AN ANALYSIS OF CAUSATION IN MEDICAL LAW

By

ALEXANDER POLITIS

96003694

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The fundamental activity of medical science is to determine the ultimate causation of disease.

Wilfred Trotter - Speech, Guild of Public Pharmacists (1933)

The Law of Causation, the recognition of which is the main pillar of inductive science, is but the familiar truth that invariability of succession is found by observation to obtain between every fact in nature and some other fact which has preceded it.

John Stuart Mill – On the Law of Universal Causation, A System of Logic, Ratiocinative and Inductive: Being A Connected View of the Principles of Evidence and the Methods of Scientific Investigation (1846)

You let me down, man! Now I don't believe in nothin'! I'm goin' to law school!

Jimbo Jones – The Simpsons, Season 5, Episode 11

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SUMMARY

This dissertation addresses the most prominent difficulties involved in the determination of causation in the context of medical law in South Africa. The principal philosophical and conceptual basis of causation is based on pure logic, whereas legal principles governing causation are based on, and influenced by concepts such as "common sense" and "language". "Common sense", although forming an important part of any examination into causation, cannot adequately deal with complex issues of causation. The main South African principles governing causation, evidence a reliance on the traditional two-step test for causation, commencing with the *conditio sine qua non* theory and the limitation of liability through the application of the principles which govern legal causation. The tension between a purist approach to factual causation, based on the *conditio sine qua non* theory, and the wider "flexible" approach to factual causation enumerated by the Constitutional Court in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) remains entirely unresolved. The inability of the *conditio sine qua non* theory to provide fair and just results in South African medical law requires the consideration of a risk-based, negligent-increase-in-risk approach to factual causation. Problems relating to evidentiary gaps, disease, drug interactions and multiple uncertain causes in medical law are universally encountered and the legal systems of Germany, England & Wales, Canada and Australia. The aforementioned jurisdictions provide useful comparative solutions and alternative approaches to problems in establishing causation in medical law. The alternative suggested approaches to the established principles of causation are premised on contribution to risk or damage, with a departure from purist approaches to factual and legal causation in English, Canadian and Australian law. Specific alternative approaches to traditional theories of causation are appropriate in single-cause cases, whereas cases involving different causal mechanisms are more complex and require careful consideration. Policy and legal certainty require conceptually sound, balanced and well-developed alternatives to traditional approaches to causation in medical law, without unduly favouring plaintiffs or defendants in medical law cases.

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Any infelicities are my own. All sources are cited as at 30 September 2018.

Soli Deo Gloria.

ALEXANDER POLITIS

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TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION AND STATEMENT OF RESEARCH PROBLEM

1 INTRODUCTION

1 1 Purpose of the Study, Aim and Formulation of the Main Problem

The establishment of causation in determining the civil liability of medical practitioners[1] in South African Law forms arguably one of the most vexing and nebulous problems facing any South African judge, jurist or practitioner today. Prosser, speaking on the subject of causation more than half a century ago, most aptly described it as a "tangle and a jungle, a palace of mirrors and a maze."[2] Nearly seventy years later Prosser's words still accurately describe the quagmire that has become uncertain causation in medical negligence litigation.

This dissertation examines the element of causation in the law of delict, and more specifically, causation in the context of South African medical law. The subject of

[1] The main focus of this dissertation will be on the practice of medicine as understood in the everyday sense of the word, i.e. the practice of medicine by general practitioners and specialist practitioners in clinical practice (i.e. "doctors", "nurses" or "medical practitioners"), including a health practitioner and member of a health profession as referred to and defined in Section 1 of the Health Professions Act 56 of 1974 and a health care provider, health worker, health establishment, health services, health worker, hospital, military health establishment, public health establishment as defined in Section 1 of the National Health Act 61 of 2003. See also the relevant definitions pertaining to the medical professions as set out in the Allied Health Professions Act 63 of 1982, the Health Professions Act 56 of 1974, the Nursing Act 50 of 1978, the Pharmacy Act 53 1974 and the Dental Technicians Act 19 of 1979.

[2] Prosser WL "Proximate Cause in California" (1950) *California Law Review* 369.

causation (especially insofar as it pertains to medical negligence claims) presents unique difficulties which are compounded by a variety of complex factors. Those factors include, but are not limited to, the state of medical science pertaining to medical procedures; uncertainties in respect of the development, mechanisms and progression of disease; the existence of pre-existing medical conditions on the part of a particular plaintiff; or the uncertainties pertaining to drug interactions prior to, during and after medical treatment. The difficulties facing those who wish to determine causation in the context of medical negligence litigation are by no means limited to South Africa. Chapter 4 of this dissertation will illustrate the ubiquitous and universal nature of uncertain causation in medical negligence litigation.

Recent developments in the South African law of delict, more particularly in relation the requirements for factual causation (in instances where the precise cause of a plaintiff's harm was difficult to determine), have seen departures from traditional binary approaches to the problem. In what has become something of a controversial judgment, the Constitutional Court in *Lee v Minister of Correctional Services*[3] held that there can be no liability if causation is not proved on a balance of probabilities lest the "net of liability [be] cast too wide"[4] and, simultaneously, finding that there can be "no magic formula by which one can generally establish a causal nexus".[5] According to the Court, the existence of the nexus will be dependent on the facts of a particular case. The Constitutional Court, in a majority judgment written by Nkabinde J, accepted the existence of a "flexible" test for factual causation.[6] The judgment recognises and emphasises the shortcomings of the traditional *conditio sine qua non* theory in dealing with uncertain factual causation. Chapters 3 and 5 of this dissertation both contain a discussion of the uncertain implications of the acceptance of such test for factual causation in South African medical law.

[3] 2013 2 SA 144 (CC).
[4] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[5] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41].
[6] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [43] – [50].

As will be evident from what is outlined in this dissertation, the principles presently enumerated in respect of both branches of causation in various reported decisions of our Courts, including *Lee v Minister of Correctional Services*[7], have created difficulties for both plaintiffs and defendants in medical negligence litigation. Scientific and evidentiary uncertainties which render the establishment of causation difficult, if not impossible, frequently confront litigants in medical negligence cases. The traditional test for factual causation, the *conditio sine qua non* theory, is often wholly unsuited to addressing the problem of uncertain causation in medical negligence cases. It may be impossible for meritorious plaintiffs in instances where negligence is proven, or the inference of negligence on the part of a medical practitioner may readily be drawn, to prove a causal link between the defendant's negligence and his or her harm. It seems most unfair that a mechanical approach to factual and legal causation would see a plaintiff, who can prove her case on a balance of probabilities (i.e. "51%"), succeed against a medical practitioner when a similar plaintiff, who is only able to prove his case on a balance of probabilities to "49%", is non-suited. On the other hand, it seems equally unfair that a medical practitioner should be held liable for damage when causation has not been proven against him, especially in an environment where defensive medicine and an unfettered flood of opportunistic litigation against medical practitioners appear to be the order of the day.[8] Defendants may find that the net of liability has been cast too wide and that legal certainty in respect of the requirements for the establishment of causation (and liability) has been diminished.

In deciding *Lee v Minister of Correctional Services*[9], the Constitutional Court has introduced, albeit inadvertently, a more general, and, it is respectfully submitted,

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[7] 2013 2 SA 144 (CC).
[8] Van der Merwe NJ & Olivier PJJ *Die Onregmatige Daad in die Suid-Afrikaanse Reg* (1989) 212 fn 32: "Weinig sin het dit ook om in die verband te betoog dat 'n mens vir 'n benadeelde jammerder voel en dat liewer die dader as die benadeelde die skade moet dra."
[9] 2013 2 SA 144 (CC).

somewhat unclear approach to determining factual causation.[10] As was so aptly stated by Visser & Kennedy-Good[11]:

> Although it is greatly welcomed that the Constitutional Court affirmed liability for a systemic state oppression, the Court failed to make use of this opportunity to provide clarity and rather added to the confusion by introducing another possible approach. Arguably, legal development regarding factual causation therefore continues to be lost in the process due to insufficient explanations and incorrect terminology.

The decision in *Lee v Minister of Correctional Services*[12] has further created uncertainty in respect of the precise scope and application of a "flexible*"* approach to causation in delict, introducing what might be an unnecessarily "amorphous"[13] approach to the determination of factual causation, and which aforementioned uncertainty requires critical and analytical attention. Insofar as practical restrictions may permit, this dissertation will provide a critical and comparative analysis of causation in medical law in South Africa and certain selected foreign jurisdictions. The present study considers the utility and viability of *inter alia* traditional, "common sense", and flexible approaches to factual causation in delictual matters. It also deals with the feasibility of utilising "risk-based" approaches to factual causation in South African medical negligence litigation. It is submitted that a systematic analysis of the principles relating to factual and legal causation in South African medical law is necessary as, at the date of this work, no comprehensive[14], critical and comparative,

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[10] Visser CJ & Kennedy-Good C *"*The Emergence of a 'Flexible' *Conditio Sine Qua Non* Test to Factual Causation" (2015) *Obiter* 150 162ff. See also Chapter 3 para 3 2 *infra*.
[11] Visser CJ & Kennedy-Good C (2015) (n10) 163.
[12] 2013 2 SA 144 (CC).
[13] Visser CJ & Kennedy-Good C (2015) (n10) 162.
[14] It should immediately be noted that, due to the vast nature of the topic and the limitations of space, a fully comprehensive and all-encompassing treatise on causation in delict and medical law constitutes a practical impossibility. The present dissertation will focus on selected issues pertaining to causation in delict and medical law. The present work is further not intended to constitute a comprehensive and all-encompassing treatise on causation in criminal law. For a comprehensive discussion of causation in the context of criminal law see Van Oosten FFW "Oorsaaklikheid by Moord en Strafbare Manslag" (LLD Dissertation, University of Pretoria) (1981); Burchell EM, Milton JRL & Burchell JM *South African Criminal Law and Procedure* (1983) 116 – 122; Van Oosten FFW "Oorsaaklikheid by Mediese

systematic analysis of causation in medical law exists in South Africa. A further aim of this study will be to address the lack of clarity and uncertainty created by the judgment of the majority of the Constitutional Court in *Lee v Minister of Correctional Services*[15] with specific reference to the application of the judgment in medical law in South Africa. As a result of its impact on the principles pertaining to factual causation in the law of delict (and by implication medical law) in South Africa, the judgment above receives considerable attention in this dissertation. It is submitted that, although any treatise on causation in South African law should contain a reference to and discussion of the judgment above, the judgment should be considered within the context of a broader examination into causation in delict and medical law in South Africa.

As previously stated, the primary purpose of this study is to comparatively evaluate the principles currently extant in relation to both factual and legal causation in medical law in South Africa and, where apposite, critically assess the need to introduce or assimilate such principles as may be useful in making a valuable, doctrinally acceptable and necessary contribution to the clarification of the principles relating to the determination of both factual and legal causation. In the context of medical law, the determination of causation even in instances where only one potential factual cause is to be ascribed to a medical practitioner may often prove highly problematic. The problem may be further exacerbated when no particular single factor, but a multitude of factors, is to blame for a particular outcome. The decision of the Constitutional Court in *Lee v Minister of Correctional Services*[16] appears, per the minority judgment of the Constitutional Court[17], to have leant towards consideration of a "risk-based" approach to causation. The present study will, in addition to what is set out

Behandeling as Tussenfaktor in die Suid-Afrikaanse Strafreg" in Joubert DJ *EM Hamman Gedenkbundel* (1984) 173; De Wet JC & Swanepoel HL *Die Suid-Afrikaanse Strafreg* (1985) 62ff; Milton JRL *South African Criminal Law and Procedure Vol II* (1996) 116ff; Burchell JM & Milton JRL *Principles of Criminal Law* (1997) 115ff; Burchell J *Principles of Criminal Law* (2005) 209ff.

[15] 2013 2 SA 144 (CC).

[16] 2013 2 SA 144 (CC).

[17] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [78] – [116].

hereinabove, focus on the need for, and the viability of, accepting a "material increase in risk" or "material contribution" approach as a qualification to the Constitutional Court's "flexible" test for factual causation. The selected approach will, on the basis as set out above, examine the necessity and viability of utilising the principles developed in the mentioned jurisdictions to create more precision and certainty when determining causation in a medical law context in South Africa.

1 2 Methodology and Comparative Approach

1 2 1 Comparative Study

The selected methodology involves a critical comparative analysis of relevant principles concerning approaches to causation in other Common Law jurisdictions such as England, Canada and Australia.[18] Reference will also be made to the law of causation in Continental systems, more specifically Germany, where the relevant legal principles are congruent with those within the framework of the South African legal system. Comparisons will be limited to the element of causation, and an extensive exposition of legal principles pertaining to torts in those jurisdictions will not be undertaken to avoid unnecessary prolixity. South African courts frequently make use of the principles which are used by courts in Common Law jurisdictions and *vice versa*. It is submitted that reference to such jurisdictions would prove useful in any comparative study on the subject of causation. It is further submitted that most legal systems today are compelled to deal with the complicated question of causation in medical law and have, to one extent or another, devised doctrinal or pragmatic solutions to such a question. It is further submitted that a comparative method of study would be able to examine the positive benefits of the solutions achieved by such legal

[18] See in general Zweigert K & Kötz H *Introduction to Comparative Law* (1998) 132ff, 180ff, 221 - 223; De Cruz P *Comparative Law in a Changing World* (1995) 10ff. See further Chapter 4 *infra*.

systems while simultaneously considering the possible pitfalls of over-extending a flexible approach to causation in medical law. Reference will be made to the principles governing causation in the foreign systems referred to above, subject to linguistic accessibility and differences in basic terminology. Reference to principles pertaining to causation in Germany will, of necessity, be made as a result of the inclusion of the "adequate causation" theory into the accepted approaches to legal causation by the Appellate Division (as it then was), in *S v Mokgethi*.[19] The primary focus of the analysis will be a study of judicial decisions and, where of assistance, auxiliary sources on the subject. The examination of causation in the aforementioned jurisdictions will be structured to provide a full exposition of South African principles relating to causation followed by an arrangement of *capita selecta* from the mentioned foreign jurisdictions. The discussion will then be followed by an analysis, critique, conclusions, and appropriate recommendations.

1 2 2 Structure and Division of Chapters

The dissertation is divided into separate chapters. Chapter 2 of this dissertation contains a philosophical background to, and an overview and a brief discussion of, various general philosophical concepts pertaining to causation. Chapter 3 will deal with an analysis of extant principles governing causation in the law of delict, and more specifically causation in South African medical law.[20] Chapter 4 will contain a

[19] 1990 (1) SA 32 (A). See also Neethling J & Potgieter JM *Neethling-Potgieter-Visser Law of Delict* (2015) 202 fn 118.

[20] For a discussion of contractual issues relevant to the doctor-patient relationship in South Africa in general see Strauss SA & Strydom MA *Die Suid-Afrikaanse Geneeskundige Reg* (1967) 104ff; Strauss SA *Doctor, Patient and the Law* (1991) 3 – 45, 73 – 89; Claassen NJB & Verschoor T *Medical Negligence in South Africa* (1992) 118; Van Oosten FFW *Medical Law: South Africa – International Encyclopaedia of Laws* (Ed Blanpain R) (1996) 53 – 59; Carstens PA & Pearmain D *Foundational Principles of South African Medical Law* (2007) 413 – 484. For a perspective on contractual issues in the medical sphere in English law see in general Phillips AF *Medical Negligence Law: Seeking a Balance* (1997) 3 – 5; Kennedy I & Grubb A *Principles of Medical Law* (1998) 465ff; Carey D *Medical Negligence Litigation* (1998) 3, 125 – 126.

discussion of causation in Common Law jurisdictions[21] commencing with an examination of the principles and methods used to establish causation in those jurisdictions. Chapter 5 will contain a comprehensive analysis, critique and relevant conclusions and recommendations.

1 2 3 Scope of Study

It must immediately be noted that a comprehensive and all-encompassing treatise on causation constitutes a practical impossibility. Any study of the topic of causation must necessarily occur within certain demarcated limits, and the present study focuses primarily on causation in the context of civil liability. Limitations of space render a comprehensive discourse on causation in both civil and criminal law in the jurisdictions of Australia, Canada, England, Germany and South Africa a practical impossibility. It is submitted that the sheer scope and magnitude of relevant material on causation in criminal law in the mentioned jurisdictions may easily form the subject of a separate and distinct dissertation. The primary focus on causation in civil litigation in this dissertation is not intended to suggest that causation in criminal law forms a subsidiary or insignificant component of the legal principles of the systems chosen for comparative examination. Any study of causation must necessarily include the salient principles of causation in criminal matters and such principles are included in the text where relevant. Chapter 3 *infra*, which deals with issues of causation in South Africa, illustrates that those principles which regulate causation in civil cases are used in (and in some cases derived from) criminal cases.[22]

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[21] The sheer magnitude of legal diversity in the United States of America (in addition to the legal principles of the other jurisdictions referred to herein) and the spatial limitations of this work render a comprehensive study of the entirety of the law of delict in the referenced jurisdictions a formidable challenge, if not an impossibility. The present study will therefore confine itself to the element of causation in tort in English, Canadian and Australian law as far as Anglophone jurisdictions are concerned and, as far as Romanistic systems are concerned, the law of Germany.

[22] Subject to the main differences in the standard of proof between criminal cases and cases in delict.

Causation is, where possible within the spatial limitations of the present work, discussed insofar as it relates to criminal cases, coronial inquests and disciplinary tribunals. Many of the important "asbestos" cases discussed in chapter 4 of this dissertation were decided in the context of civil litigation and (civil) policy considerations informed many of the principles enunciated in those cases.[23] Civil policy decisions may affect the availability of remedies to plaintiffs and defences to defendants alike. Medical negligence litigation in South Africa is at unprecedented levels[24] and may, as a result of the principles set out in *Lee v Minister of Correctional Services*[25] hold drastic implications for medical practitioners in the near future. Medical practitioners further presently face civil litigation in South Africa on a scale which far exceeds criminal cases. The present work is, for the aforementioned reasons, primarily focused on causation in civil matters.

1 3 Need for and Relevance of Study

The present study is relevant to medical law as many patients and medical practitioners require certainty regarding potential liability when undergoing or undertaking medical interventions. A recent increase in the volume and frequency of medical malpractice litigation[26] has increased the need for legal certainty in respect of causation in medical law in South Africa. The element of causation is increasingly becoming a contentious issue in medical negligence litigation and, apart from specific standard works on the subject in the law of delict, no comprehensive critical analysis of causation in the

[23] E.g. *Fairchild v Glenhaven Funeral Services Ltd* [2003] 1 AC 32 (HL); *Amaca Pty Ltd v Ellis; The State of Australia v Ellis; Millenium Inorganic Chemicals Limited v Ellis* [2010] HCA 5.
[24] See n26 *infra*.
[25] 2013 2 SA 144 (CC).
[26] See "SA's Shocking Medical Malpractice Crisis" http://www.health24.com/News/Public-Health/SAs-shocking-medical-malpractice-crisis-20150309 (accessed on 14 April 2016). See also "The 'Boom" in Medical Malpractice Claims – Patients Could be the Losers" http://www.samj.org.za/index.php/samj/article/view/7127/5206 (accessed on 14 April 2016).

context of South African medical law presently exists. The present work is therefore aimed at the examination and discussion of the main issues involved in establishing causation in medical negligence matters in South Africa.

1 4 Notes on Style

In this dissertation citations to the works of writers (monographs, published articles and dissertations) will be provided in full in the footnotes to each chapter whenever such works are first encountered. Subsequent references to such works will indicate the footnote containing the full (initial) reference to the work in a previous footnote. In order to avoid confusion, cases will be referred to in full throughout the body of this dissertation, as many such cases involve the same set of parties from Courts *a quo* through to Courts of Appeal. Where quotations are provided, original forms of emphasis are retained, but original references are omitted in order to reduce the length of such quotations. Where sections within quotations are emphasised in this dissertation, the addition of such emphasis is specifically noted. Original forms of spelling, punctuation, errors and peculiarities of style contained within quotations are retained throughout the body of this dissertation.

2 CONCLUSION

The examination of the subject will commence, in Chapter 2, with a discussion of the connections between causation and philosophy. Various similarities and differences between law and experimental science will be discussed, including a section in respect of the distinctions between the physical laws of nature, evidence, human behavior, and law. Language and the notion of “common sense” in relation to the concept of causation will also be considered.

CHAPTER 2

CAUSATION, PHILOSOPHY AND LANGUAGE

1 INTRODUCTION

1 1 Causation and Philosophy

Traditionally, jurists have held the opinion that the contribution of philosophers to the topic of causation[1] has not provided them with practical answers to the questions that arise during the determination of causation in a legal context.[2] Philosophical theories[3] have traditionally been rejected by jurists usually with the "insistence that the lawyer's causal problems are not 'scientific inquests'"[4] and the assertion that causation in the

[1] Sometimes referred to in legal texts variably as "causality" or "*oorsaaklikheid*". The definition of causation in South African law and jurisdictions selected for comparison will be discussed in Chapters 3 and 4 *infra* respectively.

[2] Hart HLA & Honoré T *Causation in the Law* (1985) 9.

[3] The discussion of the philosophical foundations of causation both in the philosophical context and the legal context in this chapter is not intended to be a comprehensive treatise on the topic. The present discussion is presented here in order to illustrate the influence of the philosophical conceptualisation of causation on its legal counterpart. For comprehensive (and critical) discussions in respect of this topic, see Zwier PJ "Cause In Fact in Tort Law – A Philosophical and Historical Examination" (1982) *DePaul Law Review* 769; Stapleton J "Choosing What We Mean by "Causation" in the Law" (2008) *Missouri Law Review* 433; Schultz M (2001) M "Further Ruminations on Cause-In-Fact" (2001) *Scandinavian Studies in Law* 478, 481; Hulswit M "A Short History of "Causation" (abridged version of *From Cause to Causation A Peircean Perspective* (2002) at http://see.library.utoronto.ca/SEED/Vol4-3/Hulswit.htm accessed on 18 April 2016); Özen U "Causality in Philosophy of Science: From Hume to Today" (2011) *International Journal of Humanities and Social Science* 191; Puppe I & Wright RW "Causation in the Law: Philosophy, Doctrine and Practice" in Infantino M & Zervogianni E *The Common Core of European Private Law: Causation* (2016) 17ff.

[4] Hart HLA & Honoré T (1985) (n2) 9; *Weld-Blundell v Stephens* [1920] AC 956, 986. See also Nkabinde J in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [56]: "The law recognizes science in requiring proof of factual causation of harm before liability for that harm is legally imposed on a defendant, but the method of proof in a courtroom is not the method of scientific proof. The law does not require proof equivalent to a control sample in scientific investigation."

law must be determined "on common sense principles."[5] Hart & Honoré state the following in respect of the similarities between law, philosophy and history[6]:

> Why has philosophy been thought irrelevant here while relevant to science? What similarity between law and history, and which of the many differences between these two and science account for this? Among many factors an important one is this. The lawyer and the historian are both primarily concerned to make causal statements about *particulars*, to establish that on some particular occasion some particular occurrence was the effect or consequence of some other particular occurrence.

The difference between law and the experimental sciences[7] is, according to Hart & Honoré, the following[8]:

> By contrast, in the experimental sciences, by which so much of the philosophical discussion of causation has been influenced, the focus of attention is the discovery of generalisations and the construction of theories. What is typically asserted here is a connection between kinds of events, and particular causal statements, made in the tidy, controlled setting of the laboratory [which ordinarily]… present no special difficulties.

[5] Hart HLA & Honoré T (1985) (n2) 9; *Hogan v Bentinck Collieries* [1949] 1 All ER 588; *Leyland Shipping Co v Norwich Union Fire Insurance Society* [1918] AC 350 360; *Haber v Walker* [1963] VR 339 357 – 358.
[6] Hart HLA & Honoré T (1985) (n2) 10.
[7] Or "empirical" or "natural" sciences.
[8] Hart HLA & Honoré T (1985) (n2) 11.

Philosophers such as Kant[9], Hume[10] and Mill[11] laid the basis for conceptual formulations pertaining to causation.[12] Hume's approach to causation involved the view that experience plays a key role in our understanding of causation – we can never

[9] Hart HLA & Honoré T (1985) (n2) 14; Kant I *Grundlegung zur Metaphysik der Sitten* (1838). Kant's concern was, according to Hart HLA & Honoré T (1985) (n2) 14 that "the truth and character of the principle that every event has a cause" and secondly the notion of "necessary connection between a cause and its effect". For an overview of Kant's treatment of causation see Fischer JM & Ennis RH "Causation and Liability" (1986) *Philosophy & Public Affairs* 33.

[10] Hart HLA & Honoré T (1985) (n2) 14; Hume D *Treatise of Human Nature*, Book 1, Part 3, Chapter 14 (1738) (Selby-Bigge Edition) 172. According to Hart HLA & Honoré T (1985) (n2) 14 Hume's great philosophical invention was to show that "[t]he 'necessity' (the 'must happen'), felt to be an essential part of causal connection, was neither some 'mysterious bond' linking particular causes and effects, nor some occult property inherent in the cause, and was different from the kind of necessity which is traceable by deductive reasoning only between propositions." In order to understand causality, according to Hart HLA & Honoré T (1985) (n2) 14 – 15, Hume insisted that "we must attend to two things: first that we make causal statements only after experience of the 'constant conjunction' or 'regular sequence' of pairs of events in nature, and secondly that, after experience of several instances of events regularly conjoined, we feel a 'determination of the mind to pass from one object to its usual attendant'". See also Smart B "True-to-Hume Laws and the Open-Future (or Hypertemporal Humeanism)" (2018) *South African Journal of Philosophy* 99 99 – 110.

[11] Hart HLA & Honoré T (1985) (n2) 16; Mill JS *A System of Logic Ratiocinative and Inductive* (1886) 3. Mill differed from Hume in his treatment of causation. Hart HLA & Honoré T (1985) (n2) 16ff point out that Hume was "content to refer to particular causes as 'events' or 'objects'; and these terms are appropriate enough in the kind of examples which he uses of the impact of one billiard ball on another, and of sounds caused by the vibration of strings and similar occurrences" whereas Mill saw past the simplistic nature of Hume's theory of causation and, according to Hart HLA & Honoré T, recognised that "in the causal statements which permeate history, law and ordinary discourse, the category of what is spoken of as causes is not restricted in this way to 'events' or 'objects'".

[12] The various doctrines as formulated by the various philosophers are discussed (and criticised) in detail in Hart HLA & Honoré T (1985) (n2) 9 – 25. According to Hart HLA & Honoré T (1985) (n2) 21, Mill's doctrine may be summarized to include the four following main points: "The central notion of the concept of causation is that of invariable sequence of events in nature, with its corollary that to assert that one event is the cause of another is indirectly to assert that events of the one kind are invariably followed by events of the other. If challenged, particular causal statements must therefore be defended by proof of the relevant generalisation asserting such invariable sequence. Secondly, Mill shows that if we consider carefully the causal sequences to be found in nature we find, not that single events are followed by others, but that the antecedents of such invariable sequences are complex sets of conditions which may include not only events but persistent states and negative conditions. Thirdly, Mill distinguishes a 'philosophical' or 'scientific' notion of cause from 'the common notion'. According to the former only the whole set of conditions jointly sufficient for the production of the effect is the cause, whereas it is characteristic of the latter that one of these is 'selected' or 'singled out' as the cause, though it is in fact related to the effect in precisely the same way as the other constituents of the set. This selection is made on principles which vary with the context and purpose of the particular causal statement. Fourthly, Mill insists that there may be several independent sets of sufficient conditions for an event of a given type and so, both according to the philosophical (or scientific) and the common notion of cause, the same event may have different causes on different occasions". See also Puppe I & Wright R W (2016) (n3) 17ff.

form an absolute general rule or rationally foretell a specific event from particular observations, no matter how many, in any causal relations.[13] Hume states that[14]:

> [W]hen one particular species of event has always, in all instances, been conjoined with another, we make no longer any scruple of foretelling one upon the appearance of the other, and of employing that reasoning, which can alone assure us of any matter of fact or existence. We then call the one object, *Cause*; the other, *Effect.*

Critical to the aforementioned connection is a notion of necessity[15] between the cause and the effect, which necessity is a distinguishing feature of any understanding of a causal relation. Schultz[16] contends, in respect of this feature of Hume's conceptualisation of causation, that if we did not believe that there was a necessary connection between the two events we would "probably" not characterise them as causal.[17] According to Hume, the aforementioned idea of necessity cannot be rationally explained at all.[18] There are no rational grounds, according to Hume, to believe that "previous instances of causation will repeat themselves also in the future or that some factors, which have previously without exception been followed by certain phenomena, will continue to do this also tomorrow".[19] Hume's focus on the relation between "events" or "objects" is problematic and, as is pointed out by Schultz[20], Hume's ideas are to be criticised because they do not adequately reflect the complexity involved in causal processes. Mill's contribution to the conceptualisation of causation was to shift emphasis away from Hume's "simple" view of causation as a relation between "events" or "objects" and to forge the idea that "causes in fact

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[13] Schultz M (2001) (n3) 481.
[14] Hume D (1738) (n10) VII, Part II 74 (emphasis retained).
[15] Schultz M (2001) (n3) 482.
[16] Schultz M (2001) (n3) 482.
[17] Schultz M (2001) (n3) 482 where the learned writer refers to this concept of necessity as "causal determinism".
[18] Schultz M (2001) (n3) 482.
[19] Schultz M (2001) (n3) 482.
[20] Schultz M (2001) (n3) 483.

consist of a complex set of factors, of which we single out one as a cause while the others are 'merely [c]onditions'".[21] The definition provided by Mill in philosophical terms is as follows[22]:

> The cause, then, philosophically speaking, is the sum total of the conditions, positive and negative taken together; the whole of the contingencies of every description, which being realised, the consequent invariably follows.

Mill's important contribution to the philosophical conceptualisation of causation is that there may be "many different distinct sets of conditions that are each sufficient to bring about the effect, which means that there is no unique sufficient set, the 'doctrine of plurality of causes'."[23] The basic problem which faces jurists, according to Hart & Honoré, is that[24]:

> When the issue is whether someone is to be blamed or punished or made to compensate others for harm which has occurred, we may indeed, at a preliminary stage of our investigation, not understand how the harm came about, and at this stage an inquiry for the cause of some harm is still a search for an explanation. Sometimes such preliminary causal inquiries in a law court, designed to establish how or why something happened, are difficult and the plaintiff may fail to discharge the onus of showing how his injuries happened.

[21] Schultz M (2001) (n3) 483; Honoré, A "Causation in the Law" in Zalta EN *The Stanford Encyclopedia of Philosophy* (2010) 1 accessed on 9 October 2017 at https://plato.stanford.edu/archives/win2010/entries/causation-law/.
[22] Quoted in Schultz M (2001) (n3) 483.
[23] Schultz M (2001) (n3) 483.
[24] Hart HLA & Honoré T (1985) (n2) 24.

Such inquiries, however, are not the source of the lawyer's main perplexities.[25] The lawyer's "main perplexities" arise when[26]:

> [A]fter it is clearly understood how some harm happened, the courts have, because of the form of legal rules, to determine whether such harm can be attributed to the defendant's action as its consequence, or whether he can properly be said to have caused it.

The difficulties referred to above are frequently amplified by the following[27]:

> [A]mong the conditions required to account for the harm which has occurred, there is found in addition to the defendant's action a factor (usually a human action or some striking natural phenomenon) which itself has some characteristics by which common sense distinguishes causes from mere conditions; so that there seems as much reason to attribute the harm to this third factor as to the defendant's action.

Such questions, according to Hart & Honoré[28], are addressed by writers on causation by means of "policy considerations".[29] Stapleton argues that humans use their knowledge of the physical laws of nature, evidence and behaviour to distinguish factors which are involved with a particular phenomenon as opposed to factors which are merely "associated" with such phenomenon by a relation of constant conjunction, which determination can be done objectively.[30] Stapleton further contends that, when a particular phenomenon is investigated, the focus of such investigation is frequently

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[25] Hart HLA & Honoré T (1985) (n2) 24.
[26] Hart HLA & Honoré T (1985) (n2) 24.
[27] Hart HLA & Honoré T (1985) (n2) 24.
[28] Hart HLA & Honoré T (1985) (n2) 24. Hart & Honoré's approach to causation is criticised by Stapleton J (2008) (n3) 461 – 465.
[29] The Appellate Division (as it then was) in *S v Mokgethi* 1990 1 SA 32 (A) recognised and affirmed the use of "policy considerations" in formulating a flexible approach to the determination of legal causation in South African law. Although *S v Mokgethi* was a criminal case, the principles set out therein were subsequently adopted in respect of the determination of legal causation in delict cases. See, for example, *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) 700.
[30] Stapleton J (2008) (n3) 433.

the role of a specific factor (such as a physical force, the absence of something, a specific piece of communicated information etc.) in the existence of a particular phenomenon.[31] By comparing the actual world of the particular phenomenon with a hypothetical world (which is constructed by notionally omitting the specified factor and sometimes other factors) the "involvement", if any, of a specified factor in the existence of the actual phenomenon, may be determined.[32] Determining whether a specified factor is involved in the existence[33] of a specific phenomenon is achieved by utilising data, such as human understanding of the physical laws of nature and evidence of behaviour.[34] Jurists' disdain for philosophical inquiries is justified as such inquiries are frequently seen to be "too abstract or vague".[35] Philosophers further do not seem to agree on "which underlying interrogation their casual expressions refer to."[36] The criticism of such an approach to causation in the legal context is that[37]:

> Some seem to use the 'intuition' of 'folk' (or more correctly non-empirical assertions of linguistic usage) as the benchmark against which a philosophical account of 'causation' is assessed, even though usage is contingent on time and place. Others seek to bathe their account of 'causation' in scientific respectability by reference to a crude push-pull concept of physics, one that ignores the role that comparison and absences play in scientific accounts such as Newton's First Law of Motion.

Stapleton argues that there can be no formulation of any reductive algorithm that "will detect when some factor is, metaphysically, a 'cause' unless a choice of underlying

[31] Stapleton J (2008) (n3) 444.
[32] Stapleton J (2008) (n3) 444.
[33] Or, it is submitted, the non-existence, or absence, of such phenomenon.
[34] Stapleton J (2008) (n3) 444.
[35] Stapleton J (2008) (n3) 447.
[36] Stapleton J (2008) (n3) 447.
[37] Stapleton J (2008) (n3) 447.

interrogation has been specified at the outset."[38] She amplifies the statement above as follows[39]:

> Fortunately debates as to what is metaphysically relevant about the existence of a phenomenon do not need to trouble lawyers. The law simply has no need to decide which is the correct metaphysical account of a phenomenon's existence. Indeed, most lawyers follow Hume in thoroughly disparaging the project of marrying law and metaphysics.

The law, according to Stapleton further has no need "to resolve metaphysical disputes about the concept of 'causation' and it is free to choose what character relations must have before it describes them as 'causal' relations."[40] In examining and analysing causation, the law does so retrospectively – it operates "from a hindsight perspective of the known facts, law of nature and so on."[41] Law does not, however, "ignore or speculate when it knows a fact" for example that X's death occurred on Monday morning at dawn by hanging from a scaffold.[42] The mesothelioma cases, as Stapleton illustrates, are examples of departures from orthodox principles of causation and proof by courts.[43] Before recognising relations as "causal", Stapleton emphasises that the law of obligations requires from such relations certain basic characteristics[44]:

> A specified factor is a cause of the existence of a particular phenomenon (as that phenomenon is individuated by the law) only if, but for that factor alone, (i) the phenomenon would not exist or (ii) an actual contribution to an element of the positive requirements for the existence of the phenomenon would not exist.

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[38] Stapleton J (2008) (n3) 447.
[39] Stapleton J "An Extended 'But-For' Test for the Causal Relation in the Law of Obligations" (2015) *Oxford Journal of Legal Studies* 1 6.
[40] Stapleton J (2015) (n39) 6.
[41] Stapleton J (2015) (n39) 8.
[42] Stapleton J (2015) (n39) 8.
[43] Stapleton J (2015) (n39) 17 fn 79; *Fairchild v Glenhaven Funeral Services Ltd* [2002] UKHL 22, [2003] 1 AC 32 (HL).
[44] Stapleton J (2015) (n39) 17.

In individual cases, when determining whether or not a certain specified factor is a cause "[an individual] relies openly and directly on [his] knowledge of features of the world such as the laws of nature, doctrinal formulae, evidence of the dispositions of the agents involved and so on, as well as [his] knowledge of specific facts of what happened in the individual case (from all of which [he] identifies the positive requirements for the existence of the phenomenon, as individualised)."[45] A concept such as "cause" may have a generalised meaning in everyday language, but a specified meaning in law. The idea of "common sense" may not hold the same meaning to different individuals in differing circumstances. The determination of causation in a particular situation may involve the consideration of language, and also of the concept of "common sense". These factors, as will be seen *infra*[46] play an important role in the determination of causation.

2 CAUSATION, LANGUAGE AND "COMMON SENSE"

2 1 Language

Cole[47] demonstrates that the language of causation is wide in scope and greatly varied[48]:

> We speak of 'causes' over a spectrum of meanings and for a variety of purposes, including those concerning the relationship of events in accordance with the hypotheses of science (smoking 'causes' cancer; the impact of a moving billiard ball on a stationary one 'causes' the latter to move); the historical involvement of an individual or thing in an event (the want of a nail 'caused' the kingdom to fall); the

[45] Stapleton J (2015) (n39) 29.
[46] Para 2, 2 2 *infra*; Chapters 3 and 4 *infra*.
[47] Cole RH "Windfall and Probability: A Study of Cause in Negligence Law – Part I – Uses of Causal Language" (1964) *California Law Review* 459.
[48] Cole RH (1964) (n47) 464.

manipulative or economic power of an individual over things or events (he 'caused' the car to swerve, his bank to issue the check, his employee to work); appraisals of the role of conduct in events (his drinking 'caused' their divorce); assessments of responsibility in an economic sense (an owner is 'a cause' of injuries suffered on his property) or as between individuals (the murderer, not the negligent seller of the weapon, is 'the cause' of the murder); the existence of a reason or justification ('probable cause'; 'just cause' for firing; 'cause of action').

Cole states further that reliance on causal language is undesirable because it "encourages reliance on un-analysed reactions in the nature of intuitions or instincts" and "a willingness to explore the facts of usage of 'cause' can lead to a fuller recognition of the policies involved in the cases and also reduce reliance on ambiguous and obscuring causal language."[49] Green emphasises the general futility of any attempt to make "word schemes" do what can only be done by the exercise of judgement in particular cases. [50] Green opines that at the best "rules will carry [judges] into the neighbourhood of a problem and then [they] must get off and walk."[51] So adamant is Green that the language of causation is an inadequate and clumsy tool with which to attack the problem of causation that he opines as follows[52]:

The sweep of judgment quickly passes beyond the reach of any rules that can be framed. And, what is more, the judicial process ought to be left free of hampering restraints in fixing limits of protection in the particular cases.

Hart and Honoré categorise Green's position as one of "divid[ing] the traditional question of causation into two elements, one of fact and the other of legal policy, but differ[ing] from [others] in refusing to identify the factual element with the notion of

[49] Cole RH (1964) (n47) 465.
[50] Green L *Judge and Jury* (1930).
[51] Green L (1930) (n50) 214.
[52] Green L (1930) (n50) 222.

sine qua non to be answered by the application of the 'but for' test".[53] Prosser states that an essential element of negligence, or any other tort, is that there must be some "reasonable connection between the act or omission of the defendant and the damage which the plaintiff has suffered". [54] According to Cole, Prosser's position is criticised by commentators who are of the view that discussions of causation are usually "meaningless facades for the unstated operation of policy."[55] Stapleton raises the following important criticism of Hart & Honoré's approach to language and causation[56]:

> A… problem in Hart & Honoré's account of causation in the Law is that it rests on a 'snapshot' of causal usage frozen in the late 1950's". Their assertion that 'ordinary language/common sense' causal principles are '*facts*' does not adequately accommodate the late-Wittgensteinian insight that meaning cannot be divorced from the activities of the language user. Yet the 'language-games' of lawyers are clearly embedded in a social practice that is in constant flux. Legislators (whose modern regulatory enactments Hart & Honoré by and large ignore) and courts change the pattern of legal obligations over time and such normative developments affect the sorts of conduct that may be prohibited or mandated… *In short, the pattern of causal usage in the Law, even if it does reflect ordinary language usage and as such is a 'social fact' at any one point of time, is contingent on the evolution of legal norms*.

Yannoulides[57] emphasises the difficulty facing lawyers when establishing factual causation in circumstances where multiple potential causes of a specific result exist[58]:

> Philosophically, equivalence prevails between all conditions, as we have no objective criterion upon which to prefer one from the other. Yet this is for the lawyer of little help in the ascription of legal responsibility. Hence the received legal interpretation treats Mill as having said that each of the

[53] Hart HLA & Honoré T (1985) (n2) 104.
[54] Prosser WL *Handbook of the Law of Torts* (1971) 236 para 41.
[55] Cole RH (1964) (n47) 466.
[56] Stapleton J (2008) (n3) 464 [emphasis added].
[57] Yannoulides S "Causation in the Law of Negligence" (2001) *Monash University Law Review* 319 323.
[58] Yannoulides S (2001) (n57) 323.

conditions expressed in counterfactual form, is a cause of a result if and only if, but for the occurrence of the condition, the result would not have occurred. Hence jointly sufficient conditions include only those which are necessary members of the set of conditions in the sense that in their absence the set would have been incomplete and would not have been followed by the consequences. This is simply to say that any condition must be at least a *conditio sine qua non*. In this sense the theory asserts that every *conditio sine qua non* of an event is a cause of it, and every cause a *conditio sine qua non*. The major difficulty with this definition arises in the situation where there are multiple sufficient causes. In such a situation, in addition to the tortfeasor's act, there is also another act that is sufficient to bring about the result. For example, consider the situation where A and B simultaneously but independently shoot C, each shot being sufficient to kill C without the other. The problem in such situations relates to the ascription of responsibility. For in imposing liability in such cases, the *conditio sine qua non* rule is violated, neither act in the example being itself a necessary condition of the harm.

2 2 "Common Sense"

Yannoulides argues that, while it is reasonable to have recourse both to common sense and ordinary speech in the ascertainment of meaning, the use of such criteria is open to objections.[59] The main difficulty involved in the use of such criteria in establishing a particular cause is that selection of such a cause is so vague that it becomes difficult to separate logical reasoning from arbitrary choice.[60] Proponents of the common sense approach to causation are of the view that the use of a common sense approach should be mostly limited to restricting consequences.[61] This becomes evident in circumstances where a "too literal application of either scientific criterion or judicial discretion is considered to lead to decisions repugnant to an informed sense of justice."[62] Hart & Honoré set out a set of principles which underpin the common sense approach as follows[63]:

[59] Yannoulides S (2001) (n57) 322.
[60] Yannoulides S (2001) (n57) 322.
[61] Yannoulides S (2001) (n57) 322.
[62] Yannoulides S (2001) (n57) 322.
[63] Hart HLA & Honoré T (1985) (n2) 27 – 43; Yannoulides (2001) (n57) 323.

(a) Common sense causal judgments have been built up in the context of explanation. That which is to be explained is usually some change in the world; any search for its cause or causes being a search for some preceding or accompanying event or state which may be regarded as 'intervening' in the normal course of events and accounting for the change. The paradigmatic case is that of the deliberate manipulation by human beings of objects, (pushing, striking), in order to bring about change.

(b) By analogy causal explanation is extended to other instances in which change is explained by reference to something which makes the difference between change and no change. For example, the explanation may lie in an action not intended to bring about the change; it may be an omission; a natural event; or a natural state of affairs.

(c) The choice of factors amongst the pool of conditions will be those which are abnormal in the context, and often also unknown. They will not include factors that are ever present or indifferently present or not when the change occurs. Hence it will not be the presence of oxygen that is to be noted as the cause of the fire but rather the deliberate lighting of the match.

(d) Of similar explanatory force is the contravention of a rule prohibiting certain conduct in order to avoid harm. Such a contravention is analogous to an abnormality in the course of nature and has similar force as a causal explanation.

(e) While free human conduct is an adequate explanation of the harm it occasions, free actions can be explained by pointing to the reasons or opportunities that prompted or facilitated them. The provision of such reasons or opportunities may be regarded as a type, albeit a weak type, of causal relation.

Stapleton criticises Hart & Honoré's assessment of "common sense" notions as follows[64]:

> [D]espite their emphasis on ordinary linguistic usage and the 'common sense' views of the ordinary person on causation, the authors pay little, if any, attention to empirical work concerned with… phenomena. They simply state that 'the ordinary person' uses words in such and such a way, according a particular causal connection in such and such circumstances, as if these were established facts.

A lawyer's approach to a particular event or state will most probably differ in significant respects from that of a doctor.[65] Neilson[66] demonstrates, with reference to *Rogers v Whitaker*[67] and *Chappel v Hart*[68], that policy considerations play an often decisive role, and that "common sense, paired with 'the setting of standards which uphold the importance of the legal duty that was breached'," led to the decision in favour of the plaintiff in *Chappel v Hart*[69]. Mrs Hart underwent a procedure to remove a pouch of skin in her oesophagus which occasionally trapped food and caused problems in swallowing. Mrs Hart inquired about the risks associated with the procedure and was concerned about vocal damage. Dr Chappel performed the procedure in 1983 without negligence but perforated the oesophagus. Ordinarily, this would not have caused significant problems, but a rare complication, mediastinitis, arose as a result of the bacteria which, by chance, had been present in the throat at the time. The plaintiff's vocal chords were damaged, and her voice affected. The defendant warned Mrs Hart of the risk of perforation, but not of the very small risk of vocal damage. The original condition from which Mrs Hart suffered was progressive, and she did not argue that, had she been warned of the risks, she would not have undergone the procedure. She did, however, argue that, had the defendant warned her

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[64] Stapleton J "Law, Causation and Common Sense" (1988) *Oxford Journal of Legal Studies* 111.
[65] Yannoulides S (2001) (n57) 323.
[66] Neilson E "Chappel v Hart: The Problem with the Common Sense Test of Causation" (1999) *University of Queensland Law Journal* 318 322.
[67] (1992) 175 CLR 479.
[68] [1998] HCA 55.
[69] [1998] HCA 55 para 95.

of the risk of vocal damage, she would have sought out a second opinion and sought out a more experienced surgeon for the procedure.

The Australian High Court unanimously applied a "common sense" approach test of causation as supplemented with the "but for" test set out in *March v E & MH Stramere (Pty) Ltd*[70]. Lavery points out that "the application of the 'common sense' test of causation resulted in members of the court questioning each other's common sense."[71] Neilson argues that, because the common sense test of causation allows the individual judges to apply their intuition to a certain set of facts, it is very likely that outcomes will become "extremely difficult for legal practitioners to predict, particularly in cases with complex facts like those in *Chappel v Hart*."[72] Lavery poses a most pertinent question in respect of the most problematic aspect of the use of a common sense approach to establishing causation[73]:

> How are lawyers to provide certain answers for doctors and patients if even the application of the finely tuned legal intuition of the members of the High Court results in totally different outcomes?

It may be so that a particular judge wishes to dispense justice to a particular plaintiff out of a feeling of what is "right" and out of a feeling of "common sense", but, as Gardner states[74]:

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[70] (1991) 171 CLR 506 where the it was concluded that the "but-for" test is not a conclusive test for causation, but that causation should be determined by a value judgment involving ordinary notions of language and common sense. See also *Bennett v Minister of Community Welfare* (1992) 176 CLR 408. See also Chapter 4 para 5 2 5 2 *infra*.
[71] Lavery J "Chappel v Hart: The High Court's Lost Chance" (1998) *Australian Health Law Bulletin* 25.
[72] Neilson E (1999) (n66) 322.
[73] Lavery J (1998) (n71) 322 – 323.
[74] Gardner J "What Is Law For? Part 2 – The Place of Distributive Justice" in Oberdiek J *Philosophical Foundations Of The Law Of Torts* (2014) 342.

[N]o judge may rule in favour of any plaintiff except by locating the plaintiff within a class of imaginable plaintiffs who would, according to the judge, be entitled to the same ruling.

To supplement the traditional "but-for" test with "common sense" and "policy" is, according to Ricci & Gray, pragmatism.[75] These authors are of the view that "the law can no longer dictate that, unless the injury can be predominantly attributed to one source (that is unless it can be shown that the injury would not have occurred 'but for' that source), recovery is impossible."[76] The traditional result of tort law in cases where a plaintiff is unable to demonstrate liability in respect of multiple causes or multiple defendants is argued by Ricci & Gray to be inequitable for plaintiffs.[77] They state the following in the context of asbestosis and mesothelioma cases[78]:

When medical evidence is not sufficiently advanced to identify one 'but for' defendant, or because the disease may have been caused by cumulative exposure from multiple sources, the standard becomes unjust… Arguably… common sense and public policy would preclude this outcome. *Nevertheless, the 'but for' principle must be expanded to include the contribution or the attribution of liability through probability of causation methods. This is critical particularly because the level of epidemiological (and biological) knowledge available for dose-response between mesothelioma and asbestos is seldom available in toxic torts*.

Milstein[79] identifies the dangers of the unfettered use of a "common sense" approach to causation as follows[80]:

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[75] Ricci PF & Gray NJ "Toxic Torts and Causation: Towards an Equitable Solution in Australian Law: Part 1 – Legal Reasoning with Uncertainty" (1998) *University of New South Wales Law Journal* 787 797.
[76] Ricci PF & Gray NJ (1998) (n75) 797.
[77] Ricci PF & Gray NJ (1998) (n75) 797.
[78] Ricci PF 7 Gray NJ (1998) (n75) 797 – 798 [emphasis added].
[79] Milstein B "Causation in Medical Negligence – Recent Developments" (1997) *Australian Health Law Bulletin* 21 22. See also Myers JS "Causation and Common Sense*"* (1951) *Miami Law Quarterly* 238 252.
[80] Milstein B (1997) (n79) 22 – 23.

(a) The flexibility and subjectivity of the common sense test of causation allows for a judicial temptation to 'blur the distinction between breach and causation'. This temptation stems partly from the fact that when a doctor has been at fault, no court wishes to send his patient away empty-handed.

(b) The adoption of an unfettered common sense approach would be an invitation to use subjective, unexpressed and undefined extra-legal values to determine legal liability.

(c) An unfettered subjective test for causation tends to place a plaintiff in a particularly advantageous position.

Maher raises the following difficulties with "common sense" and its articulation with legal theory[81]:

(a) Its contribution is incomplete – on its own it does not enable an understanding of the law. It merely repeats rules.

(b) It varies from culture to culture and from age to age.

(c) It is too tainted by bias, fixed attitudes and bigoted formulae to provide justice for all.

It is submitted that "common sense", although a useful and accepted tool in determining factual causation, can never on its own be a precise enough mechanism through which to determine factual causation in multiple or uncertain cause scenarios.

[81] Maher FKH "Common Sense and the Law" (1972) *Melbourne University Law Review* 587 605.

The "common sense" approach will be discussed in more detail *infra*[82] with specific reference to its application as an alternative "test" for factual causation[83] or as an essential part of the reasoning process involved in the determination of factual causation.[84]

3 CONCLUSION

The various schools of thought and approaches to the philosophical and linguistic underpinnings of the concept of causation illustrate the many problems facing jurists when dealing with the establishment of causation. Reaching a "uniform" conception or definition of causation is a challenging, if not impossible, undertaking given the complexities of human language and understanding. It is clear from what is set out in this chapter that a purely scientific approach to causation will never satisfy the instinctive desire of lawyers to reach a "just" and "equitable" result where a plaintiff has suffered harm due to negligence. It is also clear from what is set out in this chapter that purely "intuitive" or "instinctive" approach (without the application of some scientific and systematic evaluation of evidence) to the establishment of causation, cannot be conducive to the development of a systematic and balanced approach to the determination of causation in cases of negligence and, more specifically, to cases of medical negligence. It is submitted that a balanced approach to the establishment of causation necessitates consideration of both the philosophical principles of causation, together with a careful analysis of the language of causation. Such a consideration should not lead to an overly literal or mechanistic interpretation of causation as a philosophical and legal construct, or, on the other hand, a nebulous and inchoate "intuitive" interpretation of what causation may entail. It should lead to a balanced and systematic approach to its determination. The dangers of utilising an unfettered and

[82] Chapters 3, 4 and 5 *infra*.
[83] Chapter 3 para 2 5 3 *infra*; Chapter 4 para 5 2 5 *infra*.
[84] Chapter 3 para 2 5 3 *infra*; Chapter 4 para 5 2 5 *infra*.

subjective “common sense” approach to the establishment of causation should also be taken into consideration when determining factual causation on the part of any defendant.

Chapter 3 will deal with the principles of causation in South Africa in the context of the law of delict and specific applications thereof in medical negligence cases. Reference will be made to the general principles pertaining to the establishment of factual and legal causation, and the main issues relating to the establishment of causation in medical negligence cases in South African law, as seen against universally accepted problems encountered in medical law, will be discussed.

CHAPTER 3

CAUSATION IN SOUTH AFRICAN LAW

1 INTRODUCTION

1 1 Historical Development

Although Roman law and Roman-Dutch law recognised the necessity of establishing the existence of a causal nexus between conduct and the consequences of such conduct, those legal systems did not possess a comprehensive theory or formula on the subject of legal causation.[1] The subject of delictual liability for alternative causes was one which occupied the minds of Roman jurists.[2] Boberg, writing in 1984, succinctly summarised the casuistic nature of causation in the Roman and Roman-Dutch sources of the South African law of delict[3]:

> It may be stated at the outset that our law on the subject of causation has not been settled. Nor do our historical sources offer any assistance, for Roman law left causation to the judge's casuistic determination, and the Roman-Dutch writers carried the matter little further.

[1] A comprehensive historical overview of the development of the principles pertaining to causation in Roman law and Roman-Dutch law falls outside the scope of the present work. See in this regard Van der Walt JC & Midgley JR *Principles of Delict* (2005) 196 – 197 referring to *D* 9 2 7 5, 9 2 22 pr, 9 2 23 pr, 9 2 23 4, 9 2 11 3, 9 2 15 1, 9 2 51 pr. See also Nicholas B *An Introduction to Roman Law* (1975) 218 – 227; Van der Walt JC *Delict: Principles and Cases* (1979) 96; Zimmermann R *The Law of Obligations: Roman Foundations of the Civilian Tradition* (1996) 551, 832, 910, 976ff, 1008, 1012, 1028ff; Neethling J "The Case of the Three Hunters, Or Delictual Liability for Alternative Causes" (2003) *SALJ* 263 263 – 268 referring to *D* 9 2 51 (Julian) 86; Rabie PJ & Faris J *The Law of South Africa* (2005) (Vol 8 Part 1) 4, 233 – 234; Carstens PA & Pearmain D *Foundational Principles of South African Medical Law* (2007) 831 fn 783.

[2] Carstens PA & Pearmain D (2007) (n1) 831 fn 783.

[3] Boberg PQR *The Law of Delict (Aquilian Liability: Volume One)* (1984) 383.

1 2 The Necessity of Causation in the Establishment of Liability

The element of causation plays an essential role in the determination of both civil and criminal liability in South Africa.[4] According to Boberg[5]:

In the morass of controversy that surrounds this element of liability, the only two propositions on which there is complete unanimity shine like beacons in the darkness. These are (a) the defendant is not liable unless his conduct, in fact, caused the plaintiff's harm, and (b) the defendant is not liable merely because his conduct, in fact, caused the plaintiff's harm – such liability would be too wide, and some means of limiting it must be found.

Neethling & Potgieter are of the view that[6]:

The *causing* of damage through conduct, or, in other words, a *causal nexus* between conduct and damage, is required for a delict. A person can thus not be liable if he has not *caused* any damage.

Van der Walt & Midgley opine as follows[7]:

The complex problem of causation involves a consideration of two different questions: whether any factual relation exists between the defendant's conduct and the harm sustained by the plaintiff; and whether, or to what extent, the defendant should be held legally responsible for the consequences factually induced by his or her conduct.

Van der Merwe & Olivier commence their discussion on the topic of causation in respect of delictual liability in the following terms[8]:

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[4] Van der Walt JC (1979) (n1) 94; Van Oosten FFW "Oorsaaklikheid by Moord en Strafbare Manslag" (LLD Thesis, University of Pretoria) (1981) 224; Carstens PA *"*Medical Negligence as a Causative Factor in South African Criminal Law: Novus Actus Interveniens or Mere Misadventure?" (2006) *SACJ* 192 193 fn 2: "Causation is of course not a separate element per se for criminal liability but is rather part of the definitional elements (or proscription) of the crimes of murder and culpable homicide." See also *Naidoo v Minister of Police & Others* 2016 1 SACR 468 (SCA).

[5] Boberg PQR (1984) (n3) 380.

[6] Neethling J & Potgieter JM *Neethling-Potgieter-Visser Law of Delict* (2015) 183. See also Boberg PQR (1984) (n3) 380 – 381; Visser PJ & Potgieter JM *Law of Damages through the Cases* (2004) 25 where the learned writers are of the view that, according to the South African law of damages, damage must be caused by a so-called "damage-causing event", referring to both a human act and the surrounding circumstances.

[7] Van der Walt JC & Midgley JR (2005) (n1) 197.

[8] Van der Merwe NJ & Olivier PJJ *Die Onregmatige Daad in die Suid-Afrikaanse Reg* (1989) 196.

Alvorens 'n dader deliktueel aanspreeklik gehou kan word, moet dit vasstaan dat hy skade of persoonlikheidsnadeel aan 'n ander veroorsaak het. Tussen die handeling van die dader en die nadeel van die benadeelde moet met ander woorde 'n kousale verband bestaan.

There can, therefore, be no doubt that, in South African law, and more particularly the law of delict, the existence of a causal nexus between a defendant's conduct and the harmful consequences suffered by a plaintiff constitutes an essential requirement for liability.[9] To succeed against a defendant in delict, a plaintiff must prove that the defendant committed a wrongful[10], negligent (or intentional) act (or omission)[11] against him and that such conduct resulted in the plaintiff suffering harm.[12] As far as the involvement of wrongfulness and culpability are concerned in respect of the determination of causation in delict, Boberg emphasises the following important principle[13]:

The question is not whether the defendant's conduct was wrongful and culpable, but whether the harm for which the plaintiff sues was caused wrongfully and culpably by the defendant.

In the context of criminal liability[14], Burchell & Milton state that "for a person's conduct to be regarded as the cause of a consequence, it must be both the cause in fact

[9] Van der Walt JC (1979) (n1) 94; Van der Merwe NJ & Olivier PJJ (1989) (n8) 196; Neethling J (2003) (n1) 264; Van der Walt JC & Midgley JR (2005) (n1) 196; Rabie PJ & Faris J (2005) (n1) 4; Coetzee LC & Carstens PA "Medical Malpractice and Compensation in South Africa" (2011) *Chicago-Kent Law Review* 1263 1288, 1288 fn 200; Neethling J & Potgieter JM (2015) (n6) 183; Visser CJ & Kennedy-Good C "The Emergence of a 'Flexible' *Conditio Sine Qua Non* Test to Factual Causation?" (2015) *Obiter* 150.

[10] Some writers prefer the term "unlawful" – see Van der Walt JC & Midgley JR (2005) (n1) 1. As there is no consistency between the use of the term by the various writers cited, the terms "wrongful" and "unlawful" will be used interchangeably in this dissertation.

[11] *B and Another v Moore and Another* [2017] 3 All SA 799 (WCC) paras [66] – [70].

[12] The elements of a delict are well-established and the present discussion is not intended to constitute a comprehensive discussion of such elements, with the present emphasis placed on causation as an element of a delict. For a comprehensive general discussion of the elements of a delict see: Boberg PQR (1984) (n3) 380ff; Van der Merwe NJ & Olivier PJJ (1989) (n8) 24 – 196; Van der Walt JC & Midgley JR (2005) (n1) 30 – 210; Rabie PJ & Faris J (2005) (n1) 4 – 5; Neethling J & Potgieter JM (2015) (n6) 1 – 220.

[13] Boberg PQR (1984) (n3) 381.

[14] For a comprehensive exposition of the principles of causation in criminal law see Van Oosten FFW (1981) (n4) 115ff; Burchell EM, Milton JRL & Burchell JM *South African Criminal Law and Procedure* (1983) 116 – 122; Van Oosten FFW "Oorsaaklikheid by Mediese Behandeling as Tussenfaktor in die Suid-Afrikaanse Strafreg" in Joubert DJ *EM Hamman Gedenkbundel* (1984) 173; De Wet JC & Swanepoel HL *Die Suid-Afrikaanse Strafreg* (1985) 62ff; Milton JRL *South African Criminal Law and Procedure Vol II* (1996) 55 – 61; Burchell JM & Milton JRL *Principles of Criminal Law* (1997) 115ff; Burchell J *Principles of Criminal Law* (2005) 209ff. See also *S v Mokgethi* 1990 1 SA 32 (A) 40H: "The 'legal cause'… is only the legally significant factual cause, and even the legal cause may vary from one branch of the law to another. A may be regarded as having caused a particular injury for the purposes

and the legal cause of that consequence."[15] Snyman, discussing the element of causation in relation to materially defined crimes[16], is of the view that[17]:

> In materially defined crimes, the question must always be whether X's act caused the prohibited situation or state of affairs or, to put it differently, whether there was a causal link (nexus) between X's conduct and the prohibited situation (for example, Y's death).

Van der Walt emphasises the fact that[18]:

> The factual consequences of an act may theoretically stretch into infinity and the *causae* of a particular consequence go back to the beginning of time. A person can as a matter of practical politics not be held responsible for all the factual consequences of his conduct. Some limitation must be introduced and a balance struck between the plaintiff's claim for full reparation of the loss suffered and the defendant's interest in not being overburdened by his legal liability.

The principal question to be addressed is whether a factual relationship (or nexus) exists between the particular act[19] or omission[20] of a defendant and any harm suffered by a plaintiff.[21] This factual question relates to "whether the negligent act or omission

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of determining that he is liable to pay damages in delict to the injured person, but it does not follow that he would be regarded as having caused the injury for the purpose of determining whether he is liable to criminal punishment in respect of the occurrence."

[15] Burchell EM, Milton JRL & Burchell JM (1983) (n14) 116 – 118; Burchell JM & Milton JRL (1997) (n14) 115. See also De Wet JC & Swanepoel HL (1985) (n14) 62ff; Milton JRL (1996) (n14) 467.

[16] Van Oosten FFW (1981) (n4) 115ff; Snyman CR *Criminal Law* (2002) 74: "In materially defined crimes, on the other hand, it is not specific conduct which is prohibited, but any conduct which *causes* a specific condition. Examples of this type of crime are murder, culpable homicide, arson and abortion."

[17] Snyman CR (2002) (n16) 74. See also Burchell E, Hunt PMA & Burchell JM *South African Criminal Law and Procedure Vol I* (1997) chapter 6.

[18] Van der Walt JC (1979) (n1) 95.

[19] Van der Merwe NJ & Olivier PJJ (1989) (n8) 196; Van der Walt JC & Midgley JR (2005) (n1) 197; Rabie PJ & Faris J (2005) (n1) 234; Neethling J & Potgieter JM (2015) (n6) 183. See also para 2 2 *infra*.

[20] Neethling J & Potgieter JM (2015) (n6) 191. See also Boberg PQR (1984) (n3) 383; Van der Merwe NJ & Olivier PJJ (1989) (n8) 224; Van der Walt JC & Midgley JR (2005) (n1) 199; Rabie PJ & Faris J (2005) (n1) 234; *S v Van As* 1967 4 SA 594 (A); *Minister of Police v Skosana* 1977 1 SA 31 (A); *Siman and Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 914 – 918; *S v Chipinge Rural Council* 1989 2 SA 342 (ZS) 347; *Moses v Minister of Safety and Security* 2000 3 SA 106 (C); *Minister of Safety and Security v WH* 2009 4 SA 213 (E) 220 – 221; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC); *Goliath v Member of the Executive Council for Health, Eastern Cape* 2015 2 SA 97 (SCA). See also para 2 3 *infra*.

[21] Van der Walt JC (1979) (n1) 94; Van der Walt JC & Midgley JR (2005) (n1) 197, 198; Rabie PJ & Faris J (2005) (n1) 234 – 235; Visser PJ "Gedagtes oor Feitelike Kousaliteit en die Deliktereg" (2006) *TSAR* 581 where the learned writer makes the important point that causation also serves an important role in the law of damages insofar as the latter pertains to delictual liability. He is of the view that causation further plays an important role in the determination of joint liability in terms of Section 1(1)(a) the Apportionment of Damages Act 34 of 1956.

in question caused or materially contributed to harm giving rise to the claim."[22] Simply stated, the question is "whether one fact follows from another."[23] According to Snyman, conduct is a necessary precondition or "*conditio sine qua non*"[24] for a situation if the conduct cannot "be 'thought away' without the situation disappearing at the same time."[25] Further, according to Snyman, for conduct or an event to be a *conditio sine qua non*, one must be able to say that "but for" the conduct or event, the prohibited situation would not have happened.[26] Neethling & Potgieter are of the view that the question of whether a causal nexus exists in any particular case is a question of fact "which should always be answered in the light of available evidence and relevant probabilities."[27] As will be seen later in this chapter[28], accumulated human knowledge and experience play an important role in any enquiry into causation.[29] To limit the potentially limitless scope of liability, a further requirement, namely legal causation, is necessary.[30] Legal liability will, as the second part of the test for causation in the South African law of delict, be discussed later in this chapter.[31]

1 3 Factual Nexus

In many cases, the presence of a factual nexus (an obvious single cause for a particular result) is easily established. Neethling & Potgieter state the following in respect of the determination of a nexus by the courts in most cases[32]:

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[22] Van der Walt JC (1979) (n1) 95; Rabie PJ & Faris J (2005) (n1) 234; Carstens PA & Pearmain D (2007) (n1) 509, 512 – 513.
[23] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) par 38 – 41. See also Van Rensburg ADJ "Juridiese Kousaliteit en Aspekte van Aanspreeklikheidsbeperking by die Onregmatige Daad" (LLD Thesis – UNISA) (1970) 141, 152; Neethling J & Potgieter JM "Vonnisbespreking: Aanspreeklikheid van die Staat vir Tuberkulose in die Gevangenis" (2013) *Litnet Akademies* 1 5.
[24] See paras 1 3, 2 *infra*.
[25] Snyman CR (2002) (n16) 76.
[26] Snyman CR (2002) (n16) 76.
[27] Neethling J & Potgieter JM (2015) (n6) 183. See also Van der Walt JC (1979) (n1) 94 – 95; Van Oosten FFW (1981) (n4) 164ff; Van der Merwe NJ & Olivier PJJ (1989) (n8) 197; Snyman CR (2002) (n16) 74; Van der Walt JC & Midgley JR (2005) (n1) 198; Rabie PJ & Faris J (2005) (n1) 235 – 236; Neethling J "Delictual Liability of Prison Authorities for Contagious Diseases among Inmates*"* (2013) *TSAR* 177 184 – 185.
[28] See para 2 4 *infra*.
[29] Snyman CR (2002) (n16) 74.
[30] *Masango v Road Accident Fund* [2017] ZAGPJHC 221 (Unreported Judgment) (3 August 2017) paras [16] – [20]; *Hing and Others v The Road Accident Fund* 2014 3 SA 350 (WCC).
[31] See para 5 *infra*.
[32] Neethling J & Potgieter JM (2015) (n6) 185; Van der Walt JC (1979) (n1) 95. See also par 4 2 *infra*.

At the outset it must be emphasised that in most of the cases that occur in practice there is no problem in determining in one way or another whether the conduct of the defendant has caused harm to the plaintiff or not. The courts usually succeed admirably in determining, on the basis of the evidence and the probabilities of the given case, whether a causal link exists between the wrongdoer's conduct and the damage.

The learned writers are of the unequivocal view that a causal nexus "is simply something which (factually) exists or does not exist and it appears that no amount of theorising can take the matter any further."[33] They present the following argument in respect of the determination of a factual nexus[34]:

It stands to reason that due to the dynamic and complex nature of reality it is neither possible, nor necessary, to find a general 'test' by means of which causation in general may be determined. In a particular set of facts, by contrast, it is necessary to indicate on what grounds a conclusion is based that fact X, e.g., the relevant act of the wrongdoer, caused the relevant fact Y, e.g., the damage suffered by the plaintiff. The existence of a factual causal chain must therefore be demonstrated in view of the proved relevant facts. A test for factual causation therefore depends on the facts of each case and is not something of a general nature that can be applicable to all factual complexes. In other words, there are probably as many 'tests' for causation as there are causal links.

1 4 Two-Stage Approach to Causation

Due to the complexity of the principles and problems involved in its determination, causation[35] has led to a myriad of legal and philosophical theories. The most important of these theories are, undoubtedly, the *conditio sine qua non* theory (in respect of the determination of factual causation), and the adequacy theory, the direct consequences theory, the foreseeability theory and the so-called "flexible approach" (in respect of legal causation).[36] Our courts have formally adopted a two-stage enquiry into

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[33] Neethling J & Potgieter JM (2015) (n6) 195; Van der Walt JC (1979) (n1) 95.

[34] Neethling J & Potgieter JM (2015) (n6) 195; Van der Walt JC (1979) (n1) 95. See also *B v Commissioner for the South African Revenue Services* [2017] ZATC 3 (Unreported Judgment) (3 November 2017) para [34].

[35] The term is used here in its general and overarching sense. The distinction between factual and legal causation will be discussed *infra*. See also chapter 2 *supra* in respect of a general discussion of the philosophical underpinnings of the modern theories of causation.

[36] Neethling J & Potgieter JM (2015) (n6) 183. See Van der Walt JC (1979) (n1) 95; Van der Merwe NJ & Olivier PJJ (1989) (n8) 204 – 206; Burchell J *Principles of Delict* (1993) 114; Van der Walt JC & Midgley JR (2005) (n1) 200. The aforementioned theories, in addition to other theories utilised in order to establish causation, will be discussed in greater detail *infra*. See also *De Klerk v Minister of Police* [2018] ZASCA 45 (28 March 2018) para [30]: "The test for legal causation is supple, consistent

causation, commencing with an enquiry into factual causation and, secondly, an enquiry into legal causation.[37] The majority of South African writers on the subject agree that the process of the determination of causation in delict should traditionally commence with the application of the *conditio sine qua non* theory.[38] [39] Neethling & Potgieter are of the view that the *conditio sine qua non* theory is the "natural way" in which causation should be determined.[40] The learned writers are of the view that the "method employed by the courts in practice, although frequently expressed in the terminology of the *conditio sine qua non*, is the obvious one, i.e., to inquire whether one fact follows from another."[41]

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with its foundation of public policy. Before this supple test was authoritative established, there were conflicting views as to how to test for legal causation, the main competing views being the direct consequences test and the foreseeability test. This court has held that, in applying the supple test, a court should have regard to these and other tests but should not apply them dogmatically." See further *Merchant Commercial Finance (Pty) Ltd v Katana Foods CC* [2017] ZASCA 191 (20 December 2017) para [22]: "Turning to the question of legal causation (or remoteness as it is sometimes called), the issue is one to be determined by considerations of policy. It serves as a measure of control to ensure that liability is not extended too far. It recognises that liability should not be imposed where, despite the other elements of delictual liability being present, right-minded persons, including judicial officers, will regard it as untenable to do so. In determining whether damage is too remote, tests involving foreseeability, proximity, direct consequences, all of which are relevant, 'should not be applied dogmatically, but in a flexible manner so as to avoid a result which is so unfair or unjust that it is regarded as untenable.'"

[37] Grant J "The Permissive Similarity of Legal Causation by Adequate Cause and *Nova Causa Interveniens*" (2005) *SALJ* 896; Neethling J "Delictual Protection of the Right to Bodily Integrity and Security of the Person Against Omissions by the State" (2005) *SALJ* 572, 588. See further generally Rabie PJ & Faris J (2005) (n1) 234 – 235; Knobel JC "The Feasibility of the Co-Existence of Concrete Negligence and Legal Causation" (2007) *SALJ* 579; *R v McIntyre* (1847) 2 Cox 379; *R v Mouton* 1944 CPA 399 400, 401; *R v Youngleson* 1948 1 SA 819 (W) 822; *R v Makali* 1950 1 SA 340 (N); *Rooi v R* 1952 2 PH H 119 (T) *S v Coetzee* 1974 3 SA 571 (T) 572; *S v Hartmann* 1975 3 SA 532 (C) 534; *Minister of Police v Skosana* 1977 1 SA 31 (A) 34; *S v Chibamba* 1977 4 SA 803 (RA) 806; *S v Mokoena* 1979 1 PH H 13 (A); *S v Claasen* 1979 4 SA 460 (RA) 463 466; *S v Daniëls* 1983 3 SA 275 (A) 324 – 325, 331; *S v Mokgethi* 1990 1 SA 32 (A) 39 *Muller v Mutual and Federal Insurance Co Ltd* 1994 2 SA 425 (C); *Road Accident Fund v Russell* 2001 2 SA 34 (SCA) para [17]; *H v Fetal Assessment Centre* 2015 2 SA 193 (CC) 218 fn 91; *A v Blue Crane Route Municipality* [2017] ZAECGHC 86 (Unreported Judgment) (11 July 2017) para [27]ff.

[38] Van der Walt JC (1979) (n1) 95 – 96; Van Oosten FFW (1981) (n4) 3, 158 – 159; Van der Merwe NJ & Olivier PJJ (1989) (n8) 197; Burchell J (1993) (n36) 114 – 115; Van der Walt JC & Midgley JR (2005) (n1) 197; Neethling J & Potgieter JM (2015) (n6) 183. See Burchell J & Milton J (1997) (n14) 115 where the distinction between the establishment of causation in the context of criminal law is illustrated with reference to "circumstance" crimes and the crimes of murder and culpable homicide. See also the formal distinction between formally and materially defined crimes in Snyman CR (2002) (n16) 74.

[39] See Van Rensburg ADJ (1970) (n23) 141 who criticises the *conditio sine qua non* theory, and *contra* Van Oosten FFW (1981) (n4) 120ff, 158 – 159. See also Boberg PQR (1984) (n3) 380ff; Van der Walt JC & Midgley JR (2005) (n1) 200; Rabie PJ & Faris J (2005) (n1) 234 – 235; Hutchison A "Remoteness In Contract: Under Revision In The House Of Lords Too?" (2012) *SALJ* 199 206.

[40] Neethling J & Potgieter JM (2015) (n6) 185; Van der Walt JC (1979) (n1) 95 – 96.

[41] Neethling J & Potgieter JM (2015) (n6) 185; Van der Walt JC (1979) (n1) 95 – 96.

Insofar as the process of determining causation is concerned, the court in *First National Bank of SA Ltd v Duvenhage*[42] remarked that litigants would do well in future to properly consider the element of factual causation at the outset of an action or during the contemplation of any claim to be instituted. The court reasoned that causation (and not the other elements of a delict), should be the starting point in considering the institution (or defence) of civil proceedings.[43] In appropriate circumstances, it has been held that factual causation should, at trial be determined first, with separation and postponement of the remaining issues to be determined between the parties.[44] Scott criticises the order in which causation is frequently approached, arguing that causation must be determined and satisfied first before negligence is even considered.[45] This view is shared by Scott who argues that the test for negligence should presuppose the establishment of causation.[46] To determine negligence in the absence of causation, so the learned writer argues, constitutes an academic and frivolous exercise.[47]

2 FACTUAL CAUSATION

Where it is established that a factual causal nexus exists as between the defendant's conduct and the plaintiff's harm, factual causation is present.[48] In *International Shipping Co (Pty) Ltd v Bentley*[49] the Appellate Division (as it then was) stated the following[50]:

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[42] 2006 5 SA 369 (SCA) 320 – 321.
[43] *First National Bank of South Africa Ltd v Duvenhage* 2006 5 SA 319 (SCA) 320 – 321. See also Schulze WG "Delictual Liability of a Bank towards its Client: A New Prominence Given to the Element of Causation" (2006) *TSAR* 838; *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) 479.
[44] *First National Bank of South Africa Ltd v Duvenhage* 2006 5 SA 319 (SCA) 320 – 321; *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) 479. See also Neethling J & Potgieter JM (2013) (n23) 2.
[45] Scott TJ "Minister of Police v Skosana 1977 (1) SA 31 (A)" (1977) *De Jure* 186.
[46] Scott WE "Vonnisbespreking: Minister of Police v Skosana 1977 (1) SA 31 (A)" (1977) *De Jure* 399.
[47] Scott WE (1977) (n46) 401.
[48] Whether through the use of the *conditio sine qua non* theory or a "common sense" method.
[49] 1990 1 SA 680 (A) 700. The *conditio sine qua non* theory is described as follows by Van der Merwe NJ & Olivier PJJ (1989) (n8) 197: "Hiervolgens is 'n handeling 'n oorsaak van 'n gevolg indien die handeling nie weggedink kan word sonder dat die gevolg tegelyk verdwyn nie. Die handeling moet met ander woorde die conditio sine qua non vir die gevolg wees." See also Van der Walt JC (1979) (n1) 95 – 96; Rabie PJ & Faris J (2005) (n1) 234; Coetzee LC & Carstens PA (2011) (n9) 1287ff; Visser CJ & Kennedy-Good C (2015) (n9) 151; *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) para [23].
[50] *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) 700. See also Van der Walt JC (1979) (n1) 95 – 96; Rabie PJ & Faris J (2005) (n1) 235.

> The first [enquiry] is a factual one and relates to the question as to whether the defendant's wrongful act was a cause of the plaintiff's loss. This has been referred to as 'factual causation'. The enquiry as to factual causation is generally conducted by applying the so-called 'but for' test, which is designed to determine whether a postulated cause can be identified as a *causa sine qua non* of the loss in question. This enquiry may involve the mental elimination of the wrongful conduct and the substitution of a hypothetical course of lawful conduct and the posing of the question as to whether upon such an hypothesis plaintiff's loss would have ensued or not. If it would in any event have ensued, then the wrongful conduct was not a cause of the plaintiff's loss; *aliter* if it would not so have ensued. If the wrongful act is shown in this way not to be a *causa sine qua non* of the loss suffered, then no legal liability can arise.

Burchell & Milton[51] cite Corbett JA (as he then was) in *Minister of Police v Skosana*[52] where the learned Judge defined factual causation in terms of whether "the negligent act or omission in question caused or materially contributed to… the harm giving rise to the claim."[53]

2 1 *Conditio Sine Qua Non* Theory and Factual Causation

The *conditio sine qua non* theory (or "test")[54] should, as a general rule, be used to determine the existence of factual causation, especially in cases which are not complicated by concurrent or supervening causes.[55] Van Oosten is of the view that, subject to certain exceptions, the *conditio sine qua non* theory is accepted either as exclusive test for causation or, at the least, as a basic test for causation by most South African writers.[56] South African Courts also generally favour the *conditio sine qua non*

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[51] Burchell J & Milton JRL (1997) (n14) 119.
[52] *Minister of Police v Skosana* 1977 1 SA 31 (A).
[53] *Minister of Police v Skosana* 1977 1 SA 31 (A) 34E – F. See also para 2 5 2 *infra.*
[54] See Snyman CR (2002) (n16) 76 – 83 where the learned writer warns against describing the theory as a "test". See also Van Rensburg ADJ "'n Kritiese Beskouing van die Conditio Sine Qua Non-Oorsaaklikheidsteorie Soos Uiteengesit deur Ons Suid-Afrikaanse Skrywers" (1970) in Pont D *Huldigingsbundel Daniel Pont* 384; Van der Walt JC (1979) (n1) 96 – 97; Van Oosten (1981) (n4) 118ff; Van der Merwe NJ & Olivier PJJ (1989) (n8) 197ff (who refer to the aforementioned criticism but refer to it as a "test"); Burchell J (1993) (n36) 114 – 115; *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC) 339. In this dissertation the term "*conditio sine qua non* theory" is used. Where cited or quoted sources use the term "*conditio sine qua non* test", such references have been retained.
[55] Van der Walt JC & Midgley JR (2005) (n1) 198; *Kgobane v Minister of Justice* 1969 3 SA 365 (A) 373; *Portwood v Svamvur* 1970 4 SA 8 (RA) 14; *Da Silva v Coutinho* 1971 3 SA 123 (A) 147; *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A).
[56] Van Oosten FFW (1981) (n4) 118. See also Van der Merwe NJ "Die Conditio Sine Qua Non-Toets vir Oorsaak en Gevolg" (1965) *THRHR* 173 177; Van der Walt JC (1979) (n1) 96 – 97.

theory in determining causation.[57] In *Tuck v Commissioner of Inland Revenue*[58] Corbett JA (as he then was) stated the following in respect of the distinction between the two stages of enquiry into causation[59]:

Suffice it to say that it is generally recognised that causation in the law of delict gives rise to two distinct enquiries. The first, often termed 'causation in fact' or 'factual causation', is whether there is a factual link of cause and effect between the act or omission of the party concerned and the harm for which he is sought to be held liable; and in this sphere the generally recognised test is that of the *conditio sine qua non* or the 'but for' test. This is essentially a factual enquiry. Generally speaking no act or omission can be regarded as a cause in fact unless it passes this test. The second enquiry postulates that the act or omission is a *conditio sine qua non* and raises the question as to whether the link between the act or omission and the harm is sufficiently close or direct for legal liability to ensue; or whether the harm is, as it is said, 'too remote'. This enquiry (sometimes called 'causation in law' or 'legal causation') is concerned basically with a juridical problem in which considerations of legal policy may play a part.

Van der Merwe & Olivier explain the *conditio sine qua non* theory as follows[60]:

Hiervolgens is 'n handeling 'n oorsaak van 'n gevolg indien die handeling nie weggedink kan word sonder dat die gevolg tegelyk verdwyn nie.

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[57] Van der Walt JC (1979) (n1) 96 – 97; Neethling J & Potgieter JM (2015) (n6) 185, 185 fn 12; *Da Silva v Coutinho* 1971 3 SA 123 (A); *Aïda Real Estate v Lipschitz* 1971 3 SA 871 (W) 873H-874D; *S v Van As* 1976 2 SA 921 (A); *S v Mokoena* 1979 1 PH H13 (A); *S v Daniëls* 1983 3 SA 275 (A) 331B; *Siman & Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A); *Tuck v Commissioner for Inland Revenue* 1988 3 SA 819 (A) 832; *Mediterranean Shipping Co Ltd v Speedwill Shipping Co Ltd* 1989 1 SA 164 (D); *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A); *S v Mokgethi* 1990 1 SA 32 (A); *Oelofsen v Cigna Insurance Co of SA Ltd* 1991 1 SA 74 (T) 83; *Thandani v Minister of Law and Order* 1991 1 SA 702 (E); *Smit v Abrahams* 1992 3 SA 158 (C); *Suid-Afrikaanse Nasionale Lewensassuransiemaatskappy Bpk v Louw & Collins Afslaers (Edms) Bpk* 1997 1 SA 592 (A) 610; *Groenewald v Groenewald* 1998 2 SA 1106 (SCA) 1113; *Silver v Premier, Gauteng Provincial Government* 1998 4 SA 569 (W) 574 – 576; *Ncoyo v Commissioner of Police, Ciskei* 1998 1 1 SA 128 (Ck) 137; *Tenza v Putco Ltd* 1998 2 SA 330 (N) 333; *Meevis v Sheriff, Pretoria East* 1999 2 SA 389 (T) 396 – 397; *Mukheiber v Raath* 1999 3 SA 1065 (SCA) 1077 – 1079; *Moses v Minister of Safety and Security* 2000 3 SA 106 (C) 117 – 118; *OK Bazaars (1929) Ltd v Standard Bank of South Africa Ltd* 2002 3 SA 688 (SCA) 697; *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA) 449; *Odendaal v Road Accident Fund* 2002 3 SA 70 (W); *Minister of Safety and Security v Hamilton* 2004 2 SA 216 (SCA) 239 – 241; *Minister van Veiligheid en Sekuriteit v Geldenhuys* 2004 1 SA 515 (SCA) 531 – 532; *Van der Spuy v Minister of Correctional Services* 2004 2 SA 463 (SE) 472; *Minister of Safety and Security v Carmichele* 2004 3 SA 305 (SCA) 327ff*; Tsogo Sun Holdings (Pty) Ltd v Qing-He Shan* 2006 6 SA 537 (SCA) 541; *Minister of Safety and Security v WH* 2009 4 SA 213 (E); *Black v Joffe* 2007 3 SA 171 (C) 185; *Harrington NO v Transnet (Ltd)* 2007 2 SA 228 (C) 241; *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd* 2009 2 SA 150 (SCA) 163; *mCubed International (Pty) Ltd v Singer* 2009 4 SA 471 (SCA) 479 – 480; *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) paras [46] – [49]; *Home Talk Developments (Pty) Ltd & Others v Ekurhuleni Metropolitan Municipality* 2018 1 SA 391 (SCA) paras [73] – [75], [88]; *Pro Tempo v Van der Merwe* 2018 1 SA 181 (SCA).

[58] 1988 3 SA 819 (A).

[59] 1988 3 SA 819 (A) para 20.

[60] Van der Merwe NJ & Olivier PJJ (1989) (n8) 197; Van der Walt JC (1979) (n1) 96 – 97.

Neethling & Potgieter are of the view that, according to this theory[61]:

One should in order to determine whether X was a cause of Y, eliminate X mentally and consider whether Y still exists or not. If Y falls away when X is eliminated, X is a cause of Y. If Y still exists when X is eliminated, Y has not been caused by X.

According to De Wet an act is a cause of a condition[62]:

[I]ndien dit 'n *conditio sine qua non* of onontbeerlike voorwaarde vir daardie toestand is.

The *conditio sine qua non* theory is not, according to Neethling & Potgieter the only way to determine factual causation.[63] In this regard Van der Walt & Midgley are of the view that our Courts have never advanced the *conditio sine qua non* theory as an exclusive test for factual causation.[64] "Common sense standards" (or a "juryman's view") must, according to our Courts, be used where the *conditio sine qua non* theory is not applicable.[65] Hunt, speaking on causation in criminal law, observes as follows[66]:

Causation does not have to be defined in purely factual, empirical or physical terms, for what the law will or will not treat as having caused a consequence is ultimately a matter of policy. It is determined by the purposes of criminal law: the administration of criminal justice in accordance with the needs of society. It follows not only that 'causation' in criminal law may receive a definition different from that

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[61] Neethling J & Potgieter JM (2015) (n6) 186; Van der Walt JC (1979) (n1) 96 – 97.
[62] De Wet JC & Swanepoel HL (1985) (n14) 62. See, however, Van der Walt JC (1979) (n1) 96 – 97; Van Oosten FFW (1981) (n4) 118.
[63] Neethling J & Potgieter JM (2015) (n6) 185, 185 fn14; Van Rensburg ADJ (1970) (n23) 141; Van der Walt JC (1979) (n1) 96 – 97; Van der Walt JC & Midgley JR (2005) (n1) 200. Van der Merwe NJ & Olivier PJJ (1989) (n8) 198 are of the opinion that a practically manageable substitute for the theory as test for causation or as formulation for the concept of causation itself has not yet been devised. See also *Portwood v Svamvur* 1970 4 SA 8 (RA) 14 – 15; *Minister of Police v Skosana* 1977 1 SA 31 (A) 43 – 44; *Siman & Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 917 – 918.
[64] Van der Walt JC & Midgley JR (2005) (n1) 200; Van der Walt JC (1979) (n1) 96 – 97. See also Visser PJ (2006) (n21) 586 where the learned author states that it is self-evident that, due to the variable and dynamic nature of reality, it is neither possible nor necessary to establish a universally applicable "test" in terms of which causation may be established "everywhere" or "at all times".
[65] The "common sense" approach also creates, it is respectfully submitted, its own difficulties. See para 3 *infra* for the discussion of *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) and the problems attendant upon the use of a "common sense" approach. See also Van der Walt JC (1979) (n1) 96 – 97; Snyman CR (2002) (n16) 76; Van der Walt JC & Midgley JR (2005) (n1)199 fn15, 201 fn15; Visser PJ (2006) (n21) 585 – 586; Visser CJ & Kennedy-Good C (2015) (n9) 152; *Portwood v Svamvur* 1970 4 SA 8 (RA) 14 – 15; *Minister of Police v Skosana* 1977 1 SA 31 (A) 43 – 44; *Siman & Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 917 – 918; *Ncoyo v Commisioner of Police, Ciskei* 1998 1 SA 128 (Ck) 137; *Serfontein v Spoornet* 1999 1 All SA 217 (SE) 227; *Thoroughbred Breeders' Association v Price Waterhouse* 2001 4 SA 551 (SCA) par [52]; *Merchant Commercial Finance (Pty) Ltd v Katana Foods CC* [2017] ZASCA 191 (20 December 2017) para [22]ff.
[66] Hunt PMA *South African Criminal Law and Procedure* Vol II (1970) 326 – 327, 329 – 330.

of philosophy but even from that other of branches of the law where there are different policy needs. At the same time it is usual to treat causation as at least in part a factual question, adopting as the test the *sine qua non*: the necessary condition.

In exceptional cases, where the application of the established principles of the *conditio sine qua non* theory does not provide a solution, and if knowledge and experience indicate a factual nexus between an act and a particular consequence, such act is considered to be a "cause-in-fact" of the consequences.[67] The approach above, according to Van der Walt & Midgley illustrates that the *conditio sine qua non* theory is used only as a means of expressing an "*a priori* conclusion" based on knowledge and human experience.[68] Visser opines that the test for causation will depend on the facts of every case and is not something that may readily find application to every set of facts.[69] Van Oosten argues that the *conditio sine qua non* theory is not a mere factual test for causation but a fully-fledged legal test because is it adopted by the law, and because the law approaches causation in a manner that differs from that followed by medical science.[70]

The general view, however, is that the *conditio sine qua non* theory is only a method for determining factual causation.[71] Visser emphasises the fact that our courts have not, despite criticism, decided to abandon the terminology of the *conditio sine qua non* theory.[72] The reasons for not abandoning such terminology according to Visser are that: (1) such terminology has repeatedly been utilised by our courts of appeal (our lower courts being bound to such usage by reason of the doctrine of *stare decisis*) and (2) that our courts, despite paying "lip service" to *conditio sine qua non*, do not apply

[67] Van der Walt JC & Midgley JR (2005) (n1) 200; Van der Walt JC (1979) (n1) 96 – 97; Coetzee LC & Carstens PA (2011) (n9) 1288.
[68] See in this regard para 2 4 3 infra. Snyman CR (2002) (n16) 76; Van Rensburg ADJ (1970) (n54) 384 – 409; Van der Walt JC (1979) (n1) 96 – 97; Boberg PQR (1984) (n3) 380; Van der Walt JC & Midgley JR (2005) (n1) 201, 201fn 8; Neethling J & Potgieter JM (2015) (n6) 190, 190 fn 39.
[69] Visser PJ (2006) (n21) 586. See also Van der Walt JC (1979) (n1) 96 – 97.
[70] Neethling J & Potgieter JM (2015) (n6) 186. See also Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek" (1982) *De Jure* 4; Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek (Vervolg)" (1982) *De Jure* 239 256 – 257; Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek (Slot)" (1983) *De Jure* 36.
[71] Neethling J & Potgieter JM (2015) (n6) 186. See also Van Rensburg ADJ "Nog Eens *Conditio Sine Qua Non*" (1977) *TSAR* 101ff; Van der Walt JC (1979) (n1) 96 – 97; *S v Daniëls* 1983 3 SA 275 (A) 331.
[72] Visser PJ (2006) (n21) 585.

a strict method of "thinking away" in terms of the test but instead use an application of the *conditio sine qua non* theory in determining factual causation. [73]

2 2 *Conditio Sine Qua Non* and Positive Conduct

In the case of positive conduct or a *commissio*, the conduct "must be 'removed' in the mind in order to establish whether the consequences in question would still have resulted."[74] This inquiry involves a "retrospective analysis of what would probably have happened, based upon the evidence and what could have been expected in the ordinary course of human endeavour."[75] The question of whether the hypothetical positive conduct is to be determined objectively or subjectively, in other words, according to what the reasonable person would have done, or what the relevant defendant would have done is, according to Neethling & Potgieter, not settled[76]:

> The Constitutional Court preferred an objective test, but Harms JA was of the opinion that the inquiry should contain both approaches. However, 'inserting' reasonable conduct of the wrongdoer into the set of facts appears to have the potential to cause a confusion of factual causation and negligence. First, it must be determined whether the wrongdoer could have done anything to prevent the relevant consequence (causation), and only then whether the reasonable person in the position of the wrongdoer would have prevented the consequence (negligence).

2 3 *Conditio Sine Qua Non* and Failure to Act

In the case of a failure to act or an *omissio*, a hypothetical "positive" must be inserted into the particular set of facts.[77] Stated differently, the process of determining factual

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[73] Visser PJ (2006) (n21) 585.

[74] Carstens PA (2006) (n4) 194. See also Van der Walt JC (1979) (n1) 96 – 97; Van Oosten FFW (1981) (n4) 166; Neethling J & Potgieter JM "Vonnisbespreking: Administrateur, *Natal v Trust Bank van Afrika Bpk 1979 3 SA 824 (A)*" (1980) *THRHR* 83 85 – 86; Burchell J & Milton J (1997) (n14) 115ff; Snyman CR (2002) (n16) 76 – 86; Van der Walt JC & Midgley JR (2005) (n1) 199, 199 fn 8; Rabie PJ & Faris J (2005) (n1) 236; Visser PJ (2006) (n21) 583; Neethling J & Potgieter JM (2015) (n6) 186.

[75] Neethling J & Potgieter JM (2015) (n6) 191 – 192. See also Van der Walt JC (1979) (n1) 96 – 97.

[76] Neethling J & Potgieter JM (2015) (n6) 192 – 193. See also Van der Walt JC (1979) (n1) 96 – 97; Rabie PJ & Faris J (2005) (n1) 236 – 237; *Carmichele v Minister of Safety and Security (Centre for Applied Legal Studies Intervening)* 2001 4 SA 938 (CC) 969; *Minister of Finance v Gore* 2007 1 SA 111 (SCA) 125 – 126.

[77] For examples of sanctionable omissions see *Kovalsky v Krige* (1910) 20 CTR 822; *Mitchell v Dixon* 1914 AD 519; *Webb v Isaac* 1915 EDL 273; *Van Wyk v Lewis* 1924 AD 438; *Hewatt v Rendel* 1925 TPD 679; *Prowse v Kaplan* 1933 EDL 273; *Allott v Paterson & Jackson* 1936 SR 221; *R v Van Schoor* 1948 4 SA 349 (C); *R v Van der Merwe* 1953 2 PH H124 (W); *Dube v Administrator, Transvaal* 1963 4 SA 260; *S v Mkwetshana* 1965 2 SA 493 (N); *St Augustine's Hospital (Pty) v Le Breton* 1975 2 SA

causation in the case of an *omissio* entails "a retrospective analysis of what would probably have happened if the alleged wrongdoer had acted positively in the light of the available evidence and the probabilities originating from human behaviour and related circumstances."[78] In *Minister of Police v Skosana*[79] Corbett JA stated the following in respect of a failure by members of the police to provide Mr Skosana with prompt medical assistance[80]:

> The negligent delay in furnishing the deceased with medical aid and treatment… can only be regarded as having caused or materially contributed to his death if the deceased would have survived but for the delay. This is the crucial question and it necessarily involves a hypothetical enquiry into what would have happened had the delay not occurred.

Boberg[81] argues, in respect of *Minister of Police v Skosana*[82] that:

> Traditionalists will agree with Corbett JA's dualistic analysis of the causation issue in *Minister of Police v Skosana* at 34: First to be satisfied is the requirement of factual causation, after which an issue of 'legal causation' or 'remoteness of damage' may arise. This is not a true issue of causation at all, but a policy-based mechanism for eliminating from the causal net those factual consequences for which it would be unreasonable or undesirable to impose liability.

530 (D); *Buls v Tsatsarolakis* 1976 2 SA 891 (T); *Richter v Estate Hammann* 1976 3 SA 226 (C); *Blyth v Van den Heever* 1980 1 SA 191 (A); *S v Kramer* 1987 1 SA 887 (W); *Pringle v Administrator, Transvaal* 1990 2 SA 379 (W); *Castell v De Greef* 1994 4 SA 408 (C); *Collins v Administrator, Cape* 1995 4 SA 73 (C); *Seema v Executive Member Gauteng* 2002 1 SA 771 (T); *Van der Walt v De Beer* 2005 5 SA 151 (C); *Louwrens v Oldwage* 2006 2 SA 161 (SCA). See also Visser PJ (2006) (n21) 584 – 585; Rabie PJ & Faris J (2005) (n1) 237; Neethling J & Potgieter JM (2015) (n6) 191; Van der Walt JC & Midgley JR (2005) (n1) 199, 199 fn 7; Carstens PA (2006) (n4) 194; Snyman CR (2002) (n16) 86; Van Oosten FFW (1981) (n4) 142 – 144; Visser PJ (2006) (n21) 583; Scott TJ "How Safe Should a Sidewalk Be? The Evergreen Question of a Municipality's Liability for Negligent Omissions" (2013) *TSAR* 164 176; Van der Walt JC (1979) (n1) 96 – 97; Neethling J "Aanspreeklikheid Weens 'n Late: Versoening tussen die Tradisionele en Nuwe Toets vir Deliktuele Onregmatigheid, of nie?" (2015) *Litnet Akademies* 810 819.

[78] Neethling J & Potgieter JM (2015) (n6) 191 – 192. See also Van der Walt JC (1979) (n1) 96 – 97.

[79] 1977 1 SA 31 (A) 35. See also *Home Talk Developments (Pty) Ltd & Others v Ekurhuleni Metropolitan Municipality* 2018 1 SA 391 (SCA) paras [56] – [58].

[80] 1977 1 SA 31 (A) 35. See also *Botha v Minister van Veiligheid en Sekuriteit* 2003 6 SA 568 (T) 587; *Minister of Safety and Security v Geldenhuys* 2004 1 SA 515 (SCA); *Minister of Safety and Security v Carmichele* 2004 3 SA 305 (SCA).

[81] Boberg PQR (1984) (n3) 387, 397 – 398. See also McKerron RG *Law of Delict* (1971) 125; Van der Walt JC (1979) (n1) 96 – 97.

[82] 1977 1 SA 31 (A).

In *Minister of Safety and Security v Van Duivenboden*[83] the Supreme Court of Appeal appended an important addition to the abovementioned dictum in *Minister of Police v Skosana*[84]:

> [25] There are conceptual hurdles to be crossed when reasoning along those lines for, once the conduct that actually occurred is mentally eliminated and replaced by hypothetical conduct, questions will immediately arise as to the extent to which consequential events would have been influenced by the changed circumstances. Inherent in that form of reasoning is thus considerable scope for speculation which can only broaden as the distance between the wrongful conduct and its alleged effect increases. No doubt a stage will be reached at which the distance between cause and effect is so great that the connection will become altogether too tenuous, but, in my view, that should not be permitted to be exaggerated unduly. A plaintiff is not required to establish the causal link with certainty, but only to establish that the wrongful conduct was probably a cause of the loss, which calls for a sensible retrospective analysis of what would probably have occurred, *based upon the evidence and what can be expected to occur in the ordinary course of human affairs rather than an exercise in metaphysics*.

The facts in *S v Van As*[85] serve as an appropriate example of an inquiry into factual causation where an *omissio* was involved. Police officers failed to search for children who had fled into the night and later died of exposure. The question to be decided was whether the children's death was caused by the policemen's failure to search. The court asked itself whether a reasonable search for the children would have prevented their

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[83] 2002 6 SA 431 (SCA) para [25] [emphasis added]. See also *Moses v Minister of Safety and Security* 2000 3 SA 106 (C) 117 – 118; *S v Ramosunya* 2000 2 SACR 257 (T); *S v Counter* 2003 1 SACR 143 (SCA); *Minister of Safety and Security v Hamilton* 2004 2 SA 216 (SCA) 239 – 240; *Minister of Safety and Security v Geldenhuys* 2004 1 SA 515 (SCA) 531 – 532; *Van der Spuy v Minister of Correctional Services* 2004 2 SA 463 (SE) 472; *S v Tembani* 2007 1 SACR 355 (SCA); *Minister of Finance v Gore* 2007 1 SA 111 (SCA) 125; *Shabalala v Metrorail* 2007 3 SA 167 (W) 170; *Kantey & Templer (Pty) Ltd v Van Zyl NO* 2007 1 SA 610 (C) 624; *S v Seemela* 2016 2 SACR 125; Van der Walt JC (1979) (n1) 96 – 97; Van der Walt JC & Midgley JR (2005) (n1) 199; Rabie PJ & Faris J (2005) (n1) 236; Carstens (2006) (n4) 192 – 211; Scott TJ "Failure by Passenger to Hold Railroad Operator Liable for Damage Occasioned by Robbery on Train" (2008) *THRHR* 324 329 – 330; Carstens PA "Judicial Recognition Of Substandard Medical Treatment In South African Public Hospitals: The Slippery Slope of Policy Considerations and Implications for Liability in the Context of Criminal Medical Negligence" (2008) *South African Public Law* 168 175ff.

[84] 1977 1 SA 31 (A). See also Rabie PJ & Faris J (2005) (n1) 236; Neethling J & Potgieter JM (2015) (n6)195 fn 78; *Carmichele v Minister of Safety and Security supra; Carmichele v Minister of Safety and Security* 2004 3 SA 305 (SCA); *Minister of Justice & Constitutional Development v X* 2015 1 SACR 187 (SCA).

[85] 1967 4 SA 594 (A). See also Van der Walt JC (1979) (n1) 96; Van Oosten FFW (1981) (n4) 166 – 167; Rabie PJ & Faris J (2005) (n1) 237; Neethling J & Potgieter JM (2015) (n6) 192.

death, thereby inserting positive conduct in the place of the omission.[86] In *Za v Smith*[87] Brand JA summarised the position in respect of the *conditio sine qua non* theory and omissions as follows[88]:

> What it essentially lays down is the enquiry – in the case of an omission – as to whether, but for the defendant's wrongful and negligent failure to take reasonable steps, the plaintiff's loss would not have ensued. In this regard this court has said on more than one occasion that the application of the "but-for test" is not based on mathematics, pure science or philosophy. It is a matter of common sense, based on the practical way in which the minds of ordinary people work, against the backdrop of everyday-life experiences. In applying this common sense, practical test, a plaintiff therefore has to establish that it is more likely than not that, but for the defendant's wrongful and negligent conduct, his or her harm would not have ensued. The plaintiff is not required to establish this causal link with certainty.

In *Oppelt v Department of Health, Western Cape*[89] the plaintiff suffered a dislocation of vertebrae in his spine. From the rugby field, he was taken to hospital, arriving at 15h15. He was attended to by Dr V, who, at 16h00, phoned Dr R, a neurosurgery registrar, who suggested transporting the plaintiff from Wesfleur Hospital to Groote Schuur by helicopter. None were available, and the plaintiff was brought to Groote Schuur by ambulance, arriving at 17h40. At 18h00 Dr R saw him, and at 20h22 Dr C,

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[86] Neethling J & Potgieter JM (2015) (n6) 192; *Kovalsky v Krige* (1910) 20 CTR 822; *Mitchell v Dixon* 1914 AD 519; *Webb v Isaac* 1915 EDL 273; *Van Wyk v Lewis* 1924 AD 438; *Hewatt v Rendel* 1925 TPD 679; *Prowse v Kaplan* 1933 EDL 273; *Allott v Paterson & Jackson* 1936 SR 221; *R v Van Schoor* 1948 4 SA 349 (C); *R v Van der Merwe* 1953 2 PH H124 (W); *Dube v Administrator, Transvaal* 1963 4 SA 260; *S v Mkwetshana* 1965 2 SA 493 (N); *St Augustine's Hospital (Pty) v Le Breton* 1975 2 SA 530 (D); *Buls v Tsatsarolakis* 1976 2 SA 891 (T); *Richter v Estate Hammann* 1976 3 SA 226 (C); *Minister of Police v Skosana* 1977 1 SA 31 (A); *Blyth v Van den Heever* 1980 1 SA 191 (A); *Siman and Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 914 – 918; *S v Kramer* 1987 1 SA 887 (W); *S v Chipinge Rural Council* 1989 2 SA 342 (ZA) 347; *Pringle v Administrator, Transvaal* 1990 2 SA 379 (W); *Castell v De Greef* 1994 4 SA 408 (C); *Collins v Administrator, Cape* 1995 4 SA 73 (C); *Moses v Minister of Safety and Security* 2000 3 SA 106 (C); *Seema v Executive Member Gauteng* 2002 1 SA 771 (T); *Van der Walt v De Beer* 2005 5 SA 151 (C); *Louwrens v Oldwage* 2006 2 SA 161 (SCA); *Minister of Safety and Security v WH* 2009 4 SA 213 (E) 220 – 221. See also Visser PJ (2006) (n21) 584 – 585; *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA); *Minister of Safety and Security v Hamilton* 2004 2 SA 216 (SCA); *Carmichele v Minister of Safety and Security* 2004 3 SA 305 (SCA); *Gouda Boerdery v Transnet* 2005 5 SA 490 (SCA); *South African Hang and Paragliding Association And Another v Bewick* 2015 3 SA 449 (SCA); *Minister of Justice and Constitutional Development v X* 2015 1 SA 25 (SCA); *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC); *Mashongwa v Passenger Rail Agency of South Africa* 2016 3 SA 528 CC.

[87] 2015 4 SA 574 (SCA) para [30]. See also Neethling J & Potgieter JM "Vonnisbespreking: Deliktuele Aanspreeklikheid weens 'n Late: Onregmatigheid en Nalatigheid" (2016) *LitNet Akademies* 491 499.

[88] Brand JA appears to have incorporated in this passage the general principles pertaining to factual causation set out in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC). See also Van Rensburg ADJ (1970) (n23) 62; Van der Walt JC (1979) (n1) 96 – 97; Neethling J & Potgieter JM (2015) (n6) 196 – 197.

[89] 2016 1 SA 325 (CC).

an orthopaedic surgery registrar, called for an ambulance to transport him to Conradie Hospital's spinal unit. The ambulance departed at 01h08 and arrived at 01h23. A closed reduction was performed at 03h50. The plaintiff was, however, paralysed from the neck down. He sued the Western Cape Health Department for damages. The issue was whether the failure to perform a closed reduction within four hours of the injury was the factual cause of the plaintiff's paralysis. The Supreme Court of Appeal held that there was (in light of the expert evidence led) no medical consensus on the time of decompression and the outcome, and the Supreme Court of Appeal dismissed the claim. The Constitutional Court held that the failure to perform the closed reduction within four hours was the factual cause of Mr Oppelt's paralysis. The Constitutional Court held that the Supreme Court of Appeal had incorrectly applied a scientific rather than the applicable legal standard to the assessment of the evidence.[90] If the hypothetical positive conduct of the defendant could have prevented the plaintiff's damage or injury, it can be said that his or her omission was the cause of the damage or injury.[91]

Neethling is critical of the proposition that the conduct which is to be substituted should be lawful, arguing that to do so would be to confuse wrongfulness and factual causation.[92]

2 4 Criticism of the *Conditio Sine Qua Non* Theory

2 4 1 "Clumsy, Indirect Process of Thought"

Although the *conditio sine qua non* theory has found widespread acceptance in the law of delict, it has suffered various forms of criticism. Neethling & Potgieter raise three main points of logical criticism in respect of the *conditio sine qua non* theory.[93] The

[90] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC). See also *Media 24 Books (Pty) Ltd v Oxford University Press Southern Africa (Pty) Ltd* 2017 2 SA 1 (SCA).
[91] Van der Walt JC (1979) (n1) 96 – 97; Neethling J & Potgieter JM (2015) (n6) 186.
[92] Neethling J (2015) (n77) 820.
[93] Neethling J & Potgieter JM (2015) (n6) 187 – 191. See also Van Rensburg ADJ (1970) (n23) 22 – 30; Van der Walt JC (1979) (n1) 96 – 97; Visser PJ *"Conditio Sine Qua Non"* (1989) *THRHR* 558; Snyman CR (2002) (n16) 82 – 83; Van der Walt JC & Midgley JR (2005) (n1) 199 fn 8. It is important to note that the present discussion of criticism of the *conditio sine qua non* theory is not intended to be fully comprehensive of the topic, but to provide a general overview of the main elements of criticism raised against the theory.

first point of criticism raised by the aforementioned writers is that the *conditio sine qua non* theory is based on a "clumsy, indirect process of thought that results in circular logic."[94] The aforementioned writers expound in respect of this first point of criticism as follows[95]:

> Suppose that in a specific instance it must be established whether or not X has caused Y. According to the *conditio sine qua non* formula, the judge must in his mind eliminate X and try to imagine how the events would have progressed had X not existed. The fact that the judge must eliminate X from his mind obviously does not mean that he must think of nothing, for if he were to do that he would inevitably have to find that Y would also not have arisen because, after all, nothing cannot cause something. The judge must in fact eliminate X with the retention of all other antecedents, i.e. with the retention of all other circumstances which accompanied X. The question which he must ask is whether Y would still have taken place if these antecedents had existed without X. He must in fact search for a different possible cause of Y, because Y did in fact take place. For the sake of convenience, we may group all the other antecedents (which may be a possible cause or causes of Y) under the symbol Z. Briefly stated, the question now is whether Z would have caused Y. How can it be determined whether Z caused Y or not? If the *conditio sine qua non* test is also applied here, it means that Z must be eliminated. In such a case the circle has been completed and one is back at X where one started.

The quoted approach, according to the learned writers, leads to a situation where the judge is "denied the opportunity of trying to establish the causal potency of antecedent X directly and he is compelled to answer the question of causation indirectly by seeking an answer to the question of whether *other* antecedents have caused Y."[96] It has been argued that the influence of other antecedents to a result cannot be elevated to the sole criterion to be used in the enquiry into causation.[97]

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[94] Neethling J & Potgieter JM (2015) (n6) 187 – 188; Van der Walt JC (1979) (n1) 96 – 97.
[95] Neethling J & Potgieter JM (2015) (n6) 187; Van der Walt JC (1979) (n1) 96 – 97.
[96] Neethling J & Potgieter JM (2015) (n6) 188. See also See also See also Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek" (1982) *De Jure* 4; Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek (Vervolg)" (1982) *De Jure* 239; Van Oosten FFW "Oorsaaklikheid in die Suid-Afrikaanse Strafreg – 'n Prinsipiële Ondersoek (Slot)" (1983) *De Jure* 36 where the learned writer argues that one only has to ask whether, in the abovementioned example, Y would fall away when X is eliminated and not whether Y would still occur if X is eliminated. However, see *R v Makali* 1950 1 SA 340 (N); *Siman and Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 915; *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) in which the formulation of Van Rensburg is formally adopted.
[97] Van der Walt JC (1979) (n1) 97; Van Oosten FFW (1981) (n4) 137ff; Neethling J & Potgieter JM (2015) (n6) 188.

2 4 2 "Failure in Cases of Cumulative Causation"

The second criticism of the theory, according to various writers, is that the *conditio sine qua non* theory fails in cases of so-called cumulative causation.[98] The oft-cited example of multiple shooters firing a high-calibre weapon simultaneously at a single victim is used as an illustration in respect of the unsuitability of the *conditio sine qua non* theory to deal with instances of cumulative factual causation.[99] The unfortunate result of the application of the theory to such examples is that each of the shooters may claim that his shot would not have led to the death of the victim (the victim had received three or four other fatal shots to the head in any event) and so they would escape liability in terms of a traditional logical application of the theory.[100] De Wet & Swanepoel concede that there exists "no clear answer" to the problem which arises in cumulative causation scenarios.[101] Van Oosten comments as follows in respect of De Wet & Swanepoel's approach to the problem[102]:

> Verder erken voorstanders van die *conditio sine qua non*-toets oor die algemeen geredelik die onvermoë van die toets om gevalle van alternatiewe veroorsaking op te los, soos in die geval waar twee persone gelyktydig en onafhanklik van mekaar die slagoffer elkeen 'n doodskoot toedien… Die probleem met De Wet se siening is egter dat al sou aanvaar word dat albei persone hier aan poging tot moord skuldig bevind kan word, sou dit meebring dat by bloot nalatige optrede aan hulle kant, hulle geen strafregtelike aanspreeklikheid sal kan opdoen nie. Eienaardig is verder dat De Wet, wat in hierdie verband pertinent na die Duitse reg verwys, geen melding van die omgekeerde geval van kumulatiewe veroorsaking maak nie. By kumulatiewe veroorsaking kan daar immers geen twyfel bestaan dat waar twee persone byvoorbeeld elkeen 'n dosis gif, waarvan die gesamentlike uitwerking die dood van die slagoffer is, in laasgenoemde se kos gooi, elkeen se handeling *conditio sine qua non* vir die dood van die slagoffer daarstel nie. Nòg die een nòg die ander se handeling kan hier weggedink word sonder dat die gevolg daarmee wegval. Nou kan dit wees dat De Wet nie hierdie gevalle behandel nie, omdat hy tereg meen dat die *conditio sine qua non*-toets hier geen probleem lewer by die vasstelling van oorsaaklikheid nie. Sou dit die geval wees, is dit egter onverklaarbaar waarom persone wat gelyktydig en onafhanklik van mekaar die dood van 'n slagoffer veroorsaak wel aan moord skuldig is omdat hulle indiwidueel wel aan die *conditio sine qua non*-toets vir oorsaaklikheid voldoen, waar hulle elkeen 'n handeling verrig het

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[98] Van der Walt JC (1979) (n1) 97; Van Oosten FFW (1981) (n4) 136, 136 fn 60; Boberg PQR (1984) (n3) 383; Rabie PJ & Faris J (2005) (n1) 239; Neethling J & Potgieter JM (2015) (n6) 188.
[99] Van der Walt JC (1979) (n1) 97; De Wet JC & Swanepoel HL (1985) (n14) 64; Van der Walt JC (1979) (n1) 97; Van der Merwe NJ & Olivier PJJ (1989) (n8) 199 – 200; Rabie PJ & Faris J (2005) (n1) 239. See also para 6 3 3 *infra*.
[100] See paras 3 2, 6 3 1, 6 3 3 *infra*.
[101] De Wet JC & Swanepoel HL (1985) (n14) 64.
[102] Van Oosten FFW (1981) (n4) 136 – 137.

wat opsig self ongenoegsaam was om die dood van die slagoffer te weeg te bring, maar onskuldig aan moord is omdat hulle nie aan die *conditio sine qua non*-toets vir oorsaaklikheid voldoen nie, waar hulle elkeen ‘n handeling verrig wat op sig self genoegsaam was om die dood van die slagoffer te bewerkstellig. Dat so ‘n standpunt op ‘n teenstrydigheid neerkom, behoef nouliks enige betoog, en dit kan alleen die gevolg wees van ‘n oordrewe dogmatiese siening van *conditio sine qua non* as algemeen geldende oorsaaklikheidstoets vir alle denkbare gevalle.

It is argued that a “common sense approach of the man in the street” will result in the conclusion that all of the shooters are to blame.[103] Van der Merwe & Olivier are of the view that, when considering the example of the drunken choir which keeps the neighbourhood awake in the small hours of the morning, it is not necessarily practical to consider the individual contribution of each member of the choir to the neighbourhood’s insomnia – it was the choir as a whole which caused the disturbance.[104] The learned writers make the following observation in respect of cumulative causation in the context of the stated example[105]:

Dit doen die werklikheid en die *conditio sine qua non*-toets geweld aan om A se optrede as ‘n enkeling te beoordeel… By die kumulatiewe handeling moet *conditio sine qua non* nie toegepas word met verwysing na elke bestanddeel van die kumulatiewe handeling nie – die handeling moet globaal beoordeel word. Is die gesamentlike handeling oorsaak van die gevolg en is A se optrede nie skeibaar van die kumulatiewe gedraging nie, is A se handeling as bestanddeel van die groter geheel die oorsaak

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[103] Van der Walt JC (1979) (n1) 97; Rabie PJ & Faris J (2005) (n1) 238; Neethling J & Potgieter JM (2015) (n6) 188 – 189; *Portwood v Swamvur* 1970 4 SA 8 (RA) 15; *Ncoyo v Commissioner of Police, Ciskei* 1998 1 SA 128 (Ck) 137; *Silver v Premier, Gauteng Provincial Government* 1998 4 SA 569 (W) 575.

[104] Van der Merwe NJ & Olivier PJJ (1989) (n8) 200.

[105] Van der Merwe NJ & Olivier PJJ (1989) (n8) 200 – 201, 200 fn 86: “Volgens ons standpunt is A se handeling mede-oorsaak van D se slapelose nag, omdat A se optrede nie skeibaar van die kumulatiewe veroorsakende geheel is nie… hoewel onderskeie vorme van deelneming aan die strafreg bekend is, ken die deliktereg slegs daderskap. Waar die strafreg ‘n bevredigende resultaat kan bereik deur die lede van bv. die vuurpeloton as medepligtiges aan te merk, het die privaatreg geen ander keuse as om hulle of as daders te beskou of van aanspreeklikheid te onthef nie. Anders as vir die deliktereg is ‘n kumulatiewe daderskapbegrip vir die strafreg m.a.w. oorbodig, te meer daar in die strafreg, anders as in die privaatreg, ook met poging gewerk word… In soverre feitlike kousale verband steeds voorvereiste vir aanspreeklikheid bly, met welke gunsteling-kousaliteitsteorie ook al vorendag gekom word, moet dit duidelik wees dat slegs die kumulatiewe handelingsbegrip enige sodanige teorie in die privaatreg in werking kan laat tree in die onderhawige tipe geval. Sou aan die ander kant ‘n kousaliteitsteore gekonstrueer word wat geen feitlike grondslag het nie, sou die aangeleentheid van veroorsaking ‘n juridiese klugspel word. Word dus eenmaal geargumenteer dat A, hoewel moontlik nie feitlik nie, tog juridies as oorsaak van D se dood aan te merk is, is die deur oop vir aanspreeklikheid t.o.v ‘n ‘gevolg’ waarmee die verweerder in geen feitlike verband staan nie, word die werklikheid aldus deur ‘n norm verdring en word die kousaliteitsvereiste ‘n inhoudlose slagspreuk.*”* It is submitted that the useful remarks of the learned writers at 200 fn 86 should be seen in the context of a factual situation involving “single-agent” causative mechanisms of a similar nature or kind (i.e. a choirsong, a high-calibre bullet) – see paras 3 2, 6 3 1 – 6 3 3 *infra*. See also *R v John* 1969 (2 SA 560 (RA) 563 – 564.

van die gevolg. By korrekte aanwending daarvan, laat die *conditio sine qua non*-toets ons nie by die gesamentlike handeling in die steek nie.

Boberg responds to Van der Merwe & Olivier's approach as follows[106]:

This argument hardly applies to totally independent concurrent acts, where the one actor may not even know of the other.

2 4 3 "*Ex-Post Facto* Expression of a Predetermined Causal Nexus"

The third main criticism raised by Neethling & Potgieter against the *conditio sine qua non* theory is that it is not a test of causation "because it is merely an *ex-post facto* way of expressing a predetermined causal *nexus*."[107] The learned writers opine as follows in respect of the third main ground of logical criticism against the theory[108]:

This, as a matter of logic, is the most important reason why *conditio sine qua non* is unacceptable as a test for causation. It is interesting to note that neither the courts nor the academics who accept *conditio sine qua non* as a test for causation explain *how* one knows that if one eliminates a particular act, the alleged result also falls away or not. Apparently, it is generally accepted that *merely* by eliminating in the mind an alleged cause of a consequence, one can establish whether or not it is a cause of the consequence. That this approach is incorrect appears from the following example: X visits Y in order to accuse him of adultery with his (X's) wife. Y is exceptionally friendly and offers X a glass of beer. A few minutes after X has drunk the beer, he suffers convulsions and drops dead. How would one use the *conditio sine qua non* test in order to establish whether Y has poisoned X by means of the beer? Even if one eliminates the giving of the beer to X, one is no closer to an answer because a proper examination is necessary to determine whether X might not have died of a heart attack or whether the beer might have contained poison. It is only after all the relevant facts have been established, and the cause of X's death has been ascertained on this basis that one would know whether giving the beer to X was a *conditio sine qua non* of his death or not.

According to this criticism, the *conditio sine qua non* theory fails to provide an exact answer to the cause of X's death in the absence of all the relevant and available facts – the judge in such an example must make an intellectual leap in respect of certain of the unproven variables which are involved. No solution is offered without first

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[106] Boberg PQR (1984) (n3) 383.
[107] Neethling J & Potgieter JM (2015) (n6) 189. See also Van der Walt JC (1979) (n1) 97; Van Oosten FFW (1981) (n4) 124 – 126; Rabie PJ & Faris J (2005) (n1) 238.
[108] Neethling J & Potgieter JM (2015) (n6) 189; Rabie PJ & Faris J (2005) (n1) 238.

determining the actual cause of a particular result, and then applying the theory to the factual scenario in order to express some form of conclusion.[109] The use of the *conditio sine qua non* theory is, therefore, according to Neethling & Potgieter "merely a convenient and known way of expressing an already determined causal link."[110] In this regard Van Rensburg underscores, by means of example, the danger inherent in a retrospective and deterministic imposition of assumed facts on any particular scenario[111]:

> Gestel byvoorbeeld daar moet besluit word of 'n bepaalde antesedent oorsaak daarvan was dat 'n werknemer van die Atoomkragraad radioaktiewe bestraling opgedoen het, dan mag eliminasie van die antesedent saamval met die afwesigheid van die bestraling, nie omdat die antesedent die oorsaak van die bestraling was nie, maar om die eenvoudige rede dat 'n bepaalde elektron in die geval waar die antesedent geëlimineer is, 'n ander kwantum-sprong gemaak het as in die geval toe die antesedent aanwesig was.

Van Rensburg further criticises the *conditio sine qua non* theory and its inability to deal with concurrent factual causes by utilising the example where antecedent conditions A, B, C, and D exist simultaneously, and it is to be determined whether A constitutes a factual of the ultimate result.[112] Boberg comments as follows in respect of Van Rensburg's views on the issue[113]:

> For Van Rensburg the *sine qua non* test is inherently fallacious, and its inability to cope with concurrent causation is merely symptomatic of the rot that permeates it. The fallacy, which he exposes… amounts to this: Suppose that all the antecedent conditions in which an event took place are A, B, C and D, and it is required to determine whether A was the cause of the event. To apply the *sine qua non* test entails eliminating A and enquiring whether the event would still have taken place. Before it can be held that A was not a cause of the event, it must be decided that the other antecedents B, C and D would by themselves (without A) have caused the event. But what test of causation can be used to decide that? Not the *sine qua non* test, for that would now entail eliminating B, C, and D, which would leave only A and the question whether A alone would have caused the event. And so the circle is complete. Nor, even if it could somehow be shown that B, C and D would have caused the event, does it follow that A was not also a cause, for many circumstances contribute to the happening of an event. Only if B, C and D

[109] Neethling J & Potgieter JM (2015) (n6) 189 – 190; Rabie PJ & Faris J (2005) (n1) 238.
[110] Neethling J & Potgieter JM (2015) (n6) 190; Rabie PJ & Faris J (2005) (n1) 238.
[111] Van Rensburg ADJ (1970) (n23) 22 – 23; Van Oosten (1981) (n4) 122 – 123; Rabie PJ & Faris J (2005) (n1) 238 fn 8.
[112] Van Rensburg ADJ (1977) (n71) *TSAR* 101 102.
[113] Boberg PQR (1984) (n3) 384; Van Rensburg ADJ (1977) (n71) 102.

were jointly the sole cause of the event can it be said that A was not a cause, but how can that be established?

Van Rensburg further argues that the *conditio sine qua non* theory is not a test at all, as it cannot be used to discover anything, but merely expresses a conclusion already deduced from experience.[114] The failure of the *conditio sine qua non* theory, according to Van Rensburg, is that it "purports to make the possible causative effect of one antecedent dependent on the possible sole causal effect of the other antecedents jointly."[115] Whenever there exists a "determinate other antecedent which alone would have caused the event… it is possible to apply the *conditio sine qua non* theory as a test and not merely as the expression of a conclusion, and it is precisely then that its basic untenability stands exposed."[116] Van Rensburg further raises the following criticism in respect of the *conditio sine qua non* theory in the context of multiple (or cumulative) causation[117]:

Aanhangers van die *conditio sine qua non*-teorie wil maar altyd hê dat die teorie slegs in gevalle van sogenaamde kumulatiewe veroorsaking faal. 'n Voorbeeld hiervan sou wees waar A en B gelyktydig vir X deur die hart skiet… Dat die *conditio sine qua non*-teorie nie hier hond haar-af kan maak nie, word gewoonlik as 'n bewysprobleem gesien. Dit is beslis nie so nie. Hierdie tipe geval is slegs 'n simptoom van die kernfout van die teorie, naamlik dat daarvolgens die moontlike kousale werking van een antesedent afhanklik gestel word van die moontlike alleen-kousaliteit van die ander antesendente gesamentlik. Solank die ander antesedente 'n onbekende hoeveelheid is en daar in werklikheid glad nie daarvan kennis geneem word nie, kry mens nie moeilikheid met die 'toepassing' van die teorie nie. Indien daar egter wel 'n ander antesedent is wat op sigself dieselfde bepaalde gevolg kon bewerkstellig het… word dit moontlik om wel die teorie as 'n toets toe te pas (en nie bloot as 'n formule om 'n gevolgtrekking uit te druk nie) maar juis dán kom die basiese onhoudbaarheid daarvan na vore.

Van der Walt mentions the problem in the following terms[118]:

Where, for example, two concurrent acts take place either of which operating alone would have been sufficient to produce the harm, both acts are, in accordance with common sense, viewed as contributory factual causes of the harm… The 'failure' of the 'but for' test in such cases reveals the need to recognise exceptions to it or to formulate a supplementary test… If knowledge and experience indicate a factual

[114] Van Rensburg ADJ (1977) (n71) 102.
[115] Boberg PQR (1984) (n3) 384.
[116] Boberg PQR (1984) (n3) 384.
[117] Van Rensburg ADJ (1977) (n71) 104.
[118] Van der Walt JC (1979) (n1) 97.

nexus between an act and a particular consequence, the act is considered to be a cause in fact of the consequence.

Knowledge and experience, as well as reliable evidence, are required to determine a causal link.[119] Such knowledge may be of a factual nature e.g., that a match may cause paper to ignite, or it may be of an expert nature e.g., that using a certain medicine when eating cheese causes a stroke. Neethling & Potgieter opine that, without actual knowledge that antecedent X normally causes result Y, it is impossible in an actual case to determine whether or not X has in fact caused Y.[120] The *conditio sine qua non* test is not intended to be a precise and suitable test for factual causation in every situation, but, it should be remembered, that "the aim of this approach is to establish a factual link between the consequence and various forms of conduct or events… once such links are established, one can proceed to determine the relevance of such links in law."[121] Van Oosten, however, cautions against the mechanical determination of the relevance of such "links in law" in criminal matters involving the evidence of medical experts in the following terms[122]:

Met Van der Merwe se stelling dat nie 'n juris nie, maar 'n medikus geroep word om te getuig wanneer dit om die vraag gaan of die handeling van die beskuldigde die dood van die slagoffer veroorsaak het, kan egter nie ongekwalifiseerd saamgestem word nie. Mediese getuienis mag nodig wees om te bepaal wat medies die oorsaak van die slagoffer se dood is, maar daarna word die *conditio sine qua non*-toets van regsweë toegepas om vas te stel of die beskuldigde se handeling die oorsaak van die dood van die slagoffer was. Die feit byvoorbeeld dat die nalatige behandeling van die slagoffer deur 'n dokter medies as oorsaak van die slagoffer se dood aangemerk word, beteken immers nie dat die beskuldigde se toediening van 'n geringe besering aan die slagoffer (as gevolg waarvan die slagoffer na die dokter toe gegaan het vir behandeling daarvan), nie van regsweë as oorsaak van die slagoffer se dood bestempel kan word nie, selfs al was die besering op sigself nie medies oorsaak van sy dood nie. 'n Oorsaak van regsweë sal dus nie noodwendig die mediese oorsaak daarvan wees nie (ofskoon hulle in gegewe gevalle wel kan saamval).

[119] Van der Merwe NJ (1965) (n56) 174; Neethling J & Potgieter JM (2015) (n6) 196.
[120] Neethling J & Potgieter JM (2015) (n6) 195 – 196.
[121] Rabie PJ & Faris J (2005) (n1) 239.
[122] Van Oosten FFW (1981) (n4) 119 fn 15. See also Van der Merwe NJ (1965) (n56) 173, 174.

Notwithstanding the criticism above, the *conditio sine qua non* theory remains a vital tool in the determination of factual causation in both criminal[123] and delictual matters. Van Oosten admits that, despite criticism of the theory, it remains a valuable tool in the determination of basic factual causation.[124] Boberg argues that the *conditio sine qua non* theory is by no means perfect, but that a suitable workable alternative is yet to be found.[125] Van Rensburg suggests that the *conditio sine qua non* theory works well where an omission is involved, as a positive act is a determinate and not an indeterminate quantity.[126] The conclusion may, therefore, according to Van Rensburg, be reached that the proper test for factual causation is not to "think away" the negligent act, but substitute such an act for a careful act in the circumstances giving rise to the events, and then asking whether the event would still have occurred.[127] As Van Rensburg explains[128]:

Die punt is dat 'n mens jou 'n voorstelling van 'n gebeurtenis kan maak, maar dat dit menslik onmoontlik is om jou 'n 'nie-gebeurtenis' voor te stel.

This should not be taken to mean, so argues Van Rensburg, that such a substitution constitutes a mere substitution of the quality of the act (i.e., negligence), leaving the act intact.[129] Van Rensburg declares that[130]:

Nalatigheid is slegs 'n juridiese aspek van die handeling, en… die juridiese aspek as sodanig kan nie iets feitelik veroorsaak nie.

The salient question is, therefore, according to Van Rensburg, whether the defendant's conduct and not his negligence, caused the harm.[131] This is demonstrated by the following example[132]:

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[123] See also McQuoid-Mason DJ "Public Health Officials and MECs for Health Should be Held Criminally Liable for Causing the Death of Cancer Patients through Their Intentional or Negligent Conduct that Results in Oncology Equipment not Working in Hospitals" (2017) *SAJBL* 83 84 – 85.
[124] Van Oosten FFW (1981) (n4) 169. See also *S v Haarmeyer* 1971 3 SA 43 (A) 47.
[125] Boberg PQR (1984) (n3) 380.
[126] Van Rensburg ADJ (1977) (n71) 104 – 105.
[127] Van Rensburg ADJ (1977) (n71) 104 – 105.
[128] Van Rensburg ADJ (1977) (n71) 106.
[129] Van Rensburg ADJ (1977) (n71) 106.
[130] Van Rensburg ADJ (1977) (n71) 110.
[131] The issue of whether wrongfulness and fault can function as a criterion for legal causation is discussed later in this dissertation – see paras 5 2 and 5 4 *infra*.
[132] Boberg PQR (1984) (n3) 384.

A, a chemist, sells B a quantity of poisonous pills for photographic purposes. A negligently omits to mark the container "Poison". B's wife, C, who is blind, mistakes the pills for a headache remedy, takes them, and dies. Some would say that A is not liable because his 'negligence' did not cause C's death. But the issue is not one of causation at all… it is a question of the relevance of negligence. A's conduct – the entire act of supplying unmarked pills – did cause C's death. But the negligence aspect of it was irrelevant in the circumstances.

Whiting distinguishes between two theories – the *conditio sine qua non* theory and the "material contribution" theory, which are "essentially opposed to each other" as a "contributing factor" may be far wider than a necessary condition.[133] Either theory, according to Whiting, is not appropriate "for all situations".[134] Each of the theories above will provide suitable results in appropriate circumstances, but they will not work together in providing a solution in a single instance. Whiting argues as follows[135]:

Causation of a negative result involves interfering with the course of events in such a way that something which would otherwise have happened does not happen. Determining the cause of a negative result thus necessarily involves a hypothetical inquiry into what course of events would have taken but for the alleged cause. In particular, it involves an inquiry into whether, but for the alleged cause, that which has not happened would have happened, in other words a *sine qua non* inquiry. It is characteristic of causation of a negative result that it involves no change in reality, indeed, that such a change is prevented. Herein lies the fundamental difference between it and causation of a positive result, which involves bringing about a change in reality, not preventing it. Thus, whereas the connection between cause and negative result is merely hypothetical, based on what would have happened, the connection between cause and positive result is essentially real or actual, based on what has actually happened. A real or actual connection is properly determined simply by enquiring whether the alleged cause has materially contributed to the happening of the result in question. There is no need to resort to a hypothetical inquiry such as that involved in the *conditio sine qua non* test. Such an inquiry would at best provide a convoluted way of arriving at the same conclusion as that provided by the contribution test. Moreover, at worst the use of the *conditio sine qua non* test to determine causation of a positive result will actually produce wrong answers to the causal inquiry. This is because, as has previously been mentioned, 'necessary condition' and 'contributory factor' are not the same thing, and, as will now be demonstrated, there are certain situations in which a cause of a positive result will not also be a necessary condition of that risk.

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[133] Whiting R "Factual Causation in Perspective" in Khan E *Fiat Iustitia: Essays in Memory of Oliver Deneys Schreiner* (1983) 370 – 372.
[134] Whiting R (1983) (n133) 372.
[135] Whiting R (1983) (n133) 373.

Whiting's approach is useful in "concurrent sufficient causes" type cases.[136] Since a positive result is obtained, it suffices that each actor's conduct "materially contributed" to the relevant result, and an act may be regarded as a cause of a positive result although it was not a necessary condition of that result.[137] Whiting provides the following example in respect of necessary conditions and the *conditio sine qua non* theory[138]:

> A injures X at his home. X is removed to hospital, where he dies of the wound. Meanwhile, X's home is engulfed by an avalanche which would have killed him had he not been in hospital. A's conduct, although not a *sine qua non* of X's death is nevertheless 'obviously' a cause of X's death (a positive result)… But it is not also a cause of X's dependants' loss of support (a negative result), because, inasmuch as they would have suffered that loss in any event (as a result of the avalanche), A's conduct was not a *sine qua non* or necessary condition of it. To these basic rules certain qualifications and modifications are necessary… to avoid 'conclusions which are legally unacceptable'.

Boberg, discussing Whiting's example, notes that[139]:

> Thus, the concurrent independent killers of X – though liable for his death – would escape liability to his dependents without a modification of the *conditio sine qua non* test. Nor is that test always irrelevant in determining the causation of a positive result (as where a causal chain culminating (for practical legal purposes) in a positive result contains certain negative results as essential links in it).

Whiting characterises an omission in the context of causation as a "normative concept".[140]

He argues[141]:

> To say of a person that he has caused a result by a positive act does not necessarily imply that he has done anything wrong… But when one speaks of causation by an omission or failure to act, what one really means is causation by a wrongful omission, causation by failing to comply with a duty to act.

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[136] *Cook v Lewis* [1951] SCR 830, [1952] 1 DLR 1 (SC); McKerron RG "Uncertainty Whether A's or B's Negligence Caused the Damage" (1954) *SALJ* 177; Boberg PQR (1984) (n3) 385 – 386.
[137] Whiting R (1983) (n133) 375 – 376.
[138] Boberg PQR (1984) (n3) 386; Whiting R (1983) (n133) 375 – 376.
[139] Boberg PQR (1984) (n3) 386.
[140] Whiting R (1983) (n133) 378.
[141] Whiting R (1983) (n133) 378. Boberg PQR (1984) (n3) 386 argues in respect of Whiting's proposition that although true in the context in which Whiting intends it – as a reflection of common parlance – it does not seem to have "any jurisprudential significance".

If Whiting's proposition is correct, it implies that everyone in the world (who has failed to take any steps to avoid the harm suffered by the plaintiff) is "guilty" of the harm suffered.[142] Van der Merwe & Olivier argue that all theories of causation – until a perfect test for factual causation is formulated – must postulate a factual causal nexus between act (or omission) and a particular result.[143] It is foolish, according to Van der Merwe & Olivier, to completely jettison the *conditio sine qua non* theory in the absence of a suitable replacement.[144] Mukheibir, Niesing & Perumal mention that in some instances where a just result is not achievable, a "common sense" standard, "human experience and knowledge" and the "material contribution test" have found application by our courts.[145]

Ultimately, Burchell adopts a pragmatic approach to the issue[146]:

> No theory, like no human being, can be perfect and whatever deficiencies there may be in the *sine qua non* approach, there is no doubt that our courts, both in the delictual and the criminal sphere, find the formulation of practical use. It is of little value to subject what is essentially a common sense mode of reasoning to the strictures of philosophical analysis. If this were the acid test, very few sensible rules of law with clearly recognised exceptions and pragmatic guidelines of public policy would survive. For instance, does it really matter if the *sine qua non* reasoning does not appear to give the correct answer to the case of X and Y who simultaneously, but independently of each other, fire fatal shots at Z's head when we all know that it would be contrary to equity and common sense to exculpate both of them for causing Z's death in this highly improbable situation. *What really matters is how the courts have dealt with situations of causation*.

[142] Boberg PQR (1984) (n3) 386.
[143] Van der Merwe NJ & Olivier PJJ (1989) (n8) 201 fn 87.
[144] Van der Merwe NJ & Olivier PJJ (1989) (n8) 201 fn 87. See also Van Oosten FFW (1981) (n4) 135, 135 fn 59.
[145] Mukheibir A, Niesing L & Perumal D *The Law of Delict in South Africa* (2012) 74 – 75.
[146] Burchell J (1993) (n36) 115 [emphasis added].

2 5 Alternative Methods of Determining Factual Causation

2 5 1 Traditional Approaches

In *S v Mokgethi en Andere*[147] the Appellate Division (as it then was) re-affirmed the principles enunciated in *Minister of Police v Skosana*[148] and *S v Daniëls*[149] and simultaneously established a clear set of principles dealing with the determination of causation. These principles[150] are, firstly, that factual and legal causation must be distinguished from each other[151]; secondly, that the factual causal connection between act and consequence is determined by an analysis of the available evidence on how one fact arises from another, and not by the "thinking away" method of *conditio sine qua non* approach[152]; thirdly, that the *conditio sine qua non* theory can be used to signify an already existing causal connection but not as a test for factual causation[153]; and fourthly, that wrongfulness and fault in the normal meaning of these concepts cannot function as criteria for legal causation.[154] The Court also confirmed the principle that, in addition to the *conditio sine qua non* theory, a further standard is required in order to determine legal causation.[155]

It is difficult to doubt that a need exists for factual causation in the determination of liability. The obvious issue is, however, that the method by which factual causation is to be determined is uncertain.[156] McKerron[157] favours the *conditio sine qua non* theory, save in the sole exception referred to by the learned author, being a situation in which "the damage is brought about by two concurrent causes either of which, operating

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[147] 1990 1 SA 32 (A) 39. The principles set out in the aforementioned case pertaining to causation were re-stated and referenced by Corbett CJ in *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) 700 – 702.
[148] 1977 1 SA 31 (A). See also Boberg PQR (1984) (n3) 392ff.
[149] 1983 3 SA 275 (A). The Court also referred *inter alia* to the matters of *Rooi v R* 1952 2 PH H119 (T); *R v Loubser* 1953 2 PH H190 (W); *S v Taylor* 1967 2 PH H301 (SWA); *R v Mubila* 1956 1 SA 31 (SR); *R v Blaue* [1975] 3 All ER 446 (CA).
[150] Neethling J, Potgieter JM & Scott TJ *Case Book on the Law of Delict* (1999) 311.
[151] *S v Mokgethi* 1990 1 SA 32 (A) 39.
[152] *S v Mokgethi* 1990 1 SA 32 (A) 39 – 40.
[153] *S v Mokgethi* 1990 1 SA 32 (A) 39 – 40.
[154] *S v Mokgethi* 1990 1 SA 32 (A) 39 – 40.
[155] With reference to the various proponents of *conditio sine qua non*, the Court discussed the various advantages and disadvantages of the theory at 40 A – E and the authorities cited there. See also the discussion and summary of *S v Mokgethi* 1990 1 SA 32 (A) in Neethling J, Potgieter JM & Scott TJ (1999) (n150) 310 – 311.
[156] Boberg PQR (1984) (n3) 383.
[157] McKerron RG (1971) (n81) 125.

alone, would have been sufficient to produce the identical result."[158] Van der Walt[159] also supports the use of the *conditio sine qua non* theory but adds that the difficulties which arise in the event of multiple concurrent causes expose the "inherent fallacy" of the *conditio sine qua non* theory.[160]

In *Minister of Finance and Others v Gore*[161], the Supreme Court of Appeal revisited the issue of factual causation in the context of fraudulent conduct which occurred during certain tender award processes. The Court stated the following[162]:

[32] In our law the time-honoured way of formulating the question is in the form of the 'but for' test. Can it be said that, but for the wrongful act complained of, the loss concerned would not have ensued? Applying this requires the process of inferential reasoning described by Corbett CJ in *International Shipping Co (Pty) Ltd v Bentley*: what would have happened if the wrongful conduct is mentally eliminated and hypothetically replaced with lawful conduct? A plaintiff who can establish that, in such event, the loss would, on a preponderance of probabilities, not have occurred, recovers his damages in full because causation is regarded as having been established as a fact. A plaintiff who cannot do so will get nothing. That there is no discount, either way, stems from the nature of the inferential process: the verdict must go one way or the other even if the scales are tipped only slightly in one direction (see e.g. *Allied Maples Group Ltd v Simmons & Simmons (a firm)*; *Minister van Veiligheid en Sekuriteit v Geldenhuys*).

Cameron JA (as he then was) and Brand JA continued as follows[163]:

[33] With reference to the *onus* resting on the plaintiff, it is sometimes said that the prospect of avoiding the damages through the hypothetical elimination of the wrongful conduct must be more than 50%. This is often followed by the criticism that the resulting all-or-nothing effect of the approach is unsatisfactory and unfair. A plaintiff who can establish a 51% chance, so it is said, gets everything, while a 49% prospect results in total failure. This, however, is not how the process of legal reasoning works. The legal mind enquires: What is more likely? The issue is one of persuasion, which is ill-reflected in formulaic quantification. The question of percentages does not arise (see to this effect Baroness Hale in *Gregg v Scott*). Application of the 'but for' test is not based on mathematics, pure science or philosophy. It is a matter of common sense, based on the practical way in which the ordinary person's mind works against the background of everyday-life experiences." It is clear from the aforementioned, with respect,

[158] McKerron RG (1971) (n81) 125.
[159] Van der Walt JC (1979) (n1) 48.
[160] Van der Walt JC (1979) (n1) 48 fn 12.
[161] 2007 1 SA 111 (SCA) paras [32] – [33].
[162] 2007 1 SA 111 (SCA) paras [32] – [33].
[163] 2007 1 SA 111 (SCA) paras [32] – [33].

that the Supreme Court of Appeal eschewed, when it came to the establishment of factual causation, "formulaic quantification" and "mathematical calculation" in favour of a "common sense" approach.

The principles referred to above were re-visited, examined and confirmed by the Supreme Court of Appeal in the matter of *Minister of Correctional Services v Lee*[164].

2 5 2 Material Contribution Test

Neethling & Potgieter argue that it is "usually sufficient for the purposes of factual causation if a defendant's conduct has *in any way* contributed to the damage sustained by the plaintiff; for causation it is unnecessary that his conduct should be the only cause, or the main cause, or a direct cause" and "due to the complex and dynamic nature of reality it is in any case inconceivable that a consequence can have only one cause."[165] The material contribution test was discussed as a factor in establishing factual causation in the case of *Minister of Police v Skosana*[166] (the *conditio sine qua non* theory having been confirmed as the test for factual causation) with the court explaining that "in determining factual causation, the question is whether the defendant's conduct 'caused' or 'materially contributed to' the plaintiff's harm."[167] According to Mukheibir, Niesing & Perumal, the material contribution test:

> [H]as been used in other jurisdictions, but South African courts have referred to it in a few cases only. A possible reason for this is that the material contribution test denotes a lesser standard of proof and so applying it has the potential to broaden liability, especially where apportionment of fault is not possible.

According to Trindade & Cane[168]:

> The curiosity of this principle is that a defendant can be held liable for the whole of a loss even though all that can be proved on the balance of probabilities is that (the defendant) contributed to it. The principle allows the courts simply to ignore the lack of evidence on the issue of which factor caused which part of the plaintiff's loss.

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[164] *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) paras [46] – [49].
[165] Neethling J & Potgieter JM (2015) (n6) 195, 195 fn 77;
[166] 1977 1 SA 31 (A).
[167] Mukheibir A, Niesing L & Perumal D (2012) (n145) 75. See also *Kakamas Bestuursraad v Louw* 1960 2 SA (A) 202, 222; *Humphries v Barnes* 2004 2 SA 557 (C).
[168] Trindade FA & Cane P *The Law of Torts in Australia* (1999) 478.

However, as Mukheibir, Niesing & Perumal demonstrate, the purpose of factual causation "is to determine whether the defendant's conduct 'caused or materially contributed' to the harm suffered by the plaintiff, and not to limit liability."[169] Limitation of liability falls within the scope of legal causation, where policy and other considerations are involved. The tempering effect of legal causation ensures that a fair balance is struck between the plaintiff's and the defendant's interests, and those of society at large.[170]

2 5 3 "Common Sense"

Insofar as our courts have referred to the use of a "common sense" test for factual causation, the views of Mukheibir, Niesing & Perumal are supported insofar as they criticise the "common sense" approach for its lack of specificity.[171] According to the aforementioned writers[172]:

> [T]here is no uniform notion of common sense because notions of common sense vary from person to person. Secondly, resorting to common sense as a test may avoid properly explaining the reasons for arriving at the conclusion, which in turn might suggest that 'causal requirements are a matter of incommunicable judicial instinct', which they are not.

The learned authors further contend that a "common sense" approach to factual causation, although useful in informing a decision in respect of factual causation, cannot serve as an independent and self-contained test for factual causation.[173]

In *Bridgman NO v Witzenberg Municipality (JL & Another Intervening*)[174] a young woman (Ms Louw) who suffered from a mild mental disability was raped on the premises of the Pine Forest Holiday Resort, Ceres. The resort was owned, managed and controlled by the municipality. The plaintiff sued the municipality for damages in his capacity as the *curator ad litem* of Ms Louw. The issues between the parties were

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[169] Mukheibir A, Niesing L & Perumal D (2012) (n145) 75.
[170] Mukheibir A, Niesing L & Perumal D (2012) (n145) 75.
[171] Mukheibir A, Niesing L & Perumal D (2012) (n145) 76; *Portwood v Swamvur* 1970 4 SA 8 (RA); *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC).
[172] Mukheibir A, Niesing L & Perumal D (2012) (n145) 76.
[173] Mukheibir A, Niesing L & Perumal D (2012) (n145) 76. See also *Van der Spuy v Minister of Correctional Services* 2004 2 SA 463 (SE).
[174] 2017 3 SA 435 (WCC).

in respect of alleged negligence on the part of the municipality, and whether any negligence on its part caused or contributed causally to the injury suffered by Ms Louw. The court came to the following conclusion in respect of the element of causation[175]:

> Applying common sense, the answer to counsel's question is that the Municipality caused the rape of Ms Louw. It created a complete security vacuum at the time. Firstly, it failed to provide for security presence required by its own tender specifications. Secondly, it failed to supervise and enforce the terms of Ceres Alarms' quotation, that is, four security guards should have been on duty for the day shift. Thirdly, it failed to ensure that its own access regulations were enforced. Fourthly, it withdrew all but one of the resort staff at the critical time. This situation was created and allowed to exist by the Municipality without informing persons likely to be affected such as the L[ouw]s. The perpetrators seized this opportunity to abduct and rape Ms Louw. The act and omissions on the part of the Municipality were the probable cause of the rape. Accordingly there is a probable chain of causation between the negligent omissions (and one act) by the Municipality and the rape of Ms Louw. The Municipality owned, managed and controlled the resort. It failed to appoint a competent security firm to secure the resort in accordance with a contract embodying its usual technical specifications. There is no room for a defence relying on Ceres Alarms' status as an independent contractor because the Municipal executive and management were aware that their failure to put out a tender and to contract posed a threat to users of the resort.

It is submitted with respect that the decision in *Bridgman NO v Witzenberg Municipality (JL & Another Intervening)*[176] provides a good example of a case where the facts of the matter were of such a nature as to justify a finding of causation in terms of ordinary "common sense". The "common sense" approach may not however, it is submitted, provide satisfactory results in all factual matrices.

2 5 4 Material Increase in Risk

The creation or increase of risk of harm is not "necessarily the same as directly causing harm."[177] Mukheibir, Niesing & Perumal (discussing the English case of *McGhee v National Coal Board*[178] where the House of Lords held that the failure of the plaintiff's employer to provide shower facilities in a brick factory materially increased the risk

[175] 2017 3 SA 435 (WCC) para [165].
[176] 2017 3 SA 435 (WCC).
[177] Mukheibir A, Niesing L & Perumal D (2012) (n145) 77.
[178] 1973 1 WLR 1 (HL). See Chapter 4 para 3 3 4 4 *infra.*

of his contracting dermatitis) comment as follows in respect of an increase in risk by a wrongdoer[179]:

> In some instances of increasing risk, applying the *conditio sine qua non* test can lead to the absence of factual causation. The rationale for this seems to be that the wrongdoer has not taken the initiative of (positively) setting in motion the factual chain of events that caused the harm to occur. However, in some instances, there may be sufficient grounds for deviating from the *conditio sine qua non* test where a person has increased the risk of harm occurring.

The authors above use the example of setting fire to a house as a direct cause of harm, and they use the example of the door to a house being left open (allowing a thief to enter and steal property – the creation of a risk) which sets in motion a chain of events which creates an opportunity for harm to occur.[180] The theory has received criticism, mainly in respect of the fact that the creation of a risk cannot be equated to causing damage – to do so would be to rely on a legal fiction.[181] It should further be remembered, so cautions Wessels, that any negligent conduct increases the risk of possible injury or harm.[182] If factual causation were to be inferred from any increase in risk or risky conduct, it would imply that every finding of negligence would automatically result in a finding of factual causation.[183] As will be seen from what is set out *infra*, the Constitutional Court (in a minority judgment) had the opportunity to discuss the relevance of the material increase in risk theory in the matter of *Lee v Minister of Correctional Service*s.[184] The "material increase in risk" approaches to causation in medical negligence cases are discussed *infra.*[185]

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[179] Mukheibir A, Niesing L & Perumal D (2012) (n145) 77.
[180] Mukheibir A, Niesing L & Perumal D (2012) (n145) 77; Hart HLA & Honoré T *Causation in the Law* (1985) 59, 133.
[181] Hogg MA "Re-Establishing Orthodoxy in the Realm of Causation" (2007) *Edinburgh Law Review* 8ff; Wessels B "Alternatiewe Benaderings ten Opsigte van Feitelike Kousaliteit in die Deliktereg" (2013) *Litnet Akademies* 68 90.
[182] Wessels B (2013) (n181) 90; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) 183.
[183] Wessels B (2013) (n181) 90.
[184] 2013 2 SA 144 (CC).
[185] Paras 6 2 4 *infra*; Chapter 5 para 4 2 3 *infra.*

3 RECENT DEVELOPMENTS: *LEE v MINISTER OF CORRECTIONAL SERVICES*

In *Lee v Minister of Correctional Services*[186], the question of the determination of factual causation re-surfaced when Mr Lee, who had instituted a claim against the Minister of Correctional Services after contracting tuberculosis while in prison, and who had not been successful before the Supreme Court of Appeal[187], approached the Constitutional Court for relief.[188] Mr Lee was, according to the judgment of the Constitutional Court, not infected with tuberculosis when he was admitted to Pollsmoor prison. Based on the evidence on record, the Constitutional Court held that it was more probable than not that Mr Lee contracted the disease in prison, rather than outside it. [189] The Supreme Court of Appeal proceeded to deliver its judgment on the aforementioned basis, but "non-suited Mr Lee on the basis that he failed to prove that reasonable systemic adequacy would have 'altogether eliminated' the risk of contagion, that he did not know the source of his infection, and that had he known the source it is possible that he might have been able to establish a causal link between his infection and the specific negligent conduct on the part of the responsible authorities."[190] The Constitutional Court held that the Supreme Court of Appeal had erred in adopting the approach above, and found for Mr Lee.[191]

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[186] 2013 2 SA 144 (CC).

[187] *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA). The facts of the matter are set out succinctly in *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) paras [1] – [4] and referred to by the Constitutional Court in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [5]. An excellent summation of the facts is provided by Visser CJ & Kennedy-Good C (2015) (n9) 153 – 154. See also Neethling J (2013) (n27) 177 – 186 where the learned author is of the opinion that Mr Lee's tuberculosis infection was inevitable regardless of steps taken by the authorities and, on that basis, would not be able to succeed in delict.

[188] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) presented the first major opportunity for the Constitutional Court to consider the issue of causation in the context of the values and principles of the Constitution. See Carstens PA & Pearmain D (2007) (n1) 509 where the learned writers affirm that decisions as to legal causation must be informed by constitutional values and principles. The present inquiry in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) dealt, however, not with legal causation, but factual causation; see also the general discussion of the judgment in Neetling J & Potgieter JM (2015) (n6) 193ff.

[189] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [42]. It is, according to the report, impossible to trace the origins of the disease with certainty, especially in crowded environments.

[190] *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) para [42].

[191] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) per Nkabinde J (Moseneke DCJ, Froneman J, Jafta J and Van der Westhuizen J concurring).

3 1 *Lee v Minister of Correctional Services (CC)*: Majority Judgment

In providing a basis for its judgment, the majority in the Constitutional Court re-stated certain trite principles about the determination of factual causation.[192] More specifically, the Constitutional Court affirmed: (a) the traditional two-stage approach to causation[193]; (b) that the question of the determination of causation is complex and is surrounded by much controversy and that "there can be no liability if it is not proved, on a balance of probabilities, that the conduct of the defendant caused the harm and that only causal negligence that can give rise to legal responsibility"[194]; (c) that "a means of limiting liability, in cases where factual causation has been established, must be applied[195]"; (d) that "whether a fact can be identified as a cause depends on a conclusion drawn from available facts or evidence and relevant probabilities"[196]; (e) that "factual causation, unlike legal causation where the question of the remoteness of the consequences is considered, is not in itself a policy matter but rather a question of fact which constitutes issues connected with decisions on constitutional matters as contemplated by section 167(3)(b) of the Constitution"[197]; (f) that "the theory most frequently employed by our Courts in determining factual causation is the *conditio sine qua non* theory or the "but for" test"[198]; (g) that the standard principles relating to the establishment of factual causation are those referred to in *International Shipping Co (Pty) Ltd v Bentley*[199]; (h) that the enquiry to determine a causal link, put in its simplest formulation, is "whether one fact follows from another."[200]

It is respectfully submitted that the majority of the Constitutional Court's approach in re-stating the principles of factual causation are, to a certain point in its discussion of

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[192] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [38]ff. The Court referred to *Minister of Police v Skosana* 1977 1 SA 31 (A) 34D – E.
[193] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [38].
[194] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39]; *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA). See also Le Roux-Kemp A "Standards of Proof: Aid or Pitfall?" (2010) *Obiter* 686ff.
[195] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[196] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[197]*Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[198] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[199] 1990 1 SA 680 (A)700F – H.
[200] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [38] – [41]. See also Neethling J & Potgieter JM (2013) (n23) 5; Van Rensburg ADJ (1970) (n23) 141, 152.

this leg of the determination of causation, conventional and uncontroversial.[201] The majority of the Court, however, added the following dictum[202] in respect of factual causation[203]:

> However, as will be shown in detail later, the rule regarding the application of the test in positive acts and omission cases is not inflexible. There are cases in which the strict application of the rule would result in an injustice, *hence a requirement for flexibility. The other reason is because it is not always easy to draw the line between a positive act and an omission*. *Indeed, there is no magic formula by which one can generally establish a causal nexus. The existence of the nexus will be dependent on the facts of a particular case.*

Nkabinde J continued the Constitutional Court's criticism of the decision of the Supreme Court of Appeal, stating that it was not necessary for the substitution of reasonable alternative measures to determine factual causation "because our law allows for a more flexible approach."[204] Secondly, even if the use of a reasonable alternative substitution were necessary under the circumstances, our law does not require "evidentiary proof of the alternative, but merely substitution of a notional and hypothetical lawful, non-negligent alternative."[205] The purpose of the exercise, so the Constitutional Court held, is to evaluate the evidence presented by a plaintiff and not to require more evidence.[206] If the substitution exercise is done in this way, probable factual causation is established.[207] The Constitutional Court did not, ostensibly, favour the "'rigid deductive logic' that necessitated the conclusion that, because Mr Lee did not know the exact source of his infection, he needed to show that reasonable systemic adequacy would have altogether eliminated the risk of contagion."[208] The emphasis, in the decision of the majority of the Constitutional Court, is on the avoidance of the

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[201] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41]. See also Visser CJ & Kennedy-Good C (2015) (n9) 159.
[202] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41]. See also Visser CJ & Kennedy-Good C (2015) (n9) 159.
[203] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41] [emphasis added]. See also *Daniels v Minister of Defence* 2016 6 SA 561 (WCC).
[204] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [43]. See also *Moroana v Passenger Rail of South African* [2017] ZAGPPHC 21 (Unreported Judgment) (1 February 2017) paras [24] – [24*bis*]; *Mafole v Passenger Rail Agency of South Africa* [2017] ZAGPPHC 31 (Unreported Judgment) (1 February 2017); *M and Another v MEC of Health Northwest* [2017] ZANWHC 11 (10 February 2017) para [24].
[205] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [43].
[206] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [43].
[207] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [43].
[208] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [44].

"inflexible kind of logic"[209] used by the Supreme Court of Appeal and that our law does not require an "inflexible application of a substitution exercise in the application of the but-for test."[210]

As Wessels[211] illustrates, the majority of the Constitutional Court emphasised the so-called "flexible approach*"* adopted in *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[212] and held that the trial Court "was correct in finding that the only material question was whether the factual circumstances of the plaintiff's incarceration were the more probable cause of the plaintiff's tuberculosis infection."[213] Insofar as the approach in *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[214] is concerned, Nkabinde J stated as follows[215]:

> What we may glean from *Siman* is that substitution as part of the application of the but-for test may not be apposite where there may be concurrent or supervening causes; that it should not be applied inflexibly; that drawing the line between a positive act and an omission is not always easy to do; and, finally, *that even in the application of the but-for test common sense may have to prevail over strict logic*.

Against the backdrop of *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[216], Nkabinde J emphasised two important considerations in determining whether or not factual causation has been established: firstly, the need for employing flexibility in the factual causation enquiry[217] and secondly, the possible existence of normative considerations in establishing a factual nexus.[218] The aforementioned "flexibility" becomes especially important where the uncertain boundaries between a positive act

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[209] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [45]
[210] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [45]; *Kakamas Bestuursraad v Louw* 1960 2 SA 202 (A) 220B – C.
[211] Wessels B (2013) (n181) 85. See also Visser CJ & Kennedy-Good C (2015) (n9) 160.
[212] 1984 2 SA 888 (A). The Court also referred to *Kakamas Bestuursraad v Louw* 1960 2 SA 202 (A) 220B – C; *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA); *Minister of Finance v Gore* 2007 1 SA 111 (SCA) para [33]; Burchell J (1993) (n36) 116 – 117.
[213] Wessels B (2013) (n181) 85.
[214] 1984 2 SA 888 (A).
[215] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [49] [emphasis added].
[216] 1984 2 SA 888 (A).
[217] Visser CJ & Kennedy-Good C (2015) (n9) 160; Neethling J & Potgieter JM (2015) (n6) 194.
[218] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [48].

and an omission render the enquiry more difficult than a clear-cut *commissio* or *omissio* scenario.[219] Nkabinde J further held as follows[220]:

> The substitution exercise of determining hypothetical lawful conduct involves an evaluation of normative considerations. The determination of a question of fact, although it is also an evaluative exercise, cannot depend on social and policy considerations. Even though the purpose of using the normatively determined lawful conduct as an alternative is not primarily aimed at making an 'is' question and 'ought' question, it seems to me that it inevitably makes it at least *a mixed question of fact and law. The distinction between factual and legal causation made in our law becomes unnecessarily less clear*.

Visser & Kennedy-Good point out that "the mentioned normative considerations are not of a social or policy nature and do not, for example, require an investigation into the criterion of reasonableness."[221] The decision of the majority of the Constitutional Court attracted significant criticism from various academic writers. The main points of criticism are discussed *infra.*

3 2 Criticism of *Lee v Minister of Correctional Services (CC)*: Majority Judgment

The formulation favoured by the majority of the Constitutional Court in respect of a "flexible" approach to *conditio sine qua non* has raised concern and criticism from certain quarters as a result of the Court's formulation of the requirements pertaining to such flexibility.[222] Neethling & Potgieter[223] argue that causation should be distinguished from unlawfulness and that, when dealing with omission and the application of the *conditio sine qua non*, the examination of such conduct should not introduce or require, reference to "lawful" conduct. To do so would be to confuse the elements of unlawfulness and causation.[224] Wessels opines that the appropriate

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[219] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [49]. See also *H & L Timber Products* 2001 4 SA 814 (SCA); *MTO Forestry (Pty) Ltd v Swart NO* 2017 5 SA 76 (SCA) para [13].
[220] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [49] [emphasis added].
[221] Visser CJ & Kennedy-Good C (2015) (n9) 161.
[222] Wessels B (2013) (n181) 86; Veldsman J "Factual Causation: One Size Does Not Fit All" [2013] *De Rebus* 247; Paizes A "Factual Causation: Which 'Conditio' Must Be a 'Sine Qua Non'? A Critical Discussion of the Decision in Lee v Minister for Correctional Services*"* (2014) *SALJ* 500 500 – 509; Visser CJ & Kennedy-Good C (2015) (n9) 162ff.
[223] Neethling J & Potgieter JM (2013) (n23) 6; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [56] – [57].
[224] Neethling J & Potgieter JM (2013) (n23) 6.

question to be determined is not whether the mere incarceration of the plaintiff caused the infection, but whether or not the infection was caused as a result of the failure by the prison authorities to reasonably apply the relevant required (and existing) safety measures.[225] Given that it is impossible to identify a singular source of any particular tuberculosis infection (at least in a confined environment such as a prison), it cannot be argued according to Wessels, that it is simple "common sense" that the negligent omission on the part of the prison authorities caused the plaintiff's tuberculosis, especially where medical evidence pertinently indicated that it is equally as probable as not that the plaintiff would have contracted tuberculosis through the negligence of the prison authorities.[226] Wessels further opines that the application of "common sense" or healthy mental faculties cannot justify an inference that an injury was caused through one mechanism rather than another, especially where medical evidence indicates that both mechanisms are equally as likely to have caused the injury.[227] Meerkotter questions the precise nature of the "common sense" approach espoused by the majority of the Court, stating that[228]:

> While this flexible, common sense approach is championed by the CC, one must enquire what it entails. It is often said that such open standards are subject to idiosyncratic interpretation, based on an individual's subjective paragdigm… First, the employment of an open-ended standard such as common sense to assess the outcome of a test for factual causation enables a court to import constitutional values of fairness, justice and reasonableness into the enquiry for factual causation… Secondly, this approach must not entail '*ad hoc* exercises of discretion' based on the particular facts of the case, but must, as Midgley suggests, allow judges to adopt a mode of reasoning that is appropriate in light of the circumstances of a particular case. In order to avoid the disintegration of the test for factual causation into a mere subjective, discretionary exercise, it is necessary that parameters of this approach be delineated.

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[225] Wessels B (2013) (n181) 85 – 86, 86 fn 161. See also *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) 628 – 629: "Whether or not he was infected while incarcerated was a necessary but not an exhaustive step in that enquiry. If he was not infected while incarcerated then that would obviously end the enquiry. But if he was indeed infected while incarcerated the question still remains whether he would have been infected if there had been reasonable management of the disease. Proof alone that reasonable precautions were not taken to avoid foreseeable harm, and that the harm occurred, does not establish that the former caused the latter."

[226] Wessels B (2013) (n181) 86, 86fn 163.

[227] Wessels B (2013) (n181) 86, 86fn 164.

[228] Meerkotter A "The Dudley Lee Case: A New Approach to Factual Causation and its Implications for Transformative Jurisprudence*"* (2015) *SAPL* 273 284.

Meerkotter argues that at least two factors are pertinent to a common sense approach to factual causation[229]:

First, the constitutional guarantee of state accountability may have an indirect role to play in determining whether factual causation is satisfied. More specifically, a court must have appropriate regard to the broader consequences of systemic failures by the state. Thus the question of 'what is more likely?' may be answered with reference to the reality of the state's systemic omissions. If such an omission is likely to give rise to a particular outcome, the test for factual causation may be satisfied. It must be noted that a plaintiff may be required to adduce evidence as to the likelihood of a specific outcome in order to discharge the civil onus of proof. However, where a plaintiff faces evidential difficulties… a court must take considerations of policy and justice into account… Second, while the outcome must be just, a court must not lose sight of the nature of factual causation: ultimately, a probable factual link must exist between the state's systemic omission and the prejudice suffered by the plaintiff. Thus, it remains important to bear in mind the nature of the harm suffered by the plaintiff, as well as the nature of the omission.

Visser & Kennedy-Good[230] raise the following criticism of the majority of the Constitutional Court's approach[231]:

First, the Court incorrectly described its approach as a 'flexible' *conditio sine qua non* test... Therefore, this test formulated by the Court is not a proper or even a variant formulation of the *conditio sine qua non* test, as the supposed flexible application of this test did not highlight a necessary condition (but did highlight the Supreme Court of Appeal's formalistic application of this test...) Secondly, the Court failed to distinguish properly between the various tests to factual causation it considered in finding a factual *nexus*. Arguably, such an 'amorphous' treatment of the factual causation inquiry hindered any further contemplation of the utility of the different tests to factual causation. For instance, the Constitutional Court could have expressly recognised the material contribution test as a viable alternative to the *conditio sine qua non* test... Similarly, the Court could have interrogated the concept of 'probable cause' under the common sense approach even further... It could have questioned whether common sense should function as a distinct test for factual causation... Thirdly, the Court's amorphous treatment of the factual causation inquiry also fell short of providing a systematic analysis and application of the law. In doing so, the Court missed an opportunity of clarifying how these different approaches can coincide in the factual causation enquiry.

[229] Meerkotter A (2015) (n228) 284 – 285.
[230] Visser CJ & Kennedy-Good C (2015) (n9) 162.
[231] Visser CJ & Kennedy-Good C (2015) (n9) 162.

Price raises a critical concern in respect of the judgment, i.e., that the implications of *Lee v Minister of Correctional Services*[232] for the requirement of factual causation in the law of delict are uncertain.[233] Price further emphasises two important developments as a result of the aforementioned judgment[234]:

> To my knowledge, before *Lee* no South African court had ever held that delictual liability should be imposed merely upon proof that (1) the defendant's negligent and wrongful conduct increased a risk of particular harm and (2) the plaintiff suffered that harm. Nor had any South African court held that factual causation is established merely by proving that but for the defendant's conduct *per se*, the harm would not have occurred. On either new approach, it is far easier to establish factual causation and the boundaries of delictual liability are accordingly widened.

The application of a "flexible" or "common sense" approach to the facts in the aforementioned judgment by the Constitutional Court is problematic as such application cannot breach the evidentiary chasm confronting the plaintiff.[235] Meerkotter argues that, where a plaintiff faces evidential difficulties, a court must take considerations of policy and justice into account.[236] Human experience and "common sense" are tools to be utilised in reconstructing events but they cannot replace that which actually occurred.[237] Human experience may not, however, always provide an accurate solution: Visser provides the example of the fact that a bullet to the head is usually fatal, but that does not mean that this will be the case with every gunshot wound to the head.[238] In the context of harm occasioned by the state (such as in Dudley Lee's case), Meerkotter argues that "while an outcome must be just, a court must not lose sight of the nature of factual causation: ultimately, a probable factual link must exist between the state's systemic omission and the prejudice suffered by the plaintiff."[239]

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[232] 2013 2 SA 144 (CC).
[233] Price A *"*Factual Causation After Lee*"* (2014) *SALJ* 491. Price mentions that the Constitutional Court held, surprisingly, that it did not develop the common law - see *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [45], [72] – [73].
[234] Price A (2014) (n233) 493.
[235] Wessels B (2013) (n181) 86. See also Lord Roger's warning in respect of this type of approach in *Fairchild v Glenhaven Funeral Services Ltd* [2002] 3 All ER 305 (HL).
[236] Meerkotter A (2015) (n228) 285.
[237] Visser PJ (2006) (n21) 586.
[238] Visser PJ (2006) (n21) 586.
[239] Meerkotter A (2015) (n228) 285.

Although the application of "common sense" in the determination of factual causation as referred to *supra* is an important tool, the application of a "common sense" approach in situations where more than one action or mechanism may have caused a particular result (depending on the nature of the cause – either "cumulative causation" or "concurrent causation" - for instance where hunters X and Y deliver fatal shots to Z simultaneously) may lead to the absurd conclusion that neither X nor Y factually "caused" Z's death.[240] The solution, apparently, is that the "man in the street" and his "common sense" would solve the problem by stating that "of course they are both to blame".[241] Precisely how the same "man in the street" would deal with uncertain causation in medical law, for instance where the question is whether it is uncertain whether the actions (or omissions) of Dr X, a complicated drug interaction or a pre-existing medical condition, or a combination of them, may be to blame for a patient's death, is unclear. Would the "man in the street" simply blame "all of them" or would he simply "give the doctor the benefit of the doubt" and grant absolution from the instance? Would the "man on the street" be able to determine with precision whether a particular drug interaction is capable of resulting in the death of a patient when the latest medical science cannot provide the answer?

The "common sense" approach necessarily involves some form of intuitive decision-making on the part of a presiding officer or finder of fact.[242] This much is also positively confirmed in the English case of *Chappel v Hart*[243]:

> The resolution of the question of causation will often be asserted without lengthy articulation of reasons. Since it is a question of fact resolved as a matter of common sense and experience, the conclusion is often reached intuitively.

It is uncertain precisely how lawyers are to provide certain answers for doctors and patients when "even the application of the finely tuned legal intuition of the members

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[240] Neethling J & Potgieter JM (2013) (n23) 7; Neethling J & Potgieter JM (2015) (n6) 188, 188 fn 31.
[241] Neethling J & Potgieter JM (2013) (n23) 7. The learned writers make reference to the suggested principles of European law of delict as suggested by the European Group on Tort Law *Principles of European Tort Law: Text and Commentary* (2005) 44 which states that: "In the case of multiple activities, where each of them alone would have caused the damage at the same time, each activity is regarded as a cause of the victim's damage". See also Price A (2014) (n233) 493 – 495.
[242] Neilson E "*Chappel v Hart*: The Problem with the Common Sense Test of Causation*"* (1999) *University of Queensland Law Journal* 318 322.
[243] [1998] HCA 55 para 148. See also Chapter 4 para 3 3 10 *infra.*

of the High Court results in totally different outcomes."[244] In any event, most courts implicitly accept that its enquiries will be subject to various uncertainties.[245] Although the risk of entirely intuitive decision-making on the part of a presiding officer is minimal, if not in most cases negligible, the difficulty created by a nebulous and intuitive approach is that every individual finder of fact will exercise a different approach to the same facts, and legal practitioners will find it extremely difficult to advise their clients or to predict with any form of certainty what the outcome of any particular case might be.

As far as the influence of normative considerations is concerned in the determination of factual causation, Visser opines that it cannot be correct to argue that a test for factual causation possesses certain "normative elements."[246] Van der Walt & Midgley opine that, although any test for causation may involve the application of some normative elements[247], the primary role of the first leg of the enquiry is to establish a factual link between the conduct and the loss.[248] They continue by stating that the determination of factual causation *"*cannot depend upon policy considerations."[249] Visser is further of the view that our law recognises, generally speaking, that factual causation either exists in a specific case or it does not, and no application of legal principles, normative, theoretical or otherwise can change such position.[250] This proposition is supported by Harms who asserts that it is impossible to "relax" factual causation and who continues as follows[251]:

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[244] Lavery J "*Chappel v Hart*: The High Court's Lost Chance*"* (1998) *Australian Health Law Bulletin* 25.

[245] Green S "The Risk Pricing Principle: A Pragmatic Approach to Causation and Apportionment of Damages" (2005) *Law, Probability and Risk* 159 163.

[246] Visser PJ (2006) (n21) 586 *contra* the majority of the Court in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC). See also Van der Walt JC & Midgley JR (2005) (n1) 199; Neethling J & Potgieter JM (2015) (n6) 195.

[247] See *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) par [51]; Neethling J & Potgieter JM (2015) (n6) 195. See also Chapter 5 para 4 2 2ff *infra.*

[248] Van der Walt JC & Midgley JR (2005) (n1) 199.

[249] The decision of the majority of the Constitutional Court in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC), confusingly, has placed this assertion into doubt. See para 3 *infra*. See also *Minister of Safety and Security v Carmichele* 2004 3 SA 305 (SCA) paras [25], [60] and the principles enumerated by Trengrove JA, Nicholas AJA (*obiter dictum*) and Jansen JA in *S v Daniëls* 1983 3 SA 275 (A) 324 – 325, 302 – 303, 331C-D.

[250] Visser PJ (2006) (n21) 586: "Dit kan nie korrek wees om te betoog dat 'n toets vir feitelike kousaliteit ook 'normatiewe' elemente het nie." See also Neethling J & Potgieter JM (2015) (n6) 195.

[251] Harms LTC "The Puisne Judge, the Chaos Theory and the Common Law" (2014) *SALJ* 3. See also Boonzaier L & Mbikiwa M *"*The Constitutional Court in Harms' Way: A Response*"* (2015) *SALJ* 769 – 779.

The normative limitation on liability created by factual causation is legal causation (remoteness) and not, as Nkabinde J would have it, the test for wrongfulness. The causation enquiry can only arise when there is wrongfulness and fault, although it may in a given instance be practical to begin and end with the factual enquiry.

Davis argues that the majority of the Constitutional Court's finding that there existed no need to develop the common law in a case such as *Lee v Minister of Correctional Services*[252] because the *conditio sine qua non* test should not be applied "inflexibly" (and that the common law could accommodate the problem) is problematic.[253] The difficulty with such conclusion, according to Davis, is that it[254]:

[T]urns on the implications of the majority judgment. Given that negligent conduct increases risk, it makes harm more likely. It is thus possible to infer probable factual causation from this increased likelihood of harm. This is hardly the basis upon which our common law of factual causation has been based and is certainly not the meaning which was given to a flexible enquiry as suggested by Corbett JA (as he then was) in *Siman & Co (Pty) Ltd v Barclays Bank.*

Central to most of the criticism of the decision of the majority[255] is that *Lee v Minister of Correctional Services*[256] is problematic because "its implications for the delictual requirement of factual causation are uncertain."[257] Price opines that all delictual claims in future are potentially affected by *Lee v Minister of Correctional Services*[258], not only those against "recalcitrant government departments."[259] *Lee v Minister of Correctional Services*[260] has, insofar as it has eroded the certainty of the test for factual causation, also eroded the rule of law. Legal positions become "less certain and less predictable; it becomes harder to plan one's affairs or to give reliable legal advice; and

[252] 2013 2 SA 144 (CC).
[253] Davis DM "Where Is the Map to Guide Common-Law Development?" (2014) *Stellenbosch Law Review* 3 9; Price A (2014) (n233) 492 where the learned author points out that the majority of the Constitutional Court's finding that it had not developed the common law is surprising as there is strong evidence that the majority departed from the traditional "but for" test in at least two ways. See also Zitzke E "Constitutional Heedlessness and Over-Excitement in the Common Law of Delict's Development" (2015) *CCR* 259.
[254] Davis DM (2014) (n253) 10.
[255] And, in a sense, the decision of the minority insofar as it may introduce a "wider" enquiry into factual causation which takes cognisance of "policy considerations" – see Wessels B (2013) (n181) 94.
[256] 2013 2 SA 144 (CC).
[257] Price A (2014) (n233) 491.
[258] 2013 2 SA 144 (CC).
[259] Price A (2014) (n233) 491.
[260] 2013 2 SA 144 (CC).

an increase in costly, undesirable litigation may follow."[261] The aforementioned aspects are significant in light of the fact that it is becoming increasingly evident that South Africa has not remained spared from the rapidly increasing flood of medical malpractice litigation which has occurred elsewhere.[262] Paizes, following similar lines of critique, finds the reasoning of the minority of the Court (per Cameron J) "irresistible" and the approach of the majority of the Court "unsustainable" and "unsound".[263]

Fagan mentions the reference to the judgment of Corbett JA in *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[264] by the majority of the Court but emphasises that the majority of the Constitutional Court failed to grasp its central point, namely[265]:

> [I]t is that, in order to determine whether negligent (or wrongful) conduct was a factual cause of harm, one has to mentally eliminate or 'think away' *as much of the conduct as, but no more of the conduct than*, was negligent (or wrongful). Thereafter one must ask: if *this much, but no more*, of the conduct were eliminated, would the harm still have occurred? If the answer is: yes, the harm would still have occurred, the negligent (or wrongful) conduct was not a factual cause of the harm. But if the answer is: no, the harm would not then have occurred, the negligent (or wrongful) conduct was a factual cause of the harm.

Fagan further emphasises that Corbett JA's principle can be summarised in a different way, i.e.[266]:

> There is yet another way of putting the point that Corbett JA made... [i]n order to determine whether negligent (or wrongful) conduct was a factual cause of harm, one always has to posit or imagine a course of conduct that deviates from the actual one. However, and this is critical, the course of conduct which one posits or imagines should deviate from the actual conduct *no more than is necessary* to deprive the conduct of its negligent (or wrongful) character. To put it another way, the imagined conduct should alter the actual conduct *only just enough* to render it non-negligent (or lawful).

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[261] Price A (2014) (n233) 491.
[262] Pepper MS & Slabbert Nöthling M "Is South Africa on the Verge of a Medical Malpractice Litigation Storm?" (2011) *SAJBL* 29 – 35.
[263] Paizes A (2014) (n222) 501.
[264] *Siman & Co (Pty) Ltd v Barclays National Bank Ltd* 1984 2 SA 888 (A) 951B – H.
[265] Fagan A "Causation in the Constitutional Court: Lee v Minister of Correctional Services" (2014) *Constitutional Court Review* 104 109.
[266] Fagan A (2014) (n265) 109.

South African cases[267] provide, according to Fagan, overwhelming support for the conclusion that at the time of *Lee v Minister of Correctional Services*[268], the common law contained the following rules, and by doing so conceded that South African Courts had on many occasions applied the rules[269] referred to *infra* in determining factual causation[270]:

(1) A person who performed negligent conduct can be delictually liable for harm suffered by another person only if the negligent conduct was a factual cause of the harm;

(2) Negligent conduct was a factual cause of harm if and only if, but for the negligent conduct, the harm would not have occurred;

(3) A court is justified in concluding that a defendant's negligent conduct was a factual cause of a plaintiff's harm if and only if the plaintiff has proved that the negligent conduct probably was a factual cause of that harm; and

(4) A plaintiff has proved that a defendant's negligent conduct probably was a factual cause of the plaintiff's harm if and only if the plaintiff has proved that, but for the negligent conduct, the harm probably would not have occurred.

In some cases, however, according to the majority, South African common law accepted that "at least, in some cases, factual causation was *not* to be determined by application of rules (2) and (4)."[271] Moreover, the majority of the Court believed that the established approach to factual causation had, in fact, a "long history" of flexibility.[272] According to the learned author, the majority in *Lee v Minister of Correctional Services*[273] did not think it necessary to[274]:

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[267] *Minister of Police v Skosana* 1977 1 SA 31 (A); *Siman & Co (Pty) Ltd v Barclays National Bank* 1984 2 SA 888 (A); *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A); *Groenewald v Groenewald* 1998 2 SA 1106 (SCA); *Mukheiber v Raath & Another* 1999 3 SA 1065 (SCA); *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA); *Minister van Veiligheid en Sekuriteit v Geldenhuys* 2004 1 SA 525 (SCA); *Minister of Safety and Security v Hamilton* 2004 2 SA 216 (SCA); *Minister of Safety and Security v Carmichele* 2004 3 SA 305 (SCA); *Minister of Finance v Gore* 2007 1 SA 111 (SCA); *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA); *Delphisure Group Insurance Brokers Cape (Pty) Ltd v Dippenaar* 2010 5 SA 499 (SCA).
[268] 2013 2 SA 144 (CC).
[269] Rules "(2)" and "(4)" in Fagan's nomenclature.
[270] Fagan A (2014) (n265) 118 – 119.
[271] Fagan A (2014) (n265) 119.
[272] Fagan A (2014) (n265) 119.
[273] 2013 2 SA 144 (CC).
[274] Fagan A (2014) (n265) 119.

[P]resent the long line of cases which, in its view, had adopted a 'flexible' approach to rules (2) and (4). That is not altogether surprising: *for those cases do not exist.*

The majority of the Constitutional Court's usage of and reference to "normative principles" is unfortunate. An introduction of a further flexible criterion introduces an element of judicial uncertainty. The Court in *Lee v Minister of Correctional Services*[275] missed an opportunity to properly define and address the issues and possible solutions in concrete terms, not only in respect of factual causation, but also to provide guidance in respect of cumulative or multiple causation.[276] In a sense the finder of fact now has to twice apply certain "normative" (or "policy") considerations: first when determining factual causation and secondly when applying the test for legal causation, which test was accepted in *S v Mokgethi*[277] and in order to limit liability. It is unfortunate that the Constitutional Court did not (apart from the later explanatory gloss in *Mashongwa v PRASA*[278]) provide guidance as to when, and precisely how, the alternative tests for factual causation are to be applied in future.[279] The latter judgment did, however, confirm that no legal system permits liability without bounds.[280]

3 3 *Lee v Minister of Correctional Services (CC)*: Minority Judgment

In a dissenting judgment, the minority of the Court[281] held that "it cannot be said that it is more probable than not that 'but for' the negligence of the prison authorities, Mr Lee would not have contracted tuberculosis (TB)."[282] The central question, according to the minority of the Court, was whether Mr Lee established *a quo* that his infection with TB would probably have been averted if his jailers had taken reasonable measures to protect him from it. According to the minority of the Court, that Mr Lee probably contracted TB as a result of being locked up in Pollsmoor prison at a time when, despite

[275] 2013 2 SA 144 (CC).
[276] Price A (2014) (n233) 493.
[277] *S v Mokgethi* 1990 1 SA 32 (A).
[278] 2016 3 SA 528 (CC).
[279] Price A (2014) (n233) 493: "What makes a case 'appropriate' for the relaxation of the 'but for' test (para 74), so that the traditional approach – summarised above – is no longer determinative of factual causation? In what classes of case should a more 'flexible' approach be applied?"
[280] *Mashongwa v PRASA* 2016 3 SA 528 (CC) para [69].
[281] Per Cameron J (Mogoeng CJ, Khampepe J and Skweyiya J concurring).
[282] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [79].

standing orders, TB control measures at the prison were virtually non-existent.[283] It could not be doubted that Mr Lee contracted TB whilst in Pollsmoor prison, and the Supreme Court of Appeal assumed in Mr Lee's favour, without making a definite finding to that effect, that "he was probably infected by a fellow prisoner who had active (and thus transmissible) TB while under the control of the prison authorities."[284] Discussing the findings of the Supreme Court of Appeal, Cameron J continued by stating that[285]:

> But, in any event, the court found, because Mr Lee could not say precisely how he became infected, he was unable to prove that what the prison authorities did not do, but should have done, *caused* his injury. Here the particular nature of TB infection placed an '*insuperable hurdle*' in Mr Lee's path.

After discussing the nature of the disease, Cameron J continued as follows[286]:

> Hence, in a prison setting, particularly a large prison like Pollsmoor, the disease cannot always be diagnosed immediately. So, prisoners with active TB are contagious to others before the prison can reasonably be expected to diagnose, treat and if necessary isolate them. The result was that even if Mr Lee had shown what steps the prison authorities should reasonably have taken, the course and ferocity of the disease meant that he would always be at risk of contagion from undiagnosed fellow prisoners, whatever prison management did. *Since reasonable measures could not eliminate this risk, and since Mr Lee could not pinpoint who had infected him, it was 'just as likely as not' that he was infected by a prisoner whom the prison authorities could not reasonably have known might pass the disease on to him. It was therefore not possible to find that a negligent omission by the prison authorities caused his infection.*

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[283] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [80]. See also *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) fn 146: "The parties agreed that, to the extent that any system existed at all for managing TB, 'its application in practice was at best sporadic and in at least some respects effectively non-existent'".

[284] *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA) para [55]; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [81]. The Court continued by asking the following question at [81] D – E concerning the twofold problem facing Mr Lee: "First, what measures ought the prison authorities reasonably have taken to prevent TB transmission? And second, had the prison authorities taken these measures, would they more probably than not have saved Mr Lee from getting TB? [82] The Supreme Court of Appeal noted that the law does not require the prison authorities to 'guarantee' that a prisoner does not get TB. Pollsmoor did not have to do 'everything that would have avoided [TB] being transmitted'. The prison authorities only had to take reasonable steps to protect Mr Lee against it. What reasonable prison authorities should have done depended on medical best-practice, security issues, financial resources, personnel, space, the prevalence and incidence of the disease, 'and other factors besides'. On all this Mr Lee had only *'scant evidence', which went 'nowhere' towards showing what reasonable prison authorities should have done*." [emphasis added].

[285] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [83] [emphasis added].

[286] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [84] [emphasis added].

The existing test for causation, while adequate for cases where a plaintiff can identify the source of his or her injury, may not be sufficient where he or she cannot know the source thereof.[287] As Cameron J points out, the Supreme Court of Appeal non-suited Mr Lee because, on the existing test, he could not specify the source of his infection and therefore he could not show, on a balance of probabilities, that the prison authorities caused his injury.[288] This approach, however, according to Cameron J[289]:

> [R]ejects all prospect of recovery even where the court finds that the defendant's negligence increased the risk of injury. This seems unjust. And it may be constitutionally unsustainable. The law has never required perfection when imposing standards of care. It has only ever required *reasonable* conduct. Reasonableness permits a defendant to fall short of perfection. This means that there are legally countenanced levels of risk of harm – as well as levels of risk that the law should not countenance.

Cameron J then concludes that "the Supreme Court of Appeal's logic in the application of the existing "but-for" test was not at fault and that, ordinarily, where the source of infection was known, a claimant 'need show merely that the measures reduced the risk below 50%'" but, however, "where the claimant cannot specify the source of his infection, this cannot apply on the existing but-for test for causation."[290] The judgment continues as follows[291]:

> To bring the matter starkly back to the case before us, because a claimant in the position of Mr Lee may never be able to trace the source of his or her infection, the prison authorities would on the but-for test for causation *have no legal incentive, at least in principle, to reduce the risk of contagion*. This is because they need show only a small chance that a claimant like Mr Lee may have contracted TB anyhow, even if reasonable systemic measures had been applied. *Because the risk was not altogether eliminated, the claim will fail. And this will almost always be the case. Hence, claimants in Mr Lee's position will, on the existing test, almost never be able to succeed*.

Cameron J's dictum emphasises the difficulty facing plaintiffs in situations similar to Mr Lee and, it is submitted, the difficulty facing medical negligence plaintiffs in multiple-cause situations. Under the existing *conditio sine qua non* theory a defendant would merely have to show some small chance that the plaintiff would have suffered

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[287] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [104].
[288] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [104].
[289] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [104].
[290] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [89] – [92].
[291] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [93] [emphasis added].

injury in any event, or, it is submitted, that some other undetermined cause (such as pre-existing pathology, physiological anomaly, unexpected drug interaction or the like) could have resulted in the plaintiff's injury in any event, thereby exculpating a medical practitioner under such circumstances. The "old" (or "pre-*Lee*") approach to factual causation under such circumstances would, therefore, provide an all-or-nothing result: Factual causation is present, or it is not. The medical practitioner's negligence caused the injury, or it did not. This approach is in line with the views referred to *supra.*[292] The pre-*Lee* approach, according to the minority of the Court, leads to problems which[293]:

> [A]ll arise from the rigidity of the common-law test for causation, which requires claimants to prove more probably than not that the defendant's negligence caused their injury. They are not unique to our legal system. They have caused other jurisdictions to grapple with new approaches to the test for causation in cases where the claimant is unable to pinpoint the source of his injury, or to indicate that his injury was probably caused by a defendant who contributed to it, or where the defendant exposed the claimant to a risk of the injury in fact suffered.

The minority of the Court made reference to the difficulties pertaining to pinpointing the source of the TB infection and the parallels with mesothelioma cases in the United Kingdom, particularly cases such as *Fairchild v Glenhaven Funeral Services Ltd and Others; Fox v Spousal (Midlands)Ltd; Matthews v Associated Portland Cement Manufacturers (1978) Ltd and Others*[294] which dealt with multiple uncertain causes. The unique characteristics of TB (and the difficulty in tracing its point of origin or chain of contagion), according to the minority of the Court, "ran headlong into the fact that our law of delict demands proof of probable cause of harm."[295] Cameron J then emphasised the following important issue[296]:

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[292] See para supra, more specifically the "purist" views of Visser PJ (2006) (n21) 586 – para 3 2 *supra*.
[293] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [94].
[294] [2003] UKHL 22; [2002] 3 All ER 305; *McGhee v National Coal Board* [1972] 1 WLR 1; [1972] 3 All ER 1008 (HL) See Chapter 4 paras 3 3 4 4 – 3 3 4 6 *infra*.
[295] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [97].
[296] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [97]. See also *Nkala & Others v Harmony Gold Mining Co Ltd & Others* 2016 5 SA 240 (GJ) para [76]: "The mineworkers have acknowledged that the issue of causation for the TB mineworkers is not an easy one. But they rely on two recent cases where there was evidential uncertainty as to the direct or actual cause of the harm suffered, and where the courts developed the law by finding that the 'but for' test is not the only method of determining the issue of causation. The two cases are *Fairchild v Glenhaven Funeral Services Ltd and Others; Fox v Spousal (Midlands) Ltd; Matthews v Associated Portland Cement Manufacturers (1978) Ltd and Others* and *Lee v Minister for Correctional Services.* The majority judgment in *Lee* held that there was nothing in our law that prevented the court from approaching the question of causation

The question is whether the result – that Mr Lee is without remedy – is acceptable in our constitutional state. The answer is No. But how do we get to a just outcome? *It seems to me that our common law of recovery for negligent injury should be developed to allow for recovery in cases where a plaintiff can prove that the defendant negligently exposed him or her to the risk of harm, and the harm eventuated*. But development is an intricate task. It seems most appropriate in the limited cases of 'single fibre' diseases where one can identify but a single agent, but the disease, by its very nature, defies the but-for test." [Emphasis added]

It is clear, according to the minority of the Court that, in some classes of claim the traditional common law *conditio sine qua non* theory is incapable of delivering just outcomes.[297] In addition to leading to unjust outcomes, the *conditio sine qua non* is an "over-blunt and inadequate tool for securing constitutionally tailored justice in cases where prisoners have proved exposure to disease because of negligence on the part of prison authorities, but cannot pinpoint the source of their injury."[298] It is submitted that the same criticism may be levied against the application of the existing *conditio sine qua non* theory in medical negligence cases where the origin, source or development of a particular injury, together with negligent conduct on the part of a medical practitioner, makes pinpointing the cause of the plaintiff's injury difficult or impossible. Cameron J further points out that the change in the United Kingdom jurisprudence came without a constitutional imperative and on the grounds of "simple justice".[299] In South Africa, so Cameron J reasons, the Constitutional imperative is clear and present, especially in the case of vulnerable individuals[300]:

In Mr Lee's case, his vulnerability as a prisoner, which meant that he was unable to put himself out of harm's way, together with the lack of proper care on the part of the prison authorities, makes a similarly

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by asking whether the facts proven by the plaintiff show that they were the more probable cause of the harm she suffered. By doing so, the CC has expanded our perceptions of causation. What is clear from this development of the law is that the mineworkers are not incapable of proving that there is an inseparable causative link between their contracting TB and the unlawful exposure to excessive levels of silica dust while working on the mines. Their claim is that exposure to high levels of silica dust undermines the immune system, which increases the risk of developing TB. The mining companies do not dispute that silicosis is associated with an increased risk of TB. In the light of the development of the law and the common-cause facts, the mineworkers have more than a fair chance of discharging their onus in this regard. Thus, as this issue of unlawful exposure to excessive levels of silica dust is common to that of the silicosis mineworkers, there is no logical or practical reason to deprive the TB mineworkers from being part of the same class action. Accordingly, we find that the mining companies' resistance to combining the TB mineworkers' case with that of the silicosis mineworkers is without merit." See also *Mahaeehane and Another v Anglogold Ashanti Limited* 2017 6 SA 382 (SCA) para [19].

[297] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [100].

[298] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [101].

[299] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [101].

[300] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [101] [emphasis added].

powerful case for developing our common law. [102] *This is not to say that normative considerations bearing on what wrongs should be compensable in our constitutional system play into determining factual cause and effect – but, rather, these considerations make the case for relaxing the over-rigid strictures of but-for factual inferences.*

It is submitted that plaintiffs in medical negligence cases may also, due to a lack of evidence, a lack of proper medical records or notes or the existence of multiple causes for a particular condition, find themselves in a situation of vulnerability. A patient is, in a sense, completely delivered into the hands of the medical practitioner who undertakes a particular course of treatment or procedure. Such patient may not have any (not to mention generalised or specialised) medical knowledge or be able to evaluate the correctness or otherwise of any medical procedure performed or treatment which has been provided. It is submitted that, by analogy, therefore, a patient who is unable to pinpoint the precise factual cause of an injury after medical intervention may and should be likened to a prisoner in a position of vulnerability such as in Dudley Lee's case.[301] The difficulty lies, however, in precisely how the defendant's liability should be limited in such circumstances.

If the common law were to be developed[302], so the minority of the Court continued, the causation enquiry remains one of "fact, though now that question is a wider one..."[303] The question posed by the minority of the Court was as follows[304]:

[W]ould reasonable measures have reduced the overall *risk* of infection? And then, should the extent of risk to which the defendant's negligent conduct exposed the claimant lead to recovery for the injury that was suffered?

The minority of the Court's stance should not be seen as a blanket adoption of an unqualified "risk-based", "material increase in risk" or "material contribution" approach to the determination of factual causation. In this regard the minority of the

[301] See also Price A (2014) (n233) 494 on the issue of the "evidentiary gap" facing a plaintiff in a multiple-cause scenario.
[302] The majority of the Court were at pains to emphasise that it was not in the process of developing the common law – *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [71]; Davis DM (2014) (n253) 9 – 10.
[303] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [102].
[304] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [102].

Court raised the following three important points of qualification in respect of a "risk-based" approach to factual causation[305]:

First, it is not possible to infer probable factual causation from an increase in exposure to risk by itself. By corollary, where the actual origin of the injury cannot be traced (as with Mr Lee's TB), it is impossible to say that the infection was probably caused by a *negligent* exposure to risk, as opposed to an exposure that no amount of care on the prison authorities' part could have avoided.

Second, the very nature of negligent conduct is that it increases risk and thus makes harm more likely to occur. To infer probable factual causation merely from increased likelihood of harm is to suggest that probable factual causation follows from every finding of negligence. But increased likelihood, or an overall increase in risk, still does not tell us whether the negligent conduct was more probably than not the cause of the specific harm.

Third, the approach entails that factual causation may be inferred from any increase in risk. *This is because my colleague's approach leaves no room for assessment of the amount of risk exposure that occurred, how much of it was attributable to the negligence of the defendant, and what level of risk exposure should lead to recovery of compensation. There is thus no room for risk appreciation or possible blame apportionment*. The evidence of the amici and the prison authorities tendered on appeal illustrates this. Though their respective experts conflicted on certain points, they agreed that, even if minimum South African national standards of incarceration had been implemented, *there would still have been a more than 50% risk of transmission in Pollsmoor*.

The majority's approach, according to Cameron J, would therefore hold that if, before proper measures were in place, a prisoner had a 90% chance of contracting TB, but proper measures reduced this risk to 85%, the fact that Mr Lee was negligently exposed to an increase in risk would automatically and by itself render the prison authorities liable.[306] In other words: "even if the harm were likely to result despite reasonable measures being taken, the defendant would still be liable because the risk was increased, even if only nominally."[307]

As Wessels mentions, there is no mention in Cameron J's judgment on behalf of the minority of the Court of use of a "common sense" approach "but rather an emphasis on policy considerations, specific constitutional rights, and values which justify an

[305] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [106] – [108] [emphasis added].
[306] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [109].
[307] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [109].

exception in the specific matter."[308] The minority of the Court appeared to espouse an exceptional legal principle, which principle would allow for the provision of a remedy to a plaintiff. According to Wessels, Cameron J's confirmation that the enquiry into factual causation remains one which falls "to be determined by a binary process of determination (i.e., factual causation exists, or it does not) stands to be welcomed, but the minority of the Court's approach to a 'widened' enquiry into factual causation raises questions concerning legal certainty."[309]

The decision of the majority in *Lee v Minister of Correctional Services*[310] has altered the traditional approach to the determination of factual causation in South African law. It has resulted in a departure from the traditional "all-or-nothing" approach to factual causation.[311] It has created tension between the views regarding factual causation which were held and accepted prior to *Lee v Minister of Correctional Services*[312] and the principles set out in both the majority and minority decision.[313] It has resulted in a "widened" approach to the determination of factual causation, but has failed to provide guidance in respect of the precise nature of the principles to be applied in establishing factual causation. The introduction of "normative considerations" in determining factual causation leads, with respect, to vagueness and imprecision.[314] The decision has led to an inadvertent development of the common-law principles pertaining to the factual causation despite the claim of the majority of the Court that it did not intend doing so.[315]

The decision of the minority of the Court in *Lee v Minister of Correctional Services*[316] has, however, focused attention on the need for the consideration of a "risk-based" approach to factual causation, particularly in light of the unjust results procured by relying simply on an "all-or-nothing" approach to factual causation.[317]

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[308] Wessels B (2013) (n181) 93.
[309] Wessels B (2013) (n181) 94.
[310] 2013 2 SA 144 (CC).
[311] As referred to in paras 2 & 3 *supra*; Wessels B (2013) (n181) 94.
[312] 2013 2 SA 144 (CC).
[313] Paragraph 4 2 *supra*; Wessels B (2013) (n181) 94.
[314] Paragraph 4 3 *supra*; Wessels B (2013) (n181) 94.
[315] Paragraph 4 2 *supra*; Wessels B (2013) (n181) 94.
[316] 2013 2 SA 144 (CC).
[317] Paragraph 4 3 *supra;* Wessels B (2013) (n181) 94.

3 4 *Mashongwa v PRASA*

In *Mashongwa v PRASA*[318] Mogoeng CJ commented as follows in respect of the "flexible" test for factual causation and the majority's decision in *Lee v Minister of Correctional Services*[319]:

> *Lee* never sought to replace the pre-existing approach to factual causation. It adopted an approach to causation premised on the flexibility that has always been recognised in the traditional approach. It is particularly apt where the harm that has ensued is closely connected to an omission of a defendant that carries the duty to prevent the harm. Regard being had to all the facts, the question is whether the harm would nevertheless have ensued, even if the omission had not occurred. However, where the traditional but-for test is adequate to establish a causal link it may not be necessary, as in the present case, to resort to the *Lee* test.

It is submitted, with respect, that the import of Mogoeng CJ's judgment in the context of factual causation is that guidance has been provided in respect of *when* the "flexible" test for factual causation in *Lee v Minister of Correctional Services*[320] is to be applied. It appears from the judgment that an examination into factual causation should commence with the traditional *conditio sine qua non* theory, and where such approach is inadequate, resort must be made to the approach set out in *Lee v Minister of Correctional Services*[321].

4 SPECIFIC PROBLEMS IN FACTUAL CAUSATION

As set out *supra*[322], the most frequently-raised criticism against the *conditio sine qua non* theory is that it fails in instances where multiple defendants, acting concurrently or cumulatively, cause harm. Although a strict classification of causes which may qualify as "concurrent", "contemporaneous", "successive" or "cumulative" may not

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[318] 2016 3 SA 528 (CC). See also Scott TJ "Revisiting the Elements of Delict – the Mashongwa Judgments" (2016) *THRHR* 551ff.
[319] *Mashongwa v PRASA* 2016 3 SA 528 (CC) 547C – E; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [65].
[320] 2013 2 SA 144 (CC).
[321] 2013 2 SA 144 (CC).
[322] Para 2 4 *supra.*

be practicable[323], it is submitted that a discussion of the various forms of causation by South African writers may be useful in obtaining an overview of the various instances of factual causation which may occur.[324] It should, however, be immediately apparent that an infinite number of variables may be involved in any factual situation, and that a strict and mechanical methodology may lead to undesirable results in determining factual causation. Each factual scenario should, therefore, be considered in the light of its particular facts and circumstances. It is submitted that a general overview of the various categories of causes, which may present difficulties in establishing factual causation, may prove useful.[325]

4 1 Single, Cumulative, Successive, Concurrent, Additional, Alternative and Multiple Causes

Determining factual causation where only one agent, one act and one defendant ("single causes") are involved is usually a simple exercise.[326] Proving factual causation in instances involving multiple agents, acts, and defendants ("multiple causes") may prove to be more difficult. Van der Walt & Midgley are of the opinion that "in instances involving multiple causation, therefore, whether in the form of concurrent or contemporaneous, or successive conduct or events, a "common sense" approach is more appropriate."[327]

The aim of the enquiry into factual causation is to establish whether a factual connection exists between the consequences and various forms of events.[328] Once such links are established, it becomes possible to determine whether such factual connections are relevant in law.[329] Rabie & Faris are of the view that, in instances

[323] There being an infinite number of variables or possible permutations involved in individual factual matrices, and each set of facts requiring individual examination.
[324] The present discussion is not intended to be a comprehensive exposition on all possible variations in multiple-cause situations.
[325] The complexities inherent in the various categories or instances of factual causation justify a separate dissertation. For a general discussion see Hart HLA & Honoré T (1985) (n180) 205 – 253.
[326] E.g. X decapitates Y, who is otherwise healthy, with the single stroke of an extremely sharp and heavy sword.
[327] Van der Walt JC & Midgley JR (2005) (n1) 201.
[328] Rabie PJ & Faris J (2005) (n1) 239.
[329] Rabie PJ & Faris J (2005) (n1) 239.

involving multiple causation "whether in the form of concurrent or contemporaneous, or successive conduct or events, a common sense approach is more appropriate."[330]

Van Oosten, writing in a criminal law context, refers to cumulative causation as occurring in instances where "meerdere selfstandige en afsonderlike handelinge gesamentlik die gevolg teweegbring, sonder dat enigeen van hulle op sigself genoegsaam is om daardie gevolg te bewerkstellig."[331] Van Oosten illustrates the concept by using the example of two persons who both, independently of each other, add a dose of poison (which separate doses would, on their own not be sufficient to kill a person) to the food of a victim and who, as a result of the cumulative effect of the poison, dies.[332] He classifies the latter example as one of cumulative causation as opposed to alternative causation, stating that[333]:

> By kumulatiewe veroorsaking kan daar immers geen twyfel bestaan dat waar twee persone byvoorbeeld elkeen 'n dosis gif, waarvan die *gesamentlike* uitwerking die dood van die slagoffer is, in laasgenoemde se kos gooi, elkeen se handeling *conditio sine qua non* vir die dood van die slagoffer daarstel nie. Nòg die een nòg die ander se handeling kan hier weggedink word sonder dat die gevolg daarmee wegval.

Van Rensburg's view is that the *conditio sine qua non* theory is satisfied in cases of cumulative causation such as in the abovementioned "two poisoners" example; each person's act, on its own, is insufficient to cause the death of a victim, but, cumulatively, the combined effect of the poison kills the victim. According to Van Rensburg,

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[330] Rabie PJ & Faris J (2005) (n1) 239; Neethling J & Potgieter JM (2015) (n6) 189 – 190; *Vigario v Afrox Ltd* 1996 3 SA 450 (W) 459.

[331] Van Oosten FFW (1981) (n4) 27. Hart HLA & Honore T (1985) (n180) 235 – 236: A plaintiff takes two drugs (each sufficient to damage his retina) and the defendant, who was responsible for failing to warn the plaintiff of the danger of one of the drugs, failed to do so. He was held liable for the whole of the plaintiff's damage – *Basko v Sterling Drug Co* (1969) 416 F 2d 417; A defendant who wrongfully damaged a ship's propeller with an inspection later revealing other facts which rendered the ship unseaworthy, requiring the same repairs to be done. It was held that the defendant could be held liable for the whole amount of the repairs – *Navigazione Libera v Newtown Creek* (1938) 98 F 2d 694.

[332] Van Oosten FFW (1981) (n4) 27, 88, 136 – 142, 591. See also Van Oosten FFW (1981) (n4) 136 fn 60: "Vanweë gebrekkige terminologie in ons reg om hierdie soort geval mee te beskryf, word, in navolging van die Duitse reg, voorkeur aan hierdie begrip verleen. Hunt *Criminal Law* 328 gebruik weliswaar die begrip 'simultaneous causation' en Van der Merwe en Olivier 199 die begrip 'gesamentlike veroorsaking', maar omdat gelyktydige veroorsaking nie alleen gevalle van alternatiewe veroorsaking is nie, maar ook in gevalle van kumulatiewe veroorsaking (weereens 'n begrip uit die Duitse reg oorgeneem, om dieselfde rede) kan insluit, is hierdie begrippe nie aanvaarbaar nie. Alhoewel Van der Merwe en Olivier 200 die begrip 'kumulatiewe veroorsaking' gebruik, verwar hulle dit skynbaar met alternatiewe veroorsaking. Dieselfde geld vir Van Rensburg *Juridiese Kousaliteit* 48 – 50; 1977 TSAR 104."

[333] Van Oosten FFW (1981) (n4) 137 [emphasis added].

however, where one person administers a deadly dose of poison to a victim, and the other person administers a non-deadly dose of poison, only the first poisoner's act will qualify as a *conditio sine qua non* as the second poisoner's dose is not sufficient to cause the victim's death. Conversely, where the first poisoner's dose is not in itself deadly, but the second poisoner's dose is in itself fatal, only the second poisoner's act will be the cause of the victim's death in terms of the *conditio sine qua non* theory.[334] Although writing in the context of cumulative causation (whereas their stated example is in fact one of *concurrent* causation), Neethling & Potgieter[335] refer to the frequently-used "multiple shooters" example[336]:

> Cumulative causation occurs where more than one act actually causes a particular consequence, e.g. where X and Y simultaneously, but independently of each other, fire a fatal shot at Z's head. If one eliminates X's shot, Z's death does not fall away; on account of this one may conclude that X did not cause Z's death. Subsequently, when Y's act is eliminated, the same result is achieved, i.e. that Z's death does not fall away. The application of the *conditio sine qua non* test thus permits one to come to the absurd conclusion that neither X nor Y has in fact caused Z's death.

The solution, according to the learned writers, is "comparatively simple" [337]:

> [S]uppose a doctor later gives evidence that the victim was still alive immediately before the two bullets penetrated his head. Suppose further his evidence is that, according to his knowledge, two bullets through the head invariably cause immediate death. What can be simpler than to deduce that the firing of two bullets was the cause of the victim's death? This 'direct common sense approach of the man in the street' – as it was put in *Portwood v Svamvur* – gives a satisfying answer: both X and Y caused Z's death. To theorise about what would have happened if one of the bullets had not struck the victim's head (as required by an application of the *conditio sine qua non* approach) cannot lead to better insight into the problem. It is completely unnecessary to use *conditio sine qua non* in this case.

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[334] Van Rensburg ADJ (1970) (n23) 48 – 49. See also Van Oosten FFW (1981) (n4) 141 discussing Van Rensburg (1970) (n23) 48 - 49: "Hieruit maak hy dan die afleiding dat die vraag of die een persoon se handeling oorsaak van die slagoffer se dood is, nie afhang van die hoeveelheid gif wat hy die slagoffer toegedien het nie, maar van die hoeveelheid gif wat die ander persoon hom toegedien het en andersom. As die een persoon die slagoffer 'n dodelike dosis gif toedien, sal die ander persoon se handeling dus nooit die oorsaak van die dood van die slagoffer wees nie, ongeag die hoeveelheid gif wat hy hom toedien. Omgekeerd sal die een persoon se handeling altyd die oorsaak van die dood van die slagoffer wees, afgesien daarvan hoeveel gif hy die slagoffer toegedien het, as die ander persoon hom geen dodelike dosis gif toegedien het nie."

[335] Neethling J & Potgieter JM (2015) (n6) 188; Price A (2014) (n233) 493 – 494.

[336] Neethling J & Potgieter JM (2015) (n6) 188; Van der Merwe NJ (1965) (n56) 174 – 175.

[337] Neethling J & Potgieter JM (2015) (n6) 188. It should be noted that the proposed solution works well in "single agent" or "single mechanisms" cases but cannot assist in scenarios which involve disparate mechanisms. See however Boberg PQR (1984) (n3) 399 who argues that the *conditio sine qua non* theory broke down in the postulated scenario because it was wrongly applied.

Mukheibir, Niesing & Perumal argue that the multiple-cause issue in the "three hunters" scenario could "easily" be resolved by application of the material contribution test and there is "no need to go further."[338] In this context they also state the following in respect of the test as set out in *Fairchild v Glenhaven Funeral Services Ltd*[339]:

> The importance of this case is that it illustrates that the *conditio sine qua non* test is not the exclusive test for factual causation. Underlying enquiries into each and every aspect of delictual elements is the overall objective of the law of delict 'to define cases in which the law may justly hold one party liable to compensate another.' So the *conditio sine qua non* test should not be slavishly applied; where it would lead to an unjust result, it should make way for a test that would lead to a just result.

Discussing *Portwood v Swamvur*[340] at length, Boberg makes the following important observations in respect of the decision[341]:

> On Beadle CJ's analysis, the plaintiff's damage as a whole had two causes: the dog's getting caught in the gate (for which the defendant was not legally responsible), and the dog's vicious nature (for which the defendant was legally responsible). Prima facie the damage was indivisible, and the defendant was liable for all of it. But if the defendant could have satisfied the court that the damage was divisible by proving to what extent the plaintiff would have been injured by even a 'normal' dog in similar circumstances, he should have escaped liability for that part of the plaintiff's injuries, for it could not have been attributed to the 'cause' for which he was legally responsible.

Boberg continues the argument as follows[342]:

> If the defendant's conduct alone be looked to, it was clearly the cause of all of the plaintiff's damage, for the plaintiff would not have been bitten at all if the defendant had exercised proper control of his (vicious) dog. Yet if the damage were divisible, it would seem unjust to hold the defendant liable also for that part of it which would have been caused even if his dog had not been vicious and his conduct therefore not culpable. A desirable result is to make the defendant's liability coextensive with his culpability. And it may be achieved by invoking the doctrine of relevance advocated by Van Rensburg.

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[338] Mukheibir A, Niesing L & Perumal D (2012) (n145) 78. The learned writers also, in the context of uncertain or multiple causes, refer to *Fairchild v Glenhaven Funeral Services Ltd* [2002] 3 All ER 305 (HL). See Chapter 4 para 3 3 4 6 *infra*.
[339] [2002] 3 All ER 305 (HL).
[340] 1970 4 SA 8 (RA).
[341] Boberg PQR (1984) (n3) 413 – 414.
[342] Boberg PQR (1984) (n3) 413 – 414. See also Mukheibir A, Niesing L & Perumal D (2012) (n145) 75 – 76.

Van der Merwe & Olivier deal with the "multiple shooters" scenario as follows[343]:

Word die *conditio sine qua non*-toets op hierdie geval toegepas, moet A vry uitgaan, so word gesê, omdat A hiervolgens nie die dood van D veroorsaak het nie, in soverre A se handeling weggedink kan word, sonder dat die gevolg verdwyn – D bly dood. Hierdie redenasie is die vrug van 'n onjuiste aanwending van die *conditio sine qua non*-kousaliteitstoets wat met die werklikheid nie rekening hou nie. Waar, soos hier, met 'n gesamentlike handeling te doen gekry word, sou dit onrealisties wees om elke bestanddeel afsonderlik, met uitsluiting van die ander, aan die toets van *conditio sine qua non* te onderwerp. Die vraag is in die eerste plek nie of elke lid van die vuurpeloton afsonderlik die dood veroorsaak het nie, want nie 'n afsonderlike maar gesamentlike optrede doen hom hier voor… Volgens die *conditio sine qua non*-maatstaf het die vuurpeloton wel die dood veroorsaak en aangesien A se optrede 'n bestanddeel van die gesamentlike doodsveroorsakende handeling was, is A 'n mededader aan D se dood.

Using the example of a choir of drunken revellers waking their sleeping neighbours in the small hours of the night, Van der Merwe & Olivier argue as follows[344]:

Dieselfde geld by ander gesamentlike optredes, byvoorbeeld waar A lid was van die mannekoor wat in vreugdevolle besopenheid die stadsbewoner D se middernagtelike rus verstoor het. Dit doen die werklikheid en die *conditio sine qua non*-toets geweld aan om A se optrede as 'n enkeling te beoordeel. Die koor het gesing en dit was die koorsang wat D 'n slapelose nag besorg het. A se stem het saamgesmelt in die meer of minder melodieuse geheel. By die kumulatiewe handeling moet *conditio sine qua non* nie toegepas word met verwysing na elke bestanddeel van die kumulatiewe handeling nie – die handeling moet globaal beoordeel word. Is die gesamentlike handeling oorsaak van die gevolg en is A se optrede nie skeibaar van die kumulatiewe veroorsakende gedraging nie, is A se handeling as bestanddeel van die groter geheel oorsaak van die gevolg.

Van der Walt & Midgley mention the example of two persons, A and B, who independently set fire to C's house, and where the house is destroyed by fire, the acts of both A and B are accepted as factual causes although, neither one, taken

[343] Van der Merwe NJ & Olivier PJJ (1989) (n8) 200, 200 fn 84 where the learned writers immediately qualify their position as follows: "Hier moet dadelik beklemtoon word dat A aldus aanspreeklikheid opdoen vir sy eie aandeel aan die gebeure. Ook moet goed begryp word dat, ooreenkomstig die resep van die Wet op Verdeling van Skadevergoeding, 'mededader' in beginsel ook 'afsonderlike dader' omvat."

[344] Van der Merwe NJ & Olivier PJJ (1989) (n8) 200, 200 fn 86: "Volgens ons standpunt is A se handeling mede-oorsaak van D se dood of slapelose nag, omdat A se optrede nie skeibaar van die kumulatiewe veroorsakende geheel is nie… Hoewel onderskeie vorme van deelneming aan die strafreg bekend is, ken die deliktereg slegs daderskap. Waar die strafreg 'n bevredigende resultaat kan bereik deur die lede van bv. die vuurpeloton as medepligtiges aan te merk, het die privaatreg geen ander keuse as om hulle of as daders te beskou of van aanspreeklikheid te onthef nie."

individually, would be a *conditio sine qua non* of the destruction of the house.[345] In the context of the determination of factual causation, most writers[346] point to the difficulties which arise in situations where multiple (or "cumulative") events may present themselves as possible causes for a particular result. Neethling & Potgieter acknowledge that the application of the *conditio sine qua non*, even in its "flexible" form, would in certain cases "lead to the denial of liability in our law because it had been more probable than not that the defendants did not cause the harmful result."[347] Van der Walt & Midgley mention the importance, however, of establishing a factual link between the consequence and the various forms of conduct or events and, once established, proceeding to determine the relevance of such links in law.[348] Van der Walt & Midgley[349] advocate a "common sense" approach[350] to the establishment of factual causation where[351]:

> [T]wo concurrent acts take place, either of which, operating alone, would have been sufficient to produce the harm, both acts are, in accordance with common sense, viewed as contributory factual causes of the harm.

It is submitted that the examples referred to by Neethling & Potgieter and Van der Merwe & Olivier may qualify as "concurrent causes" or "simultaneous causes" if each shot (or chorister's voice) may, on its own, cause a certain result.[352] The actions involved may, subject to the particular circumstances of a case, constitute a cumulative cause (as in the example of the two poisoners), a simultaneous (or concurrent) cause (as in the example of each shooter firing, independently a fatal shot), both cumulative

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[345] Van der Walt JC & Midgley JR (2005) (n1) 201.
[346] Van der Walt JC & Midgley JR (2005) (n1) 201; Neethling J & Potgieter JM (2015) (n6) 188; Van der Merwe NJ & Olivier PJJ (1989) (n8) 199 – 200; Burchell EM, Milton JRL & Burchell JM (1983) (n14) 117 – 122; Snyman CR (2002) (n16) 78 – 79; Rabie PJ & Faris J (2005) (n1) 239. See the discussion of this problem by Neethling J & Potgieter JM (2015) (n6) 189, 189 fn 37 and the criticism directed to Van der Merwe NJ & Olivier PJJ's approach. Boberg PQR (1984) (n3) 383 – 384 similarly raises criticism against Van der Merwe NJ & Olivier PJJ's proposition. Neethling J (2003) (n1) 263ff; Van Oosten FFW (1981) (n4) 27 – 28.
[347]Which result would obviously be unjust since justice would be denied - see Neethling J & Potgieter JM (2015) (n6) 194, 194 fn 69.
[348] Van der Walt JC & Midgley JR (2005) (n1) 201. See also Visser CJ & Kennedy-Good C (2015) (n9) 152.
[349] Van der Walt JC & Midgley JR (2005) (n1) 201.
[350] See para 2 5 3 *supra*. See also Chapter 5 *infra* in respect of the so-called "common sense" approach. See also Rabie PJ & Faris J (2005) (n1) 239.
[351] Van der Walt JC & Midgley JR (2005) (n1) 201; *Minister of Police v Skosana* 1977 1 SA 31 (A) 43 – 44; *Vigario v Afrox Ltd* 1996 3 SA 450 (W) 459.
[352] The combined effect of the voices of the members of the choir may also constitute a cumulative cause.

and concurrent (both poisoners administer the poison at the precise moment) or a combination of cumulative and concurrent causes. Van Rensburg provides the example of builder A, whose work is delayed because B wrongfully fails to deliver cement to the building site and because C wrongfully induces his bricklayers to quit.[353] On a traditional application of the *conditio sine qua non*, A will have no action against either B or C, because neither's conduct was a *conditio sine qua non* for A's loss. Van Rensburg's approach deals with this problem by saying that causation is already, *ex hypothesi*, satisfied on the given facts – the only issue is the "relevance" of the wrongful (or intentional or negligent) aspect of B or C's conduct.[354] According to Boberg, the essence of Van Rensburg's approach is that[355]:

> [H]e separates the legal quality of conduct from the conduct itself; causation pertains only to the conduct; its legal quality depends on the relevance, which is determined not by the *sine qua non* test, but by imagining a hypothetical situation involving the same facts but substituting lawful and careful conduct for the actor's unlawful and negligent conduct. This is not an application of the *sine qua non* test or an enquiry into causation, but an enquiry into whether the actor's departure from legal norms was relevant to produce the result complained of. And it does not suffer from the defects of the *sine qua non* test as commonly applied.

Two successively occurring events involving the same plaintiff but different defendants, and which occur within a short space of time and which contribute to the same harm, may both remain factual causes of the harm.[356] In such a case the defendants are separate wrongdoers.[357] The issues of liability, indivisibility of harm and onus of proof are issues which involve legal causation.[358] Van der Walt & Midgley agree with the proposition that the questions of liability, indivisibility of harm and onus

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[353] Van Rensburg ADJ (1977) (n71) 101ff; Boberg PQR (1984) (n3) 399.
[354] Van Rensburg ADJ (1977) (n71) 101ff; Boberg PQR (1984) (n3) 399.
[355] Boberg PQR (1984) (n3) 399.
[356] Van der Walt JC & Midgley JR (2005) (n1) 201; *Minister of Communications and Public Works v Renown Food Products* 1988 4 SA 151 (C); *Bekker v Constantia Insurance Co Ltd* (1983) 1 PH J13 (E); *Minister of Safety and Security v Rudman* 2005 2 SA 16 (SCA) paras [72] – [88]; Rabie PJ & Faris J (2005) (n1) 239; *Minister of Communications & Public Works v Renown Food Products* 1988 4 SA 151 (C); *Bekker v Constantia Insurance Co Ltd* (1983) 1 PH J13 (E).
[357] Rabie PJ & Faris J (2005) (n1) 239; Neethling J "Afwysing van 'n Regsplig op Polisiebeamptes om die Reg op die Fisies-Psigiese Integriteit en Sekerheid van die Persoon buiteom Misdaadsituasies te Beskerm: Die Hoop Beskaam" (2006) *Obiter* 369 377 – 378; *Minister of Safety & Security v Rudman* 2005 2 SA 16 (SCA).
[358] See para 5 *infra*.

of proof are matters of policy which are issues involving legal causation.[359] Snyman is of the view that, where multiple causes of the same condition may be present "it is unnecessary for a court to go so far as to find that [a specific] act was the *sole* cause of the situation; it is sufficient to find that the act was *a* cause (possibly one among many) of the situation."[360]

As a solution to the problem, Neethling[361] proposes the solution mooted by the European Group on Tort Law[362] (considered to be *terra nova*[363]) which introduces proportional liability in instances involving multiple causation. The proposed solution is that "a person is liable for damage that he *might* have caused (but did not actually cause)."[364] Stated more fully[365]:

> Proportional liability may be illustrated by the well-known conundrum of the three hunters, X, Y and Z. In a forest, frequently visited by hikers, all three of them fire a shot to bring down a bird. One bullet hits and kills P. While there is no doubt that all three acted negligently, it is unknown whether the fatal shot was fired by X, Y or Z. It is thus a situation of multiple activities where each of them alone would have been sufficient to cause the damage, but it remains uncertain which one in fact caused it. The legal systems proffer various solutions to the problem. The European Group on Tort Law considered these and proposed that in the case of multiple activities, *the best solution is that each activity should be regarded as a cause to the extent corresponding to the likelihood that it may have caused the damage.* This means that in the case of the three hunters, each of them would in principle be liable for one third of the damage (loss of support by P's dependants) since the likelihood that any of the three shots killed P, is similar.

Neethling continues the justification of the proposed solution by basing it on "grounds of fairness, reasonableness and justice."[366] This solution is fair, reasonable and just, so Neethling opines, because it is impossible to prove which hunter (actually) caused P's

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[359] Van der Walt JC & Midgley JR (2005) (n1) 201. The same approach should, according to the aforementioned writers, be followed where a successive cause appears to be a *novus actus interveniens*. See also *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) para [27].
[360] Snyman CR (2002) (n16) 86.
[361] Neethling J (2003) (n1) 265 – 266.
[362] Neethling J "Towards a European Ius Commune" in "Tort Law: A Practical Experience" (2006) *Fundamina* 89. See also Chapter 5 para 4 2 5 *infra.*
[363] And not in line with the traditional principles of South African Law. See also Neethling (2003) (n1) 265.
[364] Neethling J (2006) (n362) 90 [emphasis added].
[365] Neethling J (2006) (n362) 90 [emphasis added].
[366] Neethling J (2006) (n362) 90.

death and it is impossible to prove who he or she was.[367] Rather than letting them all go free because of lack of proof, each is regarded as having caused the loss to the extent corresponding to the likelihood that he or she "may" have caused P's death.[368] This radical departure from the traditional principles of delict in respect of causation, and more specifically factual causation would introduce a "new form of delictual liability, namely *partial liability* for the tort of another person."[369] The *dictum* of Brand JA in *Potgieter v Potgieter NO*[370] is, it is submitted, apposite in the context of judicial decisions reached on the basis of what judges regard to be reasonable and fair[371]:

> In addition, the reason why our law cannot endorse the notion that judges may decide cases on the basis of what they regard as reasonable and fair, is essentially that it will give rise to intolerable legal uncertainty. That much has been illustrated by past experience. Reasonable people, including judges, may often differ on what is equitable and fair. The outcome of the case will therefore depend on the idiosyncrasies of the individual judge. Or, as Van Heerden JA put it in *Preller and Others v Jordaan* 1956 1 SA 483 (A) at 500, if judges are allowed to decide cases on the basis of what they regard as reasonable and fair, the criterion will no longer be the law but the judge.

The distinction between the single, concurrent and cumulative causes may not always be clear-cut. For example, the source of the tuberculosis infection in the case of *Lee v Minister of Correctional Services*[372] may be classified as a "single" cause if the entire population of Pollsmoor prison (and the prison environment itself) is regarded as a single source of infection (unless a particular inmate can be identified as the source, which was impossible to establish in that case) in terms of the approach suggested by Van der Merwe & Olivier.[373] As stated above, the decision in *Lee v Minister of Correctional Services*[374] has attempted to deal with the determination of factual causation where the cause of infection was uncertain through the introduction of a "flexible" approach to the determination of factual causation. Unfortunately, as stated above, the aforementioned decision did not pertinently specify precisely when the

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[367] Neethling J (2006) (n362) 91.
[368] Neethling J (2006) (n362) 91.
[369] Neethling J (2006) (n362) 91 [emphasis added]. See also the comprehensive factual scenario and proposed solution based on the "full information" approach – Paizes A (2014) (n222) 504ff.
[370] 2012 1 SA 637 (SCA).
[371] *Potgieter v Potgieter NO* 2012 1 SA 637 (SCA) 651D – 651F. See also Nienaber PM "Regters en Juriste" (2000) *TSAR* 190 193; Hefer JJF "Billikheid in die Kontraktereg volgens die Suid-Afrikaanse Regskomissie" (2000) *TSAR* 143.
[372] 2013 2 SA 144 (CC).
[373] See fn 105, fn 343, fn 344 *supra*.
[374] 2013 2 SA 144 (CC).

"flexible" test for factual causation should be applied or in which classes of case[375] the "flexible" test for factual causation should find favour.[376]

Importantly, Price[377] demonstrates that *Lee v Minister of Correctional Services*[378] did not deal with either concurrent, multiple or supervening causes and that the latter type of cases are distinguishable from *Lee v Minister of Correctional Services*[379]. According to Price, it is not clear why the Court decided to venture away from the traditional test for factual causation in *Lee v Minister of Correctional Services*[380] when it was, in fact, distinguishable from the English[381] cases.[382] The "flexible" test may, however, be used in future by our Courts when dealing with concurrent causes or multiple-cause scenarios where the application of the standard *conditio sine qua non* theory results in absurdity or leads to injustice.[383] Cumulative (or "multiple") causation is a problem which has perplexed many jurists before the decision in *Lee v Minister of Correctional Services*[384], and which will, no doubt, continue to do so long after Dudley Lee's case was decided.

5 LEGAL CAUSATION

Most legal systems limit the liability of a defendant in respect of the potentially endless chain of harmful consequences which his act or omission may have caused.[385] There must, as a matter of general agreement, be some means to limit the wrongdoer's

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[375] Price A (2014) (n233) 493.
[376] See however the judgment of Mogoeng CJ in *Mashongwa v PRASA* 2016 3 SA 528 (CC).
[377] Price A (2014) (n233) 494.
[378] 2013 2 SA 144 (CC).
[379] 2013 2 SA 144 (CC).
[380] Where a single negligent defendant is to be held responsible as opposed to one of multiple defendants in the English cases.
[381] *Fairchild v Glenhaven Funeral Services Ltd* [2003] 1 AC 32 (HL); *Sienkewicz v Greif* [2011] UKSC 10; Price A (2014) (n233) 494.
[382] Price A (2014) (n233) 494.
[383] Price A (2014) (n233) 497; *Mashongwa v PRASA* 2016 3 SA 528 (CC).
[384] 2013 2 SA 144 (CC).
[385] Van Rensburg ADJ (1970) (n23) 181 – 182; Van der Walt JC (1979) (n1) 98; Van Oosten FFW (1981) (n4) 145ff; Van der Merwe NJ & Olivier PJJ (1989) (n8) 197 – 198; Burchell J (1993) (n36) 119; Van der Walt JC & Midgley JR (2005) (n1) 164; Rabie PJ & Faris J (2005) (n1) 240; Neethling J & Potgieter JM (2015) (n6) 197; Neethling J "Vonnisbespreking: EG Electric Co (Pty) Ltd v Franklin 1979 2 SA 702 (OK)" (1979) *THRHR* 329, 331: "Word aan die ander kant bevind dat die dader nalatig gehandel het, ontstaan die vraag vir welke gevolge van sy onregmatige nalatige handeling hy aanspreeklik gehou moet word. Sy aanspreeklikheid kan tog nie onbegrens wees nie."

liability.[386] The mere confirmation of the existence of factual causation in a particular scenario "is not sufficient to establish the presence of a legally relevant causal connection."[387] In *International Shipping Co (Pty) Ltd v Bentley*[388] the following was held[389]:

> [D]emonstration that the wrongful act was a *causa sine qua non* of the loss does not necessarily result in legal liability. The second enquiry then arises, namely, whether the wrongful act is linked sufficiently or closely or directly to the loss for legal liability to ensue or whether, as it is said, the loss is too remote. This is basically a juridical problem in the solution of which considerations of policy may play a part. This is sometimes called 'legal causation'.

The purpose of legal causation is therefore to limit the extent of liability on the part of a defendant. The issue of the determination of legal causation arises when "determining which harmful consequences actually caused by the wrongdoer's wrongful, culpable act [the wrongdoer] should be held liable for" or, in other words which of the consequences of the wrongdoer's act or omission should be "imputed" to him or her.[390] Van Rensburg & Potgieter encapsulate the principle as follows[391]:

> Aanspreeklikheidsbegrensing moet deeglik van kousaliteit onderskei word. Aan die kousaliteitselement van die onregmatige daad is in 'n gegewe geval voldoen indien met 'n oorwig van waarskynlikheid bewys is dat die betrokke handeling die ter sake skadepos veroorsaak het; dat die skadepos met ander woorde uit die handeling gevolg het. Dit is 'n ander vraag of die dader deliktueel vir die skadepos wat op 'n onregmatige en skuldige wyse veroorsaak is, aanspreeklik gestel moet word.

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[386] Van Rensburg (1970) (n23) 181 – 182; Van der Walt JC (1979) (n1) 98; Van der Merwe NJ & Olivier PJJ (1989) (n8) 197 – 198; Van der Walt JC & Midgley JR (2005) (n1) 164; Rabie PJ & Faris J (2005) (n1) 240 Neethling J & Potgieter JM (2015) (n6) 197. See also Joubert WA "Oorsaaklikheid: Feit of Norm?" (1965) *Codicillus* 10 10 – 12; Van Oosten FFW (1981) (n4) 145ff, 170ff.

[387] Van der Walt JC (1979) (n1) 98. See also Strauss SA & Strydom MJ *Die Suid-Afrikaanse Geneeskundige Reg* (1967) 164; Van Oosten FFW (1981) (n4) 145ff; Rabie PJ & Faris J (2005) (n1) 240.

[388] 1990 1 SA 680 (A); Rabie PJ & Faris J (2005) (n1) 240.

[389] 1990 1 SA 680 (A) 700.

[390] Neethling J & Potgieter JM (2015) (n6) 197 – 198, 198 fn 95. The following terms have been recognised by our courts as synonyms for "imputed": "legal causation", "limitation of liability" and "imputability of harm". See also Van der Walt JC (1979) (n1) 98; Van Oosten FFW (1981) (n4) 145ff; Rabie PJ & Faris J (2005) (n1) 240 – 241; Scott TJ "Revisiting the Elements of Delict – the Mashongwa Judgments" (2016) *THRHR* 551ff.

[391] Van Rensburg ADJ & Potgieter JM "Die Toerekening van Gevolge Aan 'n Delikpleger" (1977) *THRHR* 379.

In *mCubed International (Pty) Ltd & Another v Singer & Others*[392], Brand JA held that the issue of legal causation is determined by considerations of policy, serving as a "longstop" where right-minded people, including judges "would regard the imposition of liability in a particular case as untenable, despite the presence of all other elements of delictual liability."[393] In many instances, the facts may speak so clearly towards liability on the part of the defendant that it would be unnecessary to consider the limitation of liability by utilising the process of determination of legal causation.[394] Neethling & Potgieter argue that[395]:

> Legal causation is [normally] only problematic where a chain of consecutive or remote consequences ('ulterior harm') results from the wrongdoer's conduct, and where it is alleged that he should not be held legally responsible for *all* the consequences. Nevertheless, the limits of liability should, in principle, be determined in respect of *every* delictual claim, and the fact that this determination in most cases need not be made expressly, should not lead one to believe that legal causation is relevant only in exceptional cases.

Legal causation is not the only mechanism which may be utilised to limit liability in delict. Various writers refer to the limitation of liability using the mechanism of legal causation and in order to "fix the outer limit of liability by determining whether or not a factual link between conduct and consequence should be recognised in law." [396]

After a long period of historical tension between opposing points of view, the direct consequences theory was formulated in 1921[397] and after that the foreseeability theory in 1961.[398] The earlier position is summarised as follows by Neethling & Potgieter[399]:

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[392] 2009 4 SA 471 (SCA) 481. See also *Mukheiber v Raath & Another* 1999 3 SA 1065 (SCA).
[393] Neethling J & Potgieter JM "The Law of Delict: General Principles" (2009) *Annual Survey of South African Law* 800.
[394] Van Rensburg ADJ *Normatiewe Voorsienbaarhed as Aanspreeklikheidsbegrensingsmaatstaf in die Privaatref* (1972) 2 – 3; Van der Walt JC (1979) (n1) 98; Van Oosten FFW (1981) (n4) 145ff; Van Oosten FFW (1982) (n96) 253 – 254; Neethling J & Potgieter JM (2015) (n6) 198.
[395] Neethling J & Potgieter JM (2015) (n2) 199, 199 fn 98. See also Strauss SA & Strydom MJ (1967) (n387) 164.
[396] Rabie PJ & Faris J (2005) (n1) 240 – 241. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 202; Snyman CR (2002) (n16) 79; Van der Walt JC & Midgley JR (2005) (n1) 202; Neethling J & Potgieter JM (2015) (n6) 198 – 199.
[397] *In re Polemis v Furness, Withy & Co Ltd* 1921 3 KB 560. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 203; Rabie PJ & Faris J (2005) (n1) 240 – 241.
[398] 1961 AC 388; Van der Merwe NJ & Olivier PJJ (1989) (n8) 203; Burchell J (1993) (n36) 119; Rabie PJ & Faris J (2005) (n1) 240 – 241; Van der Walt JC & Midgley JR (2005) (n1) 202.
[399] Neethling J & Potgieter JM (2015) (n6) 205 – 206. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 202 – 203; Rabie PJ & Faris J (2005) (n1) 240 – 241.

Although the courts acknowledged the existence of the problem of legal causation, they were in the past either hesitant to lay down a single, inflexible criterion by which the imputability of harm is to be determined, or they took a neutral stance in respect of the test which is to be applied.

The best-known recognised theories in respect of the determination of legal causation are the theory of adequate causation[400], the direct consequences theory[401], the theory of fault[402], reasonable foreseeability criterion[403] and the so-called flexible approach.[404]

5 1 Adequate Causation

The theory of adequate causation has its origins in the law of Germany and the Netherlands.[405] In terms of this theory "a consequence which has in fact been caused by the wrongdoer is imputed to him if the consequence is 'adequately' connected to the conduct"[406] or, described differently, a cause is said to be adequate for liability if "human experience indicates that the harm is the likely result of a normal course of events"[407] or, as Snyman[408] formulates the theory, an act "is a legal cause of a situation

[400] Van der Merwe NJ & Olivier PJJ (1989) (n8) 205 – 208; Snyman CR (2002) (n16) 81ff; Rabie PJ & Faris J (2005) (n1) 240 – 241; Van der Walt JC & Midgley JR (2005) (n1) 210; Neethling J & Potgieter JM (2015) (n6) 203.

[401] Van der Merwe NJ & Olivier PJJ (1989) (n8) 203 – 208; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 240 – 241; Neethling J & Potgieter JM (2015) (n6) 205.

[402] Van der Merwe NJ & Olivier PJJ (1989) (n8) 203 – 208; Van der Walt JC & Midgley JR (2005) (n1) 205; Rabie PJ & Faris J (2005) (n1) 240 – 241; Neethling J & Potgieter JM (2015) (n6) 207.

[403] Van der Merwe NJ & Olivier PJJ (1989) (n8) 202 – 205; Van der Walt JC & Midgley JR (2005) (n1) 208; Rabie PJ & Faris J (2005) (n1) 240 – 241; Neethling J & Potgieter JM (2015) (n6) 214.

[404] Van der Walt JC & Midgley JR (2005) (n1) 202; Rabie PJ & Faris J (2005) (n1) 240 – 241; Neethling J & Potgieter JM (2015) (n6) 200.

[405] See chapter 4 para 2 3 *infra* in respect of the formulation and application of the adequate causation theory in German law. See also Joubert WA (1965) (n386) 9 – 10; Van der Walt JC & Midgley JR (2005) (n1) 210, 210 fn 1; Rabie PJ & Faris J (2005) (n1) 248 – 249; Neethling J & Potgieter JM (2015) (n6) 202 fn 118.

[406] Neethling J & Potgieter JM (2015) (n6) 203ff. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 205; Van der Walt JC & Midgley JR (2005) (n1) 210; Grant J (2005) (n37) 896 – 897; Rabie PJ & Faris J (2005) (n1) 248 – 249.

[407] Van der Walt JC & Midgley JR (2005) (n1) 210. See also Joubert WA (1965) (n386) 7 – 8; Van Rensburg ADJ & Potgieter JM (1977) (n391) 379; Van Oosten FFW (1982) (n96) 242 – 243; Van Oosten FFW (1983) (n96) 39 – 41; Boberg PQR (1984) (n3) 445 – 447; Van der Merwe NJ & Olivier PJJ (1989) (n8) 196ff; Burchell J (1993) (n36) 120; Snyman CR (2002) (n16) 83ff; Grant J (2005) (n37) 896 – 897; Rabie PJ & Faris J (2005) (n1) 248 – 249; Neethling J & Potgieter JM (2015) (n6) 203.

[408] Snyman CR (2002) (n16) 81 – 82 where the following example is given: "To strike a match is to perform an act which tends to cause a fire, or which in normal circumstances has that potential. If, therefore, X strikes a match and uses the burning match to set a wooden cabin alight, one can aver without difficulty that his act was the cause of the burning down of the cabin… However, the question arises whether his act can be described of the cause of the burning down of the cabin in the following circumstance: All he does is to call a dog. The dog jumps up and in so doing frightens a cat. The frightened cat jumps through a window of the cabin, knocking over a lighted candle which in turn sets the whole cabin alight. If one applies the theory of adequate causation, one must conclude that in this

if, according to human experience, in the normal course of events, the act has the tendency to bring about that type of situation."[409] The question is whether "this result will come from doing such a thing."[410] In applying the theory, one "considers the particular circumstances of a case and enquires whether experience shows that one can normally expect that the type of conduct in question has a tendency to produce that particular type of result."[411]

In assessing what "normal" is a court is not limited by the concepts of foreseeability, as unforeseeable results may, in fact, be normal consequences.[412] All of the knowledge which may be available to the court must be considered, even though such knowledge was not available to a particular defendant at the time of the infringement and the court is therefore not placed into the shoes of the defendant.[413] Snyman opines in this regard that "the totality of human knowledge must be taken into consideration, including the knowledge which only a specialist in a particular field might have."[414] Any special knowledge that the defendant may have had at the time must, however, be taken into account by the court.[415] The aforementioned propositions are, according to Van der Walt & Midgley, properly illustrated by the theory's integrated approach to "thin-skull" cases where liability "is not to be assessed in the light of the defendant's knowledge, or whether the type of harm was reasonably foreseeable, but whether, in human experience, someone with a pre-existing weakness such as the plaintiff would have suffered the harm."[416] The enquiry should not be made abstractly, but with

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situation X's act was not the legal cause of the burning down of the cabin, because all that X did was to call a dog, and merely calling a dog is not an act which, according to human experience, in the normal course of events has the tendency to cause a wooden cabin to burn down." See also Grant J (2005) (n37) 897.

[409] *R v Loubser* 1953 2 PH H 190 (W); *R v Tatham* 1968 3 SA 139 (RA) 132. See also Grant J (2005) (n37) 901.

[410] Joubert WA (1965) (n386) 6, 9 – 10.

[411] Van der Walt JC & Midgley JR (2005) (n1) 210. See also Joubert WA (1965) (386) 9 – 10; Neethling J & Potgieter JM (2015) (n6) 204;

[412] Van der Walt JC & Midgley JR (2005) (n1) 210; Rabie PJ & Faris J (2005) (n1) 248 – 249; Neethling J & Potgieter JM (2015) (n6) 204.

[413] Rabie PJ & Faris J (2005) (n1) 248 – 249; Van der Walt JC & Midgley JR (2005) (n1) 210; Neethling J & Potgieter JM (2015) (n6) 204;

[414] Snyman CR (2002) (n16) 82, 82 fn 44. See also Grant J (2005) (n37) 897.

[415] Joubert WA (1965) (n386) 9 – 10; Snyman CR (2002) (n16) 82; Van der Walt JC & Midgley JR (2005) (n1) 210.

[416] Van der Walt JC & Midgley JR (2005) (n1) 210. See also Van Oosten FFW (1981) (n4) 173ff; Snyman CR (2002) (n16) 82; *R v Peverett* 1940 AD 213 218 – 219; *R v Van den Berg* 1948 2 SA 836 (T); *R v Loubser* 1953 2 PH H 190 (W).

reference to a concrete solution.[417] To determine whether or not an act tends to bring about a particular result, questions such as the following are, according to Neethling & Potgieter, asked when applying this test[418]:

> [W]as the damage the reasonably-to-be-expected consequence of the act?; did the damage fall within the expected field of protection envisaged by the legal norm that was infringed?; were the consequences 'juridically relevant' with reference to the cause?

If the result in question is "abnormal" or does not usually follow an event or a type of conduct, the relationship between the event and the result is not adequate.[419] To determine whether there is an "adequate" relationship between an act and the result, Snyman opines as follows in this regard[420]:

> [A]ll the factual circumstances ascertainable by a sensible person should be taken into consideration. If X gives Y, who has a thin skull, a light slap on the head and Y dies, the fact that Y had a thin skull should be taken into consideration in the application of the test. *The question is therefore not 'has a slight blow to another's head the tendency to cause death?' but 'has a slight blow to the head of somebody who has a thin skull the tendency to cause death*? Since the answer to the latter question is 'yes', there is in terms of the theory of adequate causation a causal relationship in this type of situation.

Neethling & Potgieter opine that seen in general terms, there are probably no substantial differences between the theory of adequate causation and the test of reasonable foreseeability.[421] The application of the adequate causation theory and the reasonable foreseeability test will, according to Neethling & Potgieter usually have the same result.[422] Generally speaking, according to the writers above, one would be able to say that "a result normally to be expected is also a reasonably foreseeable result, and *vice versa*."[423] According to Snyman, the theory is reminiscent of the test which is sometimes applied in Anglo-American law, according to which one must "determine

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[417] Grant J (2005) (n37) 898, 898 fn 13; Joubert WA (1965) (n386) 10.
[418] Neethling J & Potgieter JM (2015) (n6) 215.
[419] Snyman CR (2002) (n16) 81; Van der Walt JC & Midgley JR (2005) (n1) 210.
[420] Snyman CR (2002) (n16) 81 [emphasis added].
[421] See par 5 2 *infra.* The test of reasonable foreseeability is applied by our courts in many instances – see Neethling J & Potgieter JM (2015) (n6) 214, 214 fn 135.
[422] Neethling J & Potgieter JM (2015) (n6) 204. See also Boberg PQR (1984) (n3) 387 – 388.
[423] Neethling J & Potgieter JM (2015) (n6) 204

whether the result corresponds to the 'natural and probable consequences' or the 'reasonable consequences' of the act." [424]

Although the adequate causation test has been subject to sharp criticism[425] it still enjoys the support of certain writers[426] and has also been recognised in decisions in the field of criminal law.[427] According to Van der Walt & Midgley, the adequate causation theory "integrates the factual and normative elements of causation so as to determine whether or not the cause is adequately or suitably close to the result."[428] Snyman emphasises the difference between the *conditio sine qua non* theory and the theory of adequate causation in the following terms[429]:

> When applying the *sine qua non* theory one applies an objective and diagnostic test, that is one looks *back* at events; when applying the theory of adequate causation one uses an objective prognostic test, that is *one looks forward as from the moment of the act* and asks whether that type of result was to be expected.

Snyman is further of the view that one advantage of the adequate causation theory is that "it limits the field of possible liability by taking into account man's ability to direct or steer the chain of causation and in this way eliminates the role of mere chance."[430] Another possible advantage of the adequate causation "as it is formulated by, for example Jansen JA in *S v Daniëls* and Snyman, is that as a criterion for legal causation, it can be more easily distinguished from negligence (where a reasonable foreseeability criterion is also applied) than the criterion of reasonable foreseeability."[431]

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[424] Snyman CR (2002) (n16) 81.
[425] Van der Merwe NJ (1965) (n56) 180; Van Oosten FFW (1981) (n4) 144ff; Van der Merwe NJ & Olivier PJJ (1989) (n8) 205, 205 fn 7; Neethling J & Potgieter JM (2015) (n6) 204, 204 fn 139. See also Van Rensburg ADJ (1970) (n23) 198ff who argues that a juridically "mathematical" criterion should never be utilized to determine causation.
[426] Van der Merwe NJ & Olivier PJJ (1989) (n8) 205, 205 fn 2; Neethling J & Potgieter JM (2015) (n6) 204, 205 fn 140.
[427] Snyman CR (2002) (n16) 81, 81 fn 43; Neethling J & Potgieter JM (2015) (n6) 204, 205 fn 141; *S v Loubser* 1953 2 PH H190 (W) in which Rumpff J held that, in the eyes of the law an act is a cause of a situation if, according to human experience, the situation will flow from the act. See also *S v Grobler* 1972 4 SA 559 (O) 560 – 561; *S v Mabole* 1968 4 SA 811 (R) 816D – E, *R v John* 1969 2 SA 560 (RA) 565 – 566, *S v Counter* 2000 2 SACR 241 (T) 250B – C.
[428] Van der Walt JC & Midgley JR (2005) (n1) 210.
[429] Snyman CR (2002) (n16) 82.
[430] Snyman CR (2002) (n16) 82. See also Joubert WA (1965) (n386) 10 – 12.
[431] Neethling J & Potgieter JM (2015) (n6) 204; *S v Daniëls* 1983 3 SA 275 (A) 332.

5 2 Reasonable Foreseeability

Before the decision in *In re Polemis v Furness, Withy & Co Ltd*[432] English law accepted and applied the natural and probable consequences theory to limit a wrongdoer's responsibility.[433] According to the reasonable foreseeability[434] theory, a wrongdoer "is held liable only for those factual consequences of his or her conduct which were reasonably foreseeable."[435] In *Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd (The Wagon Mound)(The Wagon Mound No 1)*[436], the English courts rejected the theory of direct consequences, and the theory of foreseeability of consequences was formulated.[437] This theory limits liability to those factual consequences which a reasonable person in the position of the defendant would reasonably have foreseen.[438] It is not necessary that all of the consequences of the defendant's conduct should have been foreseen, but only the general nature or the kind of harm which occurred must have been reasonably foreseeable.[439] The exact extent[440]

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[432] 1921 3 KB 560. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 202 – 203.
[433] Van der Walt JC (1979) (n1) 98 – 99; Boberg PQR (1984) (n3) 387 – 388; Burchell J (1993) (n36) 120; Van der Walt JC & Midgley JR (2005) (n1) 208; Rabie PJ & Faris J (2005) (n1) 247 – 248; Carstens PA & Pearmain D (2007) (n1) 510.
[434] Or "reasonable foresight" test, also referred to as the test of "foreseeability of consequences". See further Van der Walt JC (1979) (n1) 98 – 99; Boberg PQR (1984) (n3) 387 – 388; Van der Walt JC & Midgley JR (2005) (n1) 208; Rabie PJ & Faris J (2005) (n1) 247 – 248; Carstens PA & Pearmain D (2007) (n7) 510.
[435] Van der Walt JC & Midgley JR (2005) (n1) 208; Boberg PQR (1984) (n3) 387 – 388; Van der Walt JC. See also (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 247 – 248. In *MTO Forestry (Pty) Ltd v Swart NO* 2017 5 SA 76 (SCA) the court held that foreseeability of harm should not be considered in determining wrongfulness but should be confined to the rubrics of negligence and causation.
[436] 1961 AC 388. See the discussion of causation in English law in chapter 4 *infra*. See also Van der Merwe NJ (1965) (n56) 177 – 179; Van der Walt JC (1979) (n1) 98 – 99; Boberg PQR (1984) (n3) 388; Rabie PJ & Faris J (2005) (n1) 247 – 248.
[437] Van der Merwe NJ (1965) (n56) 177 – 179; Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 247 – 248; Van der Walt JC & Midgley JR (2005) (n1) 208.
[438] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 247 – 248; Van der Walt JC & Midgley JR (2005) (n1) 208; Carstens PA & Pearmain D (2007) (n1) 510; Neethling J & Potgieter JM (2015) (n6) 208 – 214; *R v Peverett* 1940 AD 213 218 – 219; *R v Van den Berg* 1948 2 SA 836 (T).
[439] Van der Walt JC (1979) (n1) 99; Boberg PQR (1984) (n3) 388 – 389; Neethling J (1979) (n385) 331; Rabie PJ & Faris J (2005) (n1) 247 – 248; Van der Walt JC & Midgley JR (2005) (n1) 208; Neethling J & Potgieter JM (2015) (n6) 208 – 214; *Manuel v Holland* 1972 4 SA 454 (R); *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747 (A).
[440] Van der Walt JC & Midgley JR (2005) (n1) 208, 210 fn 7; Carstens PA & Pearmain D (2007) (n1) 510; Neethling J & Potgieter JM (2015) (n6) 215; *Paget v Santam Insurance Co Ltd* 1981 1 SA 814 (Z); *Masiba v Constantia Insurance Co Ltd* 1982 4 SA 333 (C) 342; *Smit v Abrahams* 1992 3 SA 158 (C) 163.

or the precise manner of occurrence[441] need not have been reasonably foreseeable.[442] The risk of harm, however, must have been a real risk[443] which a reasonable person would not have brushed aside as being far-fetched.[444] The description of the type of harm which might eventuate is critical when applying the theory.[445] In applying the theory, it is important to note that "the more specific the description of reasonably foreseeable harm, the less likely it is that it will correspond with the consequence that actually materialised."[446] Further, the more broadly the nature of the foreseeable harm is formulated "the likelihood of correspondence between it and the harm which actually occurred increases accordingly."[447] Van der Walt & Midgley mention the example of psychiatric injury cases in this regard, stating that[448]:

> Liability will only arise if the defendant would have foreseen such injury. No liability for psychiatric injury will arise if some other form of harm was foreseeable.

Liability will also arise in respect of any pre-existing weakness (or "thin skull" situation) where the well-established principle is that the defendant takes his or her

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[441] Van der Walt JC (1979) (n1) 99; Rabie PJ & Faris J (2005) (n1) 247 – 248; Van der Walt JC & Midgley JR (2005) (n1) 208, 210 fn 8; Neethling J & Potgieter JM (2015) (n6) 215; *Da Silva v Coutinho* 1971 3 SA 123 (A) 148; *BAT Rhodesia Ltd v Fawcett Security Organisation (Salisbury) Ltd* 1972 4 SA 103 (R); *Minister van Polisie en Binnelandse Sake v Van Aswegen* 1974 2 SA 101 (A) 108; *Smit v Abrahams* 1992 3 SA 158 (C) 164.

[442] *Premier of the Western Cape Province v Loots* [2011] JOL 27067 (SCA); Potgieter JM "Vonnisbespreking: Deliktuele Aanspreeklikheid vir Onvoorsienbare Gevolge van Mediese Nalatigheid" (2017) *LitNet* Akademies 975.

[443] Van der Walt JC (1979) (n1) 99; Rabie PJ & Faris J (2005) (n1) 247 – 248; Van der Walt JC & Midgley JR (2005) (n1) 208; Neethling J & Potgieter JM (2015) (n6) 215; *Overseas Tankship (UK) Ltd v The Miller Steamship Co Pty (The Wagon Mound No 2)* 1967 1 AC 617; *Standard Chartered Bank v Nedperm Bank Ltd* 1994 4 SA 747 (A) 766 – 768.

[444] Van der Walt JC (1979) (n1) 99 – 100; Boberg PQR (1984) (n3) 388 – 390; Van der Walt JC & Midgley JR (2005) (n1) 208; Rabie PJ & Faris J (2005) (n1) 247 – 248; Neethling J & Potgieter JM (2015) (n6) 215.

[445] Van der Walt JC (1979) (n1) 99 – 100; Boberg PQR (1984) (n3) 390; Van der Walt JC & Midgley JR (2005) (n1) 209; Neethling J & Potgieter JM (2015) (n6) 215.

[446] Van der Walt JC & Midgley JR (2005) (n1) 209. See also Van der Walt JC (1979) (n1) 99 – 100; Boberg PQR (1984) (n3) 390 – 391; Neethling J & Potgieter JM (2015) (n6) 215.

[447] Van der Walt JC & Midgley JR (2005) (n1) 209. See also Van der Walt JC (1979) (n1) 99 – 100; Neethling J & Potgieter JM (2015) (n6) 215.

[448] Van der Walt JC & Midgley JR (2005) (n1) 209, 210 fn 12. See also Van der Walt JC (1979) (n1) 99 – 100; Neethling J & Potgieter JM (2015) (n6) 215; *Bester v Commercial Union Versekeringsmaatskappy van Suid-Afrika Bpk* 1973 1 SA 769 (A); *Masiba v Constantia Insurance* 1982 4 SA 333 (C) 342; *Clinton-Parker v Administrator, Transvaal; Dawkins v Administrator, Transvaal* 1996 2 SA 37 (W) 57 – 59.

victim as he finds her and thin skull cases can also, therefore, be dealt with under the reasonable foreseeability test.[449]

Van der Walt & Midgley are of the view that while the reasonable foreseeability theory may not usurp the flexible criterion, it will no doubt continue to be used as a suitable secondary test for legal causation.[450] The theory has been used in several cases as a criterion for legal causation, but it remains subordinate to the flexible criterion.[451] The clear implication is that the reasonable foreseeability theory should not be seen as a single, decisive criterion for establishing liability.[452] It is, therefore, according to Neethling & Potgieter, possible in a given matter merely on the basis of legal policy, to impute liability in terms of the flexible approach even where the damage was so exceptional that it could not be described as reasonably foreseeable.[453] The content of the reasonableness criterion is not clearly borne out by the cases.[454] Neethling & Potgieter opine as follows in this regard[455]:

> Normally, the foreseeability test is not exactly defined, the decision simply being that a specific result was foreseeable or not and that is the end of the matter. There is no complete clarity on the question as to what would be so be foreseeable as to found liability.

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[449] Van der Walt JC (1979) (n1) 99 – 100; Van der Walt JC & Midgley JR (2005) (n1) 209; *Masiba v Constantia Insurance* 1982 4 SA 333 (C) 342.
[450] Van der Walt JC & Midgley JR (2005) (n1) 209, 210 fn 18; *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747 (A) where the Appellate Division (as it then was) referred to the flexible criterion but thereafter discussed the causation issue purely in terms of reasonable foreseeability.
[451] Neethling J & Potgieter JM (2015) (n6) 214 – 215; *Retief v Groenewald* (1896) 10 EDC 148; *Frenkel & Co v Cadle* 1915 NPD 173, 185 – 186; *Pietersburg Municipality v Rautenbach* 1917 TPD 252; *Workmen's Compensation Commissioner v De Villiers* 1949 1 SA 474 (C) 481; *Ocean Accident and Guarantee Corporation v Koch* 1963 4 SA 147 (A) 152, 158; *Van den Bergh v Parity Insurance Co Ltd* 1966 2 SA 621 (W) 624; *Kruger v Van der Merwe* 1966 2 SA 266 (A) 272; *Fischbach v Pretoria City Council* 1969 2 SA 693 (T) 700; *Brown v Hoffman* 1977 2 SA 556 (NC); *Thandani v Minister of Law and Order* 1991 1 SA 702 (E) 705; *Smit v Abrahams* 1992 3 SA 158 (C); *Clinton-Parker v Administrateur, Transvaal; Dawkins v Adminstrateur, Transvaal* 1996 2 SA 37 (W) 57; *Vigario v Afrox Ltd* 1996 3 SA 450 (W) 464 – 467; *Bester v Commercial Union Versekeringsmaatskappy supra*; *Mukheiber v Raath* 1999 3 SA 1065 (SCA); *Mukheiber v Raath & Another* 1999 3 SA 1065 (SCA); *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd* 2009 2 SA 150 (SCA) 165; *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) 482; *Neethling v Oosthuizen* 2009 5 SA 376 (WCC) 398; *Freddy Hirsch (Pty) Ltd v Chickenland (Pty) Ltd* 2011 4 SA276 (SCA) 298; *Nashua Mobile (Pty) Ltd v GC Pale CC t/a Invasive Plant Solutions* 2012 1 SA 615 (GSJ) 621 – 622; *Cape Empowerment Trust Ltd v Fisher Hoffman Sithole* 2013 5 SA 183 (SCA) 198; *Meevis v Sheriff, Pretoria East* 1999 2 SA 389 (T) 398; *Mafesa v Parity Versekeringsmaatskappy Bpk (In Likwidasie)* 1968 2 SA 603 (O) 605.
[452] Neethling J & Potgieter JM (2015) (n6) 215. See also Van der Walt JC (1979) (n1) 100.
[453] Neethling J & Potgieter JM (2015) (n6) 215; Van der Walt JC (1979) (n1) 100.
[454] Neethling J & Potgieter JM (2015) (n6) 215; Van der Walt JC (1979) (n1) 100.
[455] Neethling J & Potgieter JM (2015) (n6) 215; Van der Walt JC (1979) (n1) 100.

Van Rensburg[456] suggests the following approach until the courts lay down concrete rules for the determination of legal causation in terms of this theory[457]:

> [W]as the consequence, as well as the causal progression between the act and the consequence, at the time of the act foreseeable with such a degree of probability that the consequence can, in light of the circumstances, reasonably be imputed to the alleged wrongdoer?

According to Van Rensburg, in the application of this criterion, the general rule should apply that "an alleged wrongdoer is normally liable for all the consequences of his culpable, wrongful act, except for the consequences that were highly improbable.[458] Insofar as the use of fault as a possible criterion for legal causation is concerned, Neethling & Potgieter opine that[459]:

> In the discussion of fault as a possible criterion for legal causation, the reasonable foreseeability and preventability test, which is applied to determine *negligence*, cannot be applied unchanged as a criterion for the imputability of harm. Furthermore, the nature of the respective enquiries into fault and the imputability of harm differ so fundamentally that it is not expedient to attempt to answer the question about the imputability of harm with reference to the question of whether the wrongdoer had fault with regard to the remote consequence concerned. The fact that the question of the imputability of harm in most cases may be deemed to be settled as soon as it has been found that the actor has acted wrongfully and culpably does not detract from the difference in principle between fault and legal causation.

Reasonable foreseeability may also serve as a "subsidiary criterion" for the imputability of harm in cases of intentional wrongful conduct and liability without fault.[460] The theory has, however, been rejected in some reported cases.[461] In *Minister of Safety & Security & Others v WH*[462] the Court applied the reasonable foreseeability and direct consequence tests in a matter where a plaintiff was raped by her husband after police allegedly failed to arrest him in terms of a warrant of arrest issued together with a protection order in terms of the Protection of Family Violence Act 133 of 1993. The Court held that the rape of the plaintiff was a reasonably foreseeable consequence

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[456] Van Rensburg ADJ (1972) (n394) 56ff; Neethling J & Potgieter JM "Juridiese Kousaliteit Bereik Volle Wasdom" (1995) *THRHR* 346 – 347.
[457] Van Rensburg ADJ (1972) (n394) 56ff.
[458] Van Rensburg ADJ (1972) (n394) 56ff; Neethling J & Potgieter JM (2015) (n6) 215.
[459] Neethling J & Potgieter JM (2015) (n6) 216. See also Boberg PQR (1984) (n3) 390.
[460] Neethling J & Potgieter JM (2015) (n6) 216; Boberg PQR (1984) (n3) 390.
[461] *S v Gordon* 1962 4 SA 727 (N); *S v Poole* 1975 1 SA 924 (N).
[462] 2009 4 SA 213 (E). See also Neethling J & Potgieter JM (2009) (n393) 797 – 799.

of the police's omission and that the consequence of rape had been proximately and directly connected the police's omission.[463] It was further held that the close connection between events was clear, as the plaintiff was raped within a few days of the police's wrongful omission to take adequate steps to protect the plaintiff as required by order of court.[464]

5 3 Direct Consequences

In terms of this theory of causation, the defendant is liable for the direct factual consequences of his or her wrongful conduct.[465] This means that liability is not limited to the foreseeable consequences of a defendant's conduct.[466] Direct consequences are those that follow in sequence from the effect of the defendant's act upon existing conditions and forces already in operation at the time, without the intervention of any external forces which come into operation after the act has been committed.[467] A consequence, according to this theory, also need not follow the cause immediately in time and space in order to be a direct consequence thereof.[468] The foreseeability or otherwise, or probability or improbability of the direct consequences are irrelevant.[469] The essence of the theory, according to Van der Walt and Midgley is that "the wrongdoer's liability should not necessarily be limited to the reasonably foreseeable consequences of his or her conduct."[470]

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[463] Neethling J & Potgieter JM (2009) (n462) 798.
[464] Neethling J & Potgieter JM (2009) (n462) 798.
[465] Van der Merwe NJ (1965) (n56) 178; Strauss SA & Strydom MJ (1967) (n387) 164; Van der Walt JC (1979) (n1) 98 – 99; Van Oosten FFW (1981) (n4) 148 – 149; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205. See also *Alston & Another v Marine & Trade Insurance Co Ltd* 1964 4 SA 112 (W).
[466] Van der Walt JC (1979) (n1) 98 – 99; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205.
[467] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205.
[468] Van der Walt JC (1979) (n1) 98 – 99; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205; *In re Polemis v Furness, Withy & Co Ltd* 1921 3 KB 560, 570.
[469] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205.
[470] Van der Walt JC & Midgley JR (2005) (n1) 206. See also Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205 – 206.

On the other hand, liability should be limited to the direct consequences of one's wrongful conduct.[471] To narrow the limits of liability in accordance with the direct consequences theory, courts have limited liability to the direct physical consequences of wrongful conduct.[472] Additionally, the doctrine of the foreseeable plaintiff, although not part of the direct consequences theory, also provides for an effective limitation of the potentially extensive liability inherent in the theory.[473] The decision of the English courts in *In re Polemis v Furness, Withy & Co Ltd*[474] provided a clear example of the application of the direct consequences test.[475] This theory has been predominantly applied in personal injury cases.[476] Van der Walt & Midgley state that[477]:

> Once a defendant has been proved to have acted wrongfully and negligently, his or her responsibility embraces any harm flowing from a latent physical condition of the plaintiff, however unforeseeable or abnormal. The principle, inherent in the theory of direct consequences, is usually expressed by stating that the tortfeasor 'must take his victim as he finds him'.

This theory has not found much favour with our courts[478], but it has been used together with the foreseeability test.[479]

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[471] Van der Walt JC (1979) (n1) 98 – 99; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[472] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[473] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[474] 1921 3 KB 560. The defendants chartered a steamship belonging to the plaintiffs. Stevedores employed by the defendants negligently knocked a plank into the hold of the ship, which was at the time filled with petrol vapour. The plank's fall resulted in a spark which ignited the petrol vapour. The ship was completely destroyed by the fire and the defendants were held liable for the loss of the ship in the amount of £200 000. Although the destruction of the ship was not reasonably foreseeable, the court held the defendants liable on the basis that the negligent conduct of the stevedores was a direct cause of the ship's destruction. See also Van der Walt JC & Midgley JR (2005) (n1) 206.
[475] Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[476] Van der Walt JC (1979) (n1) 98 – 99; Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[477] Van der Walt JC & Midgley JR (2005) (n1) 206. See also; Van der Walt JC (1979) (n1) 98 – 99; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205 – 206.
[478] Van der Walt JC & Midgley JR (2005) (n1) 206; Rabie PJ & Faris J (2005) (n1) 244 – 245; Neethling J & Potgieter JM (2015) (n6) 205 – 206; *R v Udlhangeza* 1893 NPD 133; *R v Hine* 1910 CPD 371 375; *R v Lennett* 1917 CPD 444 446; *R v Meiring* 1927 AD 41 42; *R v Pieters* 1944 2 PH H180 (O); *R v Burwood* 1931 NPD 573 582; *R v Matsepe* 1931 AD 150 155; *Naidoo v R* 1932 NPD 343 349; *R v Victor* 1943 TPD 77 82; *R v Roopsingh* 1956 4 SA 509 (A) 511; *S v Stavast* 1964 3 SA 617 (T) 620; *S v Dawood* 1972 3 SA 825 (N) 952 963; *S v Grobler* 1972 4 SA 559 (O) 561; *S v Govender* 1976 4 SA 949 953; *Tuck v Commissioner for Inland Revenue* 1988 3 SA 819 (A) 833; *S v Mokgethi* 1990 1 SA 32 (A) 40; *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) 700 – 701.
[479] Van der Walt JC & Midgley JR (2005) (n1) 206; Neethling J & Potgieter JM (2015) (n6) 205 – 206; *Tuck v Commissioner for Inland Revenue* 1988 3 SA 819 (A) 832 – 833; *Fourie NO v Hansen* 2001 2

5 4 Fault

Neethling & Potgieter[480] state the following in respect of the use of fault as limiting factor in the determination of legal causation:

> According to this approach, the wrongdoer is liable only for those consequences in respect of which he had fault; in other words, those consequences covered by his fault are imputed to him.

Van der Merwe & Olivier posit that "liability must, therefore, be limited to the consequences willed by a person while aware of their wrongfulness, and the wrongful consequences that he reasonably should have foreseen and prevented."[481] Adherents to this theory declare that legal causation as an independent element of delict is entirely unnecessary and that the questions of fault and imputability of loss are disposed of simultaneously.[482] This would find particular application where the so-called concrete approach to negligence is followed.[483]

In terms of the concrete approach to negligence[484], negligence is to be determined by inquiring whether the wrongdoer should reasonably have foreseen and prevented loss of the nature experienced in a particular case.[485] Negligence, it is argued, then contains in itself all of the necessary elements for limiting liability.[486] Neethling & Potgieter criticise the fault-based approach to the determination of legal causation on the following basis[487]:

SA 823 (W) 842 – 843; *OK Bazaars (1929) Ltd v Standard Bank of South Africa Limited* 2002 3 SA 688 (SCA) par [33].

[480] Neethling J & Potgieter JM (2015) (n6) 207. See also Van Oosten FFW (1981) (n4) 151ff; Carstens PA (2006) (n4) 192.

[481] Van der Merwe NJ & Olivier PJJ (1989) (n8) 198 (translation as in Neethling J & Potgieter JM (2015) (n6) 207; Van Oosten FFW (1981) (n4) 173 – 177; *R v Peverett* 1940 AD 213; *R v Loubser* 1953 2 PH H 190 (W).

[482] Van Oosten FFW (1983) (n70) 57 – 60; Boberg PQR (1984) (n3) 382, 390, 439, 447, 451; Neethling J & Potgieter JM (2015) (n6) 207.

[483] Neethling J & Potgieter JM (2015) (n6) 207. See also Boberg PQR (1984) (n3) 439 – 440: "The issue of legal causation holds no terrors for those who take a relative view of wrongfulness and fault –it simply does not exist. For the active role accorded these requirements in limiting the actor's liability makes it unnecessary to invoke a further requirement of legal causation for the purpose. Factual causation is an entirely sufficient link between harm and conduct where it is further required that the conduct be wrongful and culpable *in relation to* the harm that it caused. A liability thus determined cannot be unconscionably wide, for its ambit is coextensive with the ambit of the actor's fault."

[484] Neethling J & Potgieter JM (2015) (n6) 148ff.

[485] Neethling J & Potgieter JM (2015) (n6) 212.

[486] Boberg PQR (1984) (n3) 382; Neethling J & Potgieter JM (2015) (n6) 212, 212 fn199.

[487] Neethling J & Potgieter JM (2015) (n6) 208.

Although the view that legal causation has no independent right of existence, because the question of limitation of liability may be disposed of during the investigation to determine fault (and wrongfulness) appears to be an attractive solution, especially given its simplicity, closer examination reveals that it is probably too simplistic. It is a fact that *in most cases* of delictual liability, legal causation is not expressly raised, because it is evident that the consequences caused wrongfully and culpably must be imputed to the actor. In other words, the question of limitation of liability is in most cases disposed of tacitly within the framework of the investigation into the other elements of delict.

They continue[488]:

[T]his does not imply that legal causation is denied its separate right of existence, just as, for example, wrongfulness is not irrelevant merely because many cases where wrongfulness is clearly present the courts find it unnecessary to investigate it separately and, consequently, only investigate the question of fault. The fact remains that the question of whether liability for a particular consequence should be imputed to a wrongdoer, differs fundamentally from the question of whether that consequence has been caused in conflict with the legal convictions of the community (wrongfully), or whether the law should blame the wrongdoer for his wrongful conduct (in other words, whether he had fault).

Neethling & Potgieter do not, however, agree with the approach posited by Olivier JA in *Mukheiber v Raath*[489] that limitation of liability can be effected equally well with the concrete (or relative) approach (according to which wrongfulness and negligence must be determined with reference to every harmful consequence) or legal causation (in terms of which the imputability of damage is determined independently of wrongfulness and negligence).[490]

Negligence cannot, according to Neethling & Potgieter, in the case of intent, serve as a test for determining the imputability of damage.[491] The use of fault as a criterion for legal causation is dependent on whether the abstract or concrete approach to

[488] Neethling J & Potgieter JM (2015) (n6) 208, 208 fn 168.
[489] 1999 3 SA 1065 (SCA) 1079; Neethling J & Potgieter JM (2015) (n6) 208, 208 fn 168.
[490] Neethling J & Potgieter JM (2015) (n6) 208 – 209. They further raise the following example of the young man who convinces his aged aunt to undertake a long and potentially dangerous road journey in the hopes that her death might result and her legacy accrue to him expeditiously. The aged aunt does undertake the trip as suggested by the young man and is involved in a fatal motor vehicle crash. The fact that the young man willed (and intended) for his aunt to die in the crash does not create a sufficient causal *nexus* in law – there might be factual causation in respect of the incident and the actions of the young man, but to find that legal causation exists would be unreasonable.
[491] Neethling J & Potgieter JM (2015) (n6) 211. See also Van Rensburg ADJ & Potgieter JM (1977) (n391) 381.

negligence is followed.[492] The abstract approach to negligence requires the application of one or the other of two different criteria for legal causation.[493] It is sufficient, according to the abstract approach, if damage, in general, is reasonably foreseeable.[494] In the case of the use of the concrete approach to negligence, Boberg[495] opines that it is unnecessary to investigate legal causation and the imputability of damage as the concrete test for negligence and wrongfulness supposedly contains all the elements necessary to keep liability within acceptable limits.[496]

Neethling & Potgieter, however, emphasise the need to retain the distinction between the question of wrongfulness and fault on the one hand, and the imputability of damage or legal causation merely because the latter question is disposed of within the framework of the former question.[497] It is pointless, so the aforementioned writers argue, to ask again whether the wrongdoer should have refrained from acting because the specific remote consequences could ensue once it has already been established that a reasonable person in the position of the defendant would have foreseen and prevented damage in general (abstract approach) or specifically (concrete approach).[498] It is stated that in the discussion of fault as a possible criterion for legal causation, the reasonable foreseeability and preventability test, which is applied to determine negligence, cannot be applied unchanged as a criterion for the imputability of harm.[499] Van Rensburg & Potgieter emphasise the difficulties inherent in utilising fault to limit liability[500]:

Die konsekwente aanwending van skuld as ‘n begrensingsmaatstaf kan ‘n dader egter net so onbillik tref as wat dit die getroffene… kan benadeel. Byvoorbeeld: A lol met B se vrou. B rand A met ‘n loodpyp aan met die oogmerk om hom te dood of minstens so te vermink dat hy nie met sy owerspelige bedrywighede kan voortgaan nie. B kry slegs een hou in waarmee hy A se sleutelbeen afslaan voordat omstanders tussenbei kom en die aanranding beëindig. A word per ambulans hospitaal toe geneem vir behandeling. Die ambulans raak in ‘n ongeluk betrokke en A doen ‘n ernstige kopbesering op… Die kopbesering veroorsaak dat A aan maniese bedruktheid ly waarmee hy met die erkende geneesmiddel

[492] Boberg PQR (1984) (n3) 381 – 382; Neethling J & Potgieter JM (2015) (n6) 211.
[493] Neethling J & Potgieter JM (2015) (n6) 211.
[494] Neethling J & Potgieter JM (2015) (n6) 211.
[495] Boberg PQR (1984) (n3) 381; Neethling J & Potgieter JM (2015) (n6) 211.
[496] Boberg PQR (1984) (n3) 381 – 382; Neethling J & Potgieter JM (2015) (n6) 212.
[497] Neethling J & Potgieter JM (2015) (n6) 212.
[498] Neethling J & Potgieter JM (2015) (n6) 213.
[499] Van Rensburg ADJ (1972) (n394) 16ff; Neethling J & Potgieter JM (2015) (n6) 213.
[500] Van Rensburg ADJ & Potgieter JM (1977) (n391) 381.

parstellin behandel word. In die loop van die behandeling eet hy kaas wat saam met die parstellin vir hom 'n beroerte-aanval meebring. Die beroerte-aanval laat hom 'n hulpelose invalide soos B beoog het… Daar bestaan ongetwyfeld 'n kousale verband tussen B se handeling en A se invaliditeit.

In Van Rensburg & Potgieter's example, A had the intention to injure B, and the test for negligence would not be of assistance in determining causation.[501] They argue that, in determining fault in the form of negligence, the question is whether damage is foreseeable in general terms, whereas in determining limitation of liability, the question is whether the precise nature of the harm was foreseeable. Secondly, in determining negligence, the question is not merely whether harm was foreseeable, but whether the defendant took steps to prevent such harm. It would be absurd, after having already decided that a reasonable person in the position of the defendant would have foreseen and taken steps to prevent harm, to then again ask whether the defendant should have refrained from his actions in light of the probability that such an event would have resulted. Thirdly, according to the learned writers, the establishment of negligence does not require that the causal progression between the act (or omission) and the result should be reasonably foreseeable. It could be argued, according to the learned writers, on A's behalf (in the example set out above) that the causal progression between the act and the subsequent result was not foreseeable.[502] The learned writers further argue that[503]:

Die onbetwisbare waarheid is dat dit onmoontlik is om die voorsienbaarheidskriterium op presies dieselfde manier by aanspreeklikheidsbegrensing toe te pas as by die ondersoek na nalatigheid.

5 5 Flexible Approach

Our courts presently follow a flexible approach to the determination of legal causation, which approach was delineated in *S v Mokgethi*[504] and after that confirmed in several cases dealing with private law.[505] In *S v Mokgethi*[506] Van Heerden JA held that there

[501] Van Rensburg ADJ & Potgieter JM (1977) (n391) 383.
[502] Van Rensburg ADJ & Potgieter JM (1977) (n391) 384 – 385.
[503] Van Rensburg ADJ & Potgieter JM (1977) (n391) 385.
[504] 1990 1 SA 32 (A). See also *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747 (A); Rabie PJ & Faris J (2005) (n1) 241.
[505] Burchell J (1993) (n36) 121; Rabie PJ & Faris J (2005) (n1) 241; Neethling J & Potgieter JM (2015) (n6) 200; *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747 (A).
[506] 1990 1 SA 32 (A).

is no single and general criterion for legal causation which is applicable in all instances and a flexible approach is accordingly suggested.[507] The essence of the flexible approach as set out in *S v Mokgethi*[508] is as follows[509]:

> The basic question is whether there is a close enough relationship between the wrongdoer's conduct and its consequence for such consequence to be imputed to the wrongdoer in view of policy considerations based on reasonableness, fairness and justice.

In *Standard Chartered Bank of Canada v Nedperm Bank Ltd*[510] the flexible approach in *S v Mokgethi*[511] was confirmed in a private law context as follows[512]:

> [The test for legal causation] is a flexible one in which factors such as reasonable foreseeability, directness, the absence or presence of a *novus actus interveniens*, legal policy, reasonability, fairness and justice all play their part.

The existing criteria for legal causation (such as reasonable foreseeability etc.) remain important tools in determining legal causation, albeit as subsidiary criteria.[513] Van Heerden JA held as follows in respect of the flexible criterion for legal causation[514]:

> I doubt whether a legal system can do without a dominant elastic criterion for determining legal causation. As is clear from the passages quoted above, policy considerations are relevant and [the Court must guard] against the alleged wrongdoer's liability exceeding the boundaries of reasonableness, fairness and justice. The various criteria [for legal causation] seem to me not to be significantly more exact than a criterion (the flexible criterion) according to which [the Court determines] whether a sufficiently close link exists between an act and a consequence with reference to policy considerations. I am not saying that one, or even more than one, of the criteria may not be employed on a subsidiary level in the application of the flexible criterion to a specific type of factual situation; but merely that

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[507] Burchell J (1993) (n36) 121; Grant J (2005) (n37) 902; Rabie PJ & Faris J (2005) (n1) 241; Neethling J & Potgieter JM (2015) (n6) 200.
[508] 1990 1 SA 32 (A).
[509] *S v Mokgethi* 1990 1 SA 32 (A) 40 – 41. See also *S v Daniëls* 1983 3 SA 275 (A); *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747 (A) 764ff; Burchell J (1993) (n36) 121; Rabie PJ & Faris J (2005) (n1) 241; Neethling J & Potgieter JM (2015) (n6) 201.
[510] 1994 4 SA 747 (A) 765. See also *Groenewald v Groenewald* 1998 2 SA 1106 (SCA) 1114; Rabie PJ & Faris J (2005) (n1) 241.
[511] 1990 1 SA 32 (A).
[512] *S v Mokgethi* 1990 1 SA 32 (A) 40 – 41.
[513] Rabie PJ & Faris J (2005) (n1) 241; Neethling J & Potgieter JM (2015) (n6) 201, 201 fn 116.
[514] *S v Mokgethi* 1990 1 SA 32 (A) 40 – 41 (Translated by Neethling J & Potgieter JM (2015) (n6) 201 – 202.

none of the criteria can be used [exclusively] as a more concrete measure of limitation in all types of factual situations, and for the pupose of any form of legal liability.

The Appellate Division's (as it then was) formulation and application of the flexible approach makes it clear that the subsidiary (or existing) criteria for establishing legal causation are to be utilised as aids in answering the basic question of imputability of harm.[515] It is clear that differences in emphasis in various decisions on the role of criteria such as reasonable foreseeability or direct consequences, for example, are quite acceptable "as long as justice prevails in the end."[516] Importantly, according to the flexible approach to legal causation, the various theories of legal causation "are at the service of the imputability question and not *vice versa*."[517] Brand JA in *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd*[518] indicated that the flexible criterion is not an independent criterion which is to be applied in the absence of the traditional criteria but requires that the traditional criteria should not be applied dogmatically.[519]

Botha JA also emphasised the dominance of the flexible approach to legal causation in *Smit v Abrahams*[520]:

The importance and power of the dominant criterion to solve questions of legal causation… lies precisely in the flexibility thereof. *It is my conviction that any attempt to detract from its flexibility, should be resisted*. Comparisons between the facts of the case that must be solved and the facts of other cases for which solutions have already been found, or which can arise hypothetically, can obviously be useful and valuable, and sometimes even decisive, but one should be careful not to attempt distilling rigid or generally applicable rules or principles for the comparison. The argument that the plaintiff's claim should be rejected 'in principle', is misplaced. There is only one 'principle': to determine whether the plaintiff's damage was too distant from the defendant's conduct to impute it to the latter, considerations of policy, reasonableness, fairness and justice have to be applied on the particular facts of this case.

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[515] Rabie PJ & Faris J (2005) (n1) 241; Neethling J & Potgieter JM (2015) (n6) 202. See also Scott TJ (2016) (n390) 577 – 578.
[516] Neethling J & Potgieter JM (2015) (n6) 202. See also Rabie PJ & Faris J (2005) (n1) 241.
[517] Neethling J & Potgieter JM (2015) (n6) 202, 202 fn 122. *Contra* Van der Merwe NJ & Olivier PJJ (1989) (n8) 211 – 212.
[518] 2009 2 SA 150 (SCA) 164 – 165.
[519] *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd* 2009 2 SA 150 (SCA) 482. See also *Country Cloud Trading CC v MEC, Department of Infrastructure Development* 2015 1 SA 1 (CC).
[520] 1994 4 SA 1 (A) 18; Neethling J & Potgieter JM (2015) (n6) 202, 202 fn 118.

As Van der Walt & Midgley point out, any restriction of the principle lies in the principle itself.[521] According to Neethling & Potgieter, the flexible approach can also allay fears of so-called "limitless liability".[522] In *Clinton-Parker v Administrator, Transvaal; Dawkins v Administrator Transvaal*[523] Navsa JA stated[524]:

> Our supple approach to the question of legal causation enables us to deal with policy concerns and to *ensure the floodgates are tightly sealed*.

Van der Walt & Midgley argue that[525]:

> The adoption of any single formula would clearly represent too dogmatic and oversimplified an approach to the complex and practical problems relating to legal causation. The flexible approach which the Appellate Division adopted accommodates both approaches represented by the formulae contained in the two major theories, and therefore strikes a fair and equitable balance between the causally relevant and irrelevant consequences of wrongful conduct.

The learned writers further emphasise that the worth of the flexible criterion lies precisely in its flexibility and any attempt to make it more rigid should be resisted.[526] All the circumstances of a case should be considered, and the facts of each case should be carefully considered as such facts play an important role when the umbrella concept (or flexible criterion) is applied.[527] According to Van der Walt & Midgley the criteria and principles set out hereinabove all have, together with the separate enquiry into wrongfulness, an important role as "control and balancing devices in order to establish a fair balance in fixing the limiting liability" and "which aims to strike a fair balance between the interests of the plaintiff and the defendant."[528]

In *Clarke v Hurst*[529] the applicant's husband suffered severe brain damage and his wife sought an order permitting discontinuation of artificial feeding, which would terminate

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[521] Van der Walt JC & Midgley JR (2005) (n1) 205 fn 21; *Smit v Abrahams* 1992 3 SA 158 (C); *Bonitas Medical Aid Fund v Volkskas Bank Ltd* 1992 2 SA 42 (W) 49.
[522] Neethling J & Potgieter JM (2015) (n6) 202.
[523] 1996 2 SA 37 (WLD); Neethling J & Potgieter JM (2015) (n6) 202.
[524] 1996 2 SA 37 (WLD) 63 [emphasis added].
[525] Van der Walt JC & Midgley JR (2005) (n1) 203; Neethling J & Potgieter JM (2015) (n6) 202.
[526] Van der Walt JC & Midgley JR (2005) (n1) 203; Neethling J & Potgieter JM (2015) (n6) 202.
[527] Van der Walt JC & Midgley JR (2005) (n1) 203; Neethling J & Potgieter JM (2015) (n6) 202.
[528] Van der Walt JC & Midgley JR (2005) (n1) 204.
[529] 1992 4 SA 630 (D); Rabie PJ & Faris J (2005) (n1) 241.

her husband's life. In addition to considering wrongfulness, the issue of whether such discontinuation would be the cause of her husband's death was also considered. The court noted that it had to deal with society's moral reaction to the question, which involved making a value judgment. The court held that liability should not exceed the bounds of reasonableness, fairness, and justice, and held that discontinuation of feeding would not, in law, cause the patient's death.[530]

The dominance of the flexible approach and the subsidiary nature of the other tests for legal causation have, according to Neethling & Potgieter, "weakened in certain judgments of the Supreme Court of Appeal."[531] In *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd*[532] the court opined that the flexible approach is "not an independent criterion that can be applied even in the absence of the traditional criteria, but requires at most that the traditional measures are not applied dogmatically, but rather in a flexible manner."[533] However, in *Cape Empowerment Trust Limited v Fisher Hoffman Sithole*[534] the court indicated that flexibility also means that "if the application of any or all of the known criteria should lead to a result which is untenable, legal causation will not be found."[535] Neethling & Potgieter opine that the decision in *Cape Empowerment Trust Limited v Fisher Hoffman Sithole*[536] amounts to "recognition (and therefore confirmation) of the flexible approach as an independent and even decisive test for legal causation."[537]

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[530] 1992 4 SA 630 (D) 660.
[531] Neethling J & Potgieter JM (2015) (n6) 203.
[532] 2009 2 SA 150 (SCA) 164 – 165. See also *mCubed International (Pty) Ltd v Singer NNO* 2009 4 SA 471 (SCA) 482; *Freddy Hirsch Group (Pty) Ltd v Chickenland (Pty) Ltd* 2011 4 SA276 (SCA) 297 – 298; *McCarthy Ltd t/a Budget Rent A Car v Sunset Beach Trading 300 CC t/a Harvey World Travel* 2012 6 SA 551 (GNP) 568; *Cape Empowerment Trust Limited v Fisher Hoffman Sithole* 2013 5 SA 183 (SCA) 198.
[533] *Fourway Haulage SA (Pty) Ltd v SA National Roads Agency Ltd* 2009 2 SA 150 (SCA) 165; Neethling J & Potgieter JM (2015) (n6) 203.
[534] 2013 5 SA 183 (SCA) 198.
[535] *Cape Empowerment Trust Limited v Fisher Hoffman Sithole* 2013 5 SA 183 (SCA) 198.
[536] 2013 5 SA 183 (SCA) 198.
[537] Neethling J & Potgieter JM (2015) (n6) 203. See also Strauss SA & Strydom MJ (1967) (n387) 164; Van der Walt JC (1979) (n1) 101 – 102; Van Oosten FFW (1981) (n4) 151ff, 180ff, 456ff; Rabie PJ & Faris J (2005) (n1) 245 – 246.

5 6 *Novus Actus Interveniens*

A *novus actus interveniens* is an independent event which, after the wrongdoer's act has been concluded, either caused or contributed to the consequence concerned.[538] It can also be defined as an independent, unconnected and extraneous factor or event which is not foreseeable, and which actively contributes to the occurrence of harm after the defendant's original conduct has occurred.[539] It can take the form of an intervening natural phenomenon, the conduct of a third party, or even the plaintiff's conduct.[540] It can only qualify as a *novus actus interveniens* if it is "an unexpected, abnormal or unusual event."[541] The effect of such intervening cause is important; where a *novus actus interveniens* completely extinguishes the causal connection between the conduct of the wrongdoer and the consequence, with the result that the wrongdoer's act can no longer be considered to be a factual cause of the consequence, the actor goes free.[542] However, if a reasonable person would have foreseen such an independent event, it is not considered to be a *novus actus interveniens*.[543]

A *novus actus interveniens* has the effect of completely neutralising the causative potency of the defendant's original conduct, for it indicates that, even though the causative link remains factually intact, the link between the conduct and the harm is too tenuous.[544] If, however, a reasonable person would have foreseen the independent

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[538] Van der Walt JC (1979) (n1) 101 – 102; Van Oosten FFW (1981) (n4) 151ff, 180ff; Rabie PJ & Faris J (2005) (n1) 245; Neethling J & Potgieter JM (2015) (n6) 216; *De Waal v S* 1966 2 PH H 362 (GW); *S v Taylor* 1967 2 PH H 301 (SWA); *S v Grotjohn* 1970 2 SA 355 (A) 364; *Fourie NO v Hansen* 2001 2 SA 823 (W); *PE v Ikwezi Municipality & Another* 2016 5 SA 114 (ECG).
[539] Gardiner FG & Lansdown CWH *South African Criminal Law and Procedure* Vol II (1957) 1542; Van der Walt JC (1979) (n1) 101 – 102; Van Oosten FFW (1981) (n4) 180 – 181, 456ff; Grant J (2005) (n37) 906; Van der Walt JC & Midgley JR (2005) (n1) 207; Rabie PJ & Faris J (2005) (n1) 245 – 246.
[540] Van der Walt JC (1979) (n1) 101 – 102; Van Oosten FFW (1981) (n4) 153, 153 fn 107, 182, 182 fn 209; Van der Walt JC & Midgley JR (2005) (n1) 207; Rabie PJ & Faris J (2005) (n1) 245 – 246; Neethling J & Potgieter JM (2015) (n6) 218; *Mafesa v Parity Versekeringsmaatskappy Bpk (In Likwidasie)* 1968 2 SA 603 (O); *Alston v Marine & Trade Insurance Co Ltd* 1964 4 SA 112 (W).
[541] Carstens PA (2006) (n4) 194, 194 fn 10; *R v Makali* 1950 1 SA 340 (N); *S v Ntuli* 1962 4 SA 238 (W).
[542] Strauss SA & Strydom MJ (1967) (n387) 165; Grant J (2005) (n37) 901; Rabie PJ & Faris J (2005) (n1) 245 – 246; Neethling J & Potgieter JM (2015) (n6) 216; *R v Mouton* 1944 CPD 399; R *v Loubser* 1953 2 PH H 190 (W); *R v Du Plessis* 1960 2 SA 642 (T); *R v Motomane* 1961 4 SA 569 (W).
[543] Rabie PJ & Faris J (2005) (n1) 246; *Joffe & Co Ltd v Hoskins*; *Joffe & Co Ltd v Bonamour* 1941 AD 431 455 – 456; *Fischbach v Pretoria City Council* 1969 2 SA 693 (T) 699 – 700; *Ebrahim v Minister of Law & Order* 1993 2 SA 559 (T) 566; *Vigario v Afrox* 1996 3 SA 450 (W) 464 – 465; *OK Bazaars (1929) Ltd v Standard Bank of South Africa Ltd* 2002 3 SA 688 (SCA) par [33].
[544] Van der Walt JC (1979) (n1) 101 – 102; Van der Walt JC & Midgley JR (2005) (n1) 207.

event, such event is not considered to be a *novus actus interveniens*.[545] This also applies if the intervention was caused or dictated by the exigencies of the situation created by the defendant's conduct.[546] The operation of risks inherent in the situation created by the defendant's conduct can therefore not constitute an interruption of the chain of causation.[547] Neethling & Potgieter state that, in each case, it will have to be determined (within the framework of the relevant imputability test) whether the *novus actus* has had the effect of severing the legal *nexus* with the result that the consequence should not be imputed to the actor.[548] For example, when applying the flexible approach, the question is whether the *novus actus interveniens* between the defendant's conduct and the relevant consequence has been such that the consequence cannot be imputed to the defendant on the basis of fairness, reasonableness, and justice.[549] In applying the direct consequences test, the question is therefore whether the *novus actus interveniens* breaks the "directness" of the consequence which is required for liability.[550] When applying the foreseeability theory, the question is whether the *novus actus interveniens* influences the degree of foreseeability to such an extent that it may be said that the consequence was not reasonably foreseeable as a result of the *novus actus interveniens*."[551]

In the context of criminal case law, Carstens discusses medical negligence as a causative factor in South African criminal law in the following terms[552]:

> In considering [whether the medical negligence of an attending physician constituted an intervening event] the courts had to determine whether there was in fact medical negligence on the part of the attending health care professionals. If it was found that the alleged medical negligence was a new intervening event, then it follows that the medical negligence in itself should also have been the factual and legal cause of the death of the victims. Consequently it is criminal medical negligence that is in

[545] Van Oosten FFW (1981) (n4) 182; Van der Walt JC & Midgley JR (2005) (n1) 207; Neethling J & Potgieter JM (2015) (n6) 218; *R v Peverett* 1940 AD 213 218 – 219; *De Waal v S* 1966 2 PH H 362 (GW).
[546] Van der Walt JC (1979) (n1) 101 – 102; Van der Walt JC & Midgley JR (2005) (n1) 207.
[547] Van der Walt JC (1979) (n1) 101 – 102; Van der Walt JC & Midgley JR (2005) (n1) 207.
[548] Van der Walt JC (1979) (n1) 101 – 102; Neethling J & Potgieter JM (2015) (n6) 217.
[549] Van der Walt JC (1979) (n1) 101 – 102; Neethling J & Potgieter JM (2015) (n6) 217.
[550] Van der Walt JC (1979) (n1) 101 – 102; Neethling J & Potgieter JM (2015) (n6) 217.
[551] Neethling J & Potgieter JM (2015) (n6) 217. See also Van der Walt JC (1979) (n1) 101 – 102.
[552] Carstens PA (2006) (n4) 192, 192 fn 34, 196 – 201 (discussing *S v Tembani* 1999 1 SACR 192 (W); *S v Ramosunya* 2000 2 SACR 257 (T); *S v Counter* 2003 1 SCAR 142 (SCA)); *MEC for Health, Eastern Cape v Mkhita and Another* [2016] ZASCA 176 (25 November 2016); *Minister of Justice and Correctional Services and Others v Estate Late James Stransham-Ford and Others* 2017 3 SA 152 (SCA) paras [48], [54] – [57].

issue in the context of culpable homicide, in that it has to be proven that the medical negligence as a new intervening event caused the death of the victim.

Carstens further argues that, in the assessment of medical negligence as a possible *novus actus interveniens* in a criminal law context, no distinction should be made between various degrees of negligence, that a strict adherence to the onus of proof is required in criminal cases, and that it is for the state to prove beyond reasonable doubt that there is an absence of a possible *novus actus interveniens*.[553] Medical mishaps (or "medical negligence") so Carstens argues, are more appropriately categorised as cases of medical misadventure or professional errors of judgment, and therefore not necessarily medical negligence.[554]

5 7 "Egg-Skull" Cases

"Egg-skull cases" arise in situations where a plaintiff, because of one or other physical, psychological or financial weakness, suffers more serious injury or loss as a result of the wrongdoer's conduct than would otherwise have been the case if the plaintiff had not suffered from such weakness.[555] In such cases, most jurists agree that the wrongdoer should also be liable for the harm which may be ascribed to the existence of the weakness concerned.[556] This has found expression in the maxim "you must take your victim as you find him" and is further identified as the *talem qualem* rule.[557] There appears to be no agreement about how the liability of a particular defendant for such harm should be justified, or which criterion for legal causation should be used to express liability in ideal terms.[558] Van der Merwe raises the following concern in respect of the *talem qualem* rule[559]:

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[553] Carstens PA (2006) (n4) 211.
[554] Carstens PA (2006) (n4) 211.
[555] Van der Merwe NJ (1965) (n56) 180 – 181; Van Oosten FFW (1981) (n4) 479 – 483; Neethling J & Potgieter JM (2015) (n6) 219. See *R v Johnnie Muyama* 1928 GWPD 42; *R v Dikwi* 1940 SR 19; *R v Legge* 1944 1 PH H 34 (SWA); *R v Wessels* 1949 1 PH H 5 (C); *S v Ntuli* 1962 4 SA 238 (W); *R v Gazambe* 1965 4 SA 208 (SR); *S v Bernardus* 1965 3 SA 287 (A); *R v Mara* 1966 1 SA 82 (SR); *R v John* 1969 2 SA 560 (RA); *S v Van As* 1976 2 SA 921 (A);
[556] Van der Merwe NJ (1965) (n56) 180 – 181; Neethling J & Potgieter JM (2015) (n6) 219.
[557] Neethling J & Potgieter JM (2015) (n6) 219, 219 fn 246, fn 247, fn 248, fn 249. See also Van der Merwe NJ (1965) (n56) 180 – 181.
[558] Neethling J & Potgieter JM (2015) (n6) 219.
[559] Van der Merwe NJ (1965) (n56) 180 – 181.

Waarom, kan gevra word, moet 'n persoon regtens sy prooi aanvaar soos hy hom vind, waar eersgenoemde nie vir die prooi se toestand te blameer is nie? Die uitgangspunt van ons reg is immers *res perit domino*. Alleen die verbintenisreg, meer bepaald die deliktereg, temper hierdie reël. Hierdie tempering mag nie vaag en verwarrend wees nie, maar moet ooreenkomstig duidelike beginsels geskied. Onder die bekende grondslag van 'n onregmatige daad speel die skuldvereiste 'n buitengewone groot rol, nie alleen as vereiste vir aanspreeklikheid nie, maar ook as begrensingsfaktor van die aanspreeklikheid. Skade ten opsigte waarvan, hetsy wat die ontstaan of omvang daarvan betref, geen skuld aanwesig was nie, behoort eenvoudig te rus waar dit val. Hoeseer 'n benadeelde in 'n bepaalde geval ookal bejammer moet word, kan die reg nie altyd ingryp nie. 'n Billike ewewig tussen dader en benadeelde moet steeds gehandhaaf word.

6 CAUSATION IN SOUTH AFRICAN MEDICAL LAW

6 1 Introduction: General Principles

The relationship between a medical practitioner and a patient is ordinarily a private law matter and governed by the law of obligations, i.e. the law of contract[560], certain statutory instruments[561] and the law of delict.[562] The doctor and patient relationship is ordinarily a contractual relationship which carries with it all of the rights and obligations usually established between contracting parties.[563] A breach of contract or negligence may lead to liability in contract or delict or both.[564] A breach of contract, a

[560] A comprehensive exposition of the principles pertaining to the establishment of relationships between medical practitioners and patients in a contractual or statutory context falls outside of the scope of the present work. See in this regard generally Strauss SA & Strydom MJ (1967) (n387) 104ff; 413ff; Strauss SA *Doctor, Patient and the Law: A Selection of Practical Issues* (1991) 3; Van Oosten FFW (1996) "Medical Law – South Africa" in *International Encyclopaedia of Laws* (ed Blanpain R) 53ff; Carstens PA & Pearmain D (2007) (n1) 309ff, 379ff; Nöthling Slabbert M *Medical Law in South Africa* (2011) 86, 103, Chapters 4 – 6; Hutchison A "Remoteness in Contract: Under Revision in the House of Lords Too?" (2012) *South African Law Journal* 199.

[561] Most importantly, the Constitution of the Republic of South Africa, Act 108 of 1996 and the Bill of Rights contained therein; Carstens PA & Pearmain D (2007) (n1) 21ff, 309ff, 341ff, 404ff. See also the National Health Act 61 of 2003.

[562] Strauss SA & Strydom MJ (1967) (n387) 104 – 111; Strauss SA (1991) (n560) 3; Claassen NJB & Verschoor T *Medical Negligence in South Africa* (1992) 5; Van Oosten FFW (1996) (n560) 53; Carstens PA & Pearmain D (2007) (n1) 489ff, 599ff; Dutton I *The Practitioner's Guide to Medical Malpractice in South African Law* (2015) 11ff.

[563] In the absence of a contract between the parties, the relationship may be governed by statute, the law of delict, or both - See Carstens PA & Pearmain D (2007) (n1) 322ff, 538ff.

[564] *Van Wyk v Lewis* 1924 AD 438 443, 450 – 451, 455 – 456; *Hewat v Rendel* 1925 TPD 679 691; *Alott v Paterson & Jackson* 1936 SR 221 224; *Nock v Minister of Internal Affairs* 1939 SR 286 290ff; *Dube v Administrator Transvaal* 1963 4 SA 260 (W) 266; *Magware v Minister of Health* 1981 4 SA 472 (Z) 476, 477, *Lillicrap, Wassenaar & Partners v Pilkington Brothers (SA) (Pty) Ltd* 1985 1 SA 475 (A) 475, 501ff; *Correira v Berwind* 1986 4 SA 60 (Z) 63ff; *Mtetwa v Minister of Health* 1989 3 SA 600 (D) 604; *Edouard v Administrator, Natal* 1989 2 SA 368 (D) *Administrator, Natal v Edouard* 1990 3 SA 581 (A) 585ff; *Castell v De Greeff* 1994 4 SA 408 (C) 420, 425; *Clinton-Parker v Administrator*

breach of a legal duty, negligence, or the breach of a statutory provision may also result in a medical practitioner being found guilty of a criminal offence, provided that the medical practitioner's wrongful conduct satisfies the requirements of an existing crime or crimes.[565] In instances where a medical practitioner may face liability[566] as a result of wrongful and blameworthy conduct, the liability of such a medical practitioner should be considered and decided in terms of the general principles governing liability in delict as set out above.[567]

The present discussion will focus on the element of causation as it is applied in the context of medical negligence claims in terms of the law of delict. In the context of a delict, the plaintiff must prove – apart from causation – the remaining elements of a delict.[568] The determination of causation in the field of medical law has increasingly

Transvaal 1996 2 SA 37 (WLD) 58, 59. See also Van der Merwe NJ & Olivier PJJ (1989) (n8) 479; Hutchison D & Van Heerden B "The Tort/Contract Divide Seen from the South African Perspective" (1997) *Acta Juridica* 97; Carstens PA & Pearmain D (2007) (n1) 283 – 377, 379 – 410; Price A "The Contract/Delict Interface in the Constitutional Court" (2014) *Stellenbosch Law Review* 501 502.

[565] Strauss SA & Strydom MJ (1967) (n387) 173ff; Strauss SA (1991) (n560) 249 – 252, 267; Claassen NJB & Verschoor T (1992) (n562) 5 - 6; Van Oosten FFW (1996) (n560) 58, 59ff; Carstens PA & Pearmain D (2007) (n1) 827.

[566] Either in terms of the law of obligations or in terms of the principles of criminal law. See Strauss SA & Strydom MJ (1967) (n387) 168, 168 fn 28; 294, 305, 313.

[567] See paras 2 – 5 *supra*. Visser PJ (2006) (n21) 582: "Volgens die gangbare siening oor deliktuele aanspreeklikheid, is feitlike kousaliteit of oorsaaklikheid een van die algemene 'elemente' of vereistes vir sodanige aanspreeklikheid (saam met 'n 'handeling' onregmatigheid', 'skuld', 'skade' en 'juridiese kousaliteit')… Alhoewel kousaliteit uiteraard van ander delikselemente onderskei kan word, het dit nogtans 'n besondere verband met elkeen van hulle wat nie uit die oog verloor moet word nie aangesien geen delikselement in 'n vakuum funksioneer nie."

[568] Dutton I (2015) (n562) 12 – 16. For purposes of the present discussion it should be accepted that all conduct referred to in this dissertation constitutes conduct that is unlawful ("onregmatig" or "wrongful").

enjoyed the attention of South African courts[569] and that of writers.[570] Strauss & Strydom confirm the importance of the element of causation in civil litigation arising from medical practice[571]:

> Van groot belang by die handelingselement van die delik is dat daar 'n oorsaaklikheidsverband (kousale *nexus*) tussen die handeling en die ingetrede gevolg moet bestaan. In die meeste gevalle wat in die praktyk voorkom, lewer die bewys van so 'n kousale verband nie probleme op nie. Niemand sal betwyfel nie dat waar 'n geneesheer met instrumente wat nie behoorlik gesteriliseer is nie, 'n operasie op 'n pasiënt uitvoer, met die gevolg dat die pasiënt 'n infeksie opdoen waaraan hy sterf, die geneesheer die dood van die pasiënt veroorsaak het. Tog kan die vraag of 'n oorsaaklikheidsverband tussen handeling en gevolg bestaan, dikwels moeilik wees. Dit is veral die geval waar die gevolg ingetree het weens 'n sameloop van buitengewone faktore. In die mediese praktyk kan dit byvoorbeeld gebeur.

The issue of causation specifically in medical law in South Africa has received attention in *inter alia* the following factual matrices: hypoxic ischaemic encephalopathy caused as a result of injuries sustained during birth[572]; adult respiratory distress syndrome and death caused by incorrect nasogastric intubation and aspiration[573]; meconium aspiration syndrome and cardiorespiratory arrest leading to presumed peri-natal ischaemic strokes and spastic dystonic cerebral palsy caused by

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[569] *Blyth v Van den Heever* 1981 1 SA 191 (AD); *Clarke v Hurst* 1992 4 SA 630 (D&LCD); *Gibson v Berkowitz* 1996 4 SA 1029 (WLD); *Clinton-Parker v Administrator, Transvaal; Dawkins v Administrator, Transvaal* 1996 2 SA 37 (WLD); *Silver v Premier, Gauteng Provincial Government* 1998 4 SA 569 (WLD); *Mukheiber v Raath & Another* 1999 3 SA 1065 (SCA); *McDonald v Wroe* 2006 3 All SA 565 (C); *Wright v Medi-Clinic Ltd* 2007 4 SA 327; *Stewart and Another v Botha and Another* 2008 6 SA 310 (SCA); *Phempele v MEC for Health Eastern Cape* 2014 JDR 1486 (ECM) (Unreported Judgment) par [41]ff; *Sobekwa v MEC for Health Eastern Cape* 2014 JDR 1227 (ECM); *Buys v MEC for Health and Social Development of the Gauteng Provincial Government* 2015 JDR 1246 (GP) (Unreported Judgment); *Ntungele v MEC Department of Health Eastern Cape* 2015 JDR 0104 (ECM) (Unreported Judgment) par [61]ff; *Venter v MECT for Health Gauteng Provincial Government* 2015 JDR 0406 (GP) (Unreported Judgment) paras [1] – [2.15], [30]. [38]; *Matlakala v MEC for Health Gauteng Provincial Government* 2015 JDR 2199 (GJ) (Unreported Judgment) para [24]ff; *Nzimande v MEC for Health, Gauteng* 2015 6 SA 192 (GP); *Stransham-Ford v Minister of Justice and Correctional Services and Others* 2015 4 SA 50 (GP); *Khoza v MEC for Health and Social Development, Gauteng* 2015 3 SA 266 (GJ); *Madida v MEC for Health for the Province of KwaZulu-Natal* 2016 JDR 0477 (KZP) (Unreported Judgment) paras [70] – [73]; *Chapeikin v Mini* 2016 JDR 1324 (SCA) (Unreported Judgment) paras [49] – [58].

[570] Strauss SA & Strydom MJ (1967) (n387) 164 - 168; Carstens PA & Pearmain D (2007) (n1) 827ff; Dutton I (2015) (n562) 59ff; McQuoid-Mason D & Dada M *A-Z of Medical Law* (2011) 58ff.

[571] Strauss SA & Strydom MJ (1967) (n387) 164. See also Carstens PA & Pearmain D (2007) (n1) 827ff.

[572] *Madida v MEC for Health for the Province of KwaZulu-Natal* 2016 JDR 0477 (KZP) (Unreported Judgment) par [70]; *Buys v MEC for Health and Social Development of the Gauteng Provincial Government* 2015 JDR 1246 (GP) (Unreported Judgment).

[573] *Venter v MEC for Health Gauteng Provincial Government* 2015 JDR 0406 (GP) (Unreported Judgment) paras [1] – [2.15], [30], [38].

prolonged labour and improper rescuscitation methods[574]; brachial plexus injury caused by application of fundal pressure during birth[575]; failure to refer a patient with an unusual stroke to hospital for specialised medical treatment[576]; injury of a newborn during delivery[577]; a varus deformity of the elbow resulting from improper treatment[578]; sepsis and ischaemia following failure to diagnose same after a fracture of an arm[579]; discontinuation of artificial feeding of patient in persistent vegetative state[580]; disability as a result of pressure sores developed in hospital[581]; wrongful birth and life[582]; brain injury suffered at birth[583]; a botched cauterisation procedure[584]; psychiatric illness caused by swapping of babies at birth[585]; post-traumatic stress disorder caused by failure to treat a child;[586] doctor assisted suicide[587]; brain injury suffered during delivery[588]; paralysis due to failure to treat timeously[589]; psychological trauma suffered as a result of the death of an infant at the hands of a hospital[590]; failure to diagnose hip dislocation resulting in avascular necrosis involving the head of a femur[591]; hypoxia and cerebral palsy due to improper nursing care[592]; transfer of HIV

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[574] *Matlakala v MEC for Health Gauteng Provincial Government* 2015 JDR 2199 (GJ) (Unreported Judgment) para [24]ff; *Lomalisa v M*[2017] ZANWHC 58 (Unreported Judgment) (17 August 2017); *PS obo AH v MEC for Health for the Province of KwaZulu-Natal* [2017] ZAKZPHC 37 (Unreported Judgment) (24 August 2017) paras [40]ff; *M obo M v Member of the Executive Council for Health, Eastern Cape Province* [2017] ZAECMHC 42 (Unreported Judgment) (17 October 2017) paras [149] – [157]; *H N vMEC for Health, KZN* [2018] ZAKZPHC 8 (Unreported Judgment) (4 April 2018).

[575] *Phempele v MEC for Health Eastern Cape* 2014 JDR 1486 (ECM) (Unreported Judgment) par [41]ff.

[576] *Chapeikin v Mini* 2016 JDR 1324 (SCA) (Unreported Judgment) paras [49] – [58].

[577] *Ntungele v MEC Department of Health Eastern Cape* 2015 JDR 0104 (ECM) (Unreported Judgment) par [61]ff.

[578] *Sobekwa v MEC for Health Eastern Cape* 2014 JDR 1227 (ECM).

[579] *Blyth v Van den Heever* 1981 1 SA 191 (AD).

[580] *Clarke v Hurst* 1992 4 SA 630 (D&LCD). See also *Stransham-Ford v Minister of Justice and Correctional Services and Others* 2015 4 SA 50 (GP).

[581] *Silver v Premier, Gauteng Provincial Government* 1998 4 SA 569 (WLD).

[582] *Stewart and Another v Botha and Another* 2008 6 SA 310 (SCA). See also Mukheibir A *"*Wrongful Life – the SCA Rule in Stewart v Botha (340/2007) [2008] ZASCA 84 (3 June 2008)" (2008) *Obiter* 2008 515 522 – 523.

[583] *Wright v Medi-Clinic Ltd* 2007 4 SA 327; *M obo M v Member of the Executive Council for Health, Eastern Cape* [2017] ZAECMHC 6 (Unreported Judgment) (30 March 2017) paras [34] – 35].

[584] *Gibson v Berkowitz* 1996 4 SA 1029 (WLD).

[585] *Clinton-Parker v Administrator, Transvaal; Dawkins v Administrator, Transvaal* 1996 2 SA 37 (WLD).

[586] *Nzimande v MEC for Health, Gauteng* 2015 6 SA 192 (GP).

[587] *Stransham-Ford v Minister of Justice and Correctional Services and Others* 2015 4 SA 50 (GP).

[588] *Khoza v MEC for Health and Social Development, Gauteng* 2015 3 SA 266 (GJ); *Magqeya v MEC Health, Eastern Cape* (Unreported Judgment 30 March 2017).

[589] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC).

[590] *Matshaya v MEC for Health, Eastern Cape* 2014 JDR 2442 (ECB) (Unreported Judgment); *Mbhele v MEC for Health for the Gauteng Province* [2016] ZASCA 166 (18 November 2016] paras [5] – [7].

[591] *Topham v MEC for Health, Mpumalanga* 2013 JDR 1059 (SCA) (Unreported Judgment) par [23].

[592] *Ntsele v MEC for Health, Gauteng* 2012 JDR 2044 (GSJ) (Unreported Judgment) par [39]ff; *B and Another v MEC for Health and Social Development of Gauteng Provincial Government* [2017] ZAGPPHC 152 (17 March 2017) paras [111] – [118]; *S and Another v Life Healthcare Group (Pty) Ltd*

to plaintiff by paramedics[593]; failure to diagnose an abcess resulting in sciatic nerve damage[594]; sepsis[595]; gangrene;[596] septicaemia and osteomyelitis[597]; and physiotherapy resulting in burn wounds.[598] The issue has also received attention in some decisions dealing among other things with the administration of incorrect or negligent medical treatment[599]; the failure[600] to provide medical treatment[601]; failure to procure medical treatment[602]; failure to provide post-operative care[603]; medical treatment as a *novus actus interveniens*[604]; and the disregard of medical advice by a victim of crime.[605]

6 2 Factual Causation in Medical Negligence Cases

6 2 1 General Principles

The enquiry into the existence of a causal connection between negligent conduct and harm sustained by a patient in a medical law context must follow the usual two-stage enquiry referred to and enumerated in *Minister of Police v Skosana*[606] and the

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and Another [2017] ZAKZDHC 12; 2017 4 SA 580 (KZD) paras [29] – [34]; *K v MEC for Health, Eastern Cape* [2018] ZAECGHC 21 (Unreported Judgment) (15 March 2018) para [93]ff.

[593] *MEC for Health, Kwa-Zulu Natal v Franks* 2011 JDR 0536 (SCA) (Unreported Judgment); *Franks v MEC for Health, Kwa-Zulu Natal* 2010 JDR 0043 (KZP).

[594] *SJM v HJ Groenwald & Another* 2016 (Unreported Judgment) (Case number 60022/2012) (causation not proved).

[595] *Gouws v Van Wyk* [2017] ZAGPJHC 111 (Unreported Judgment) (21 April 2017).

[596] *R v MEC for Health* [2017] ZANWHC 55 (Unreported Judgment) (3 August 2017) paras [47] – [48], [49]: "The issue of causality, especially in medical negligence cases, should be approached on the basis that it is not simply a 'common sense' approach as suggested in *Lee v Minister of Correctional Services.* The human body and its reactions are of such a complex nature that it is imperative for a plaintiff to provide expert medical evidence regarding the issue of causality."

[597] *M v Netcare Hospitals (Pty) Ltd and Others* [2017] ZAGPPHC 474 (Unreported Judgment) (14 July 2017).

[598] *Baloyi v Minister of Health Gauteng Province* 2009 JDR 0965 (GNP) (Unreported Judgment).

[599] *R v Potgieter* 1920 EDPD 254 258; *R v Mouton* 1944 CPD 399; *R v Motomane* 1951 4 SA 569 (W); *R v Loubser* 1953 2 PH H 190 (W); *R v Makali* 1959 1 SA 349 (N); *R v Du Plessis* 1960 2 SA 642 (T); *S v Norman* 1961 2 PH H 262 (GW); *R v Foromani* 1962 2 PH H 252 (SR); *S v Dawood* 1972 3 SA 825 (N); *Du Preez v Pretorius* [2017] ZASCA 133 (29 September 2017); *Maphosa v MEC for Health, Limpopo* [2017] ZAGPPHC 1259 (Unreported Judgment) (20 December 2017) para [23]ff; *Savage v Road Accident Fund* [2018] ZAWCHC 17 (Unreported Judgment) (15 February 2018).

[600] *Minister of Police v Skosana* 1977 1 SA 31 (A) 43 – 44.

[601] *R v Mubila* 1956 1 SA 31 (SR).

[602] *R v Foromani* 1962 2 PH H 252 (SR).

[603] *M v Vallabh* [2017] ZAGPJHC 397 (Unreported Judgment) (24 November 2017) paras [53] & [80].

[604] *MEC for Health, Eastern Cape v Mkhita and Another* [2016] ZASCA 176; *Mbangeni v MEC Health, Gauteng Province and Another* [2017] ZAGPJHC 401 (Unreported Judgment) (15 December 2017) paras 40 – 44.

[605] *R v Mubila* 1956 1 SA 31 (SR); *S v Mini* 1963 3 188 (A); *S v Taylor* 1967 2 PH H 301 (SWA); *R v Mabole* 1968 4 SA 811 (R); *S v Dawood* 1972 3 SA 825 (N); *S v Mashele* 1972 2 PH H 136 (A).

[606] 1977 1 SA 31 (A) 34 – 35.

principles referred to elsewhere in this dissertation.[607] The first stage of the enquiry relates to factual causation and whether the medical practitioner's negligent conduct was the factual cause of (or materially contributed to) the patient's harm or injury.[608] If the medical practitioner's negligent conduct does not satisfy the test for factual causation, no legal liability can arise and *caedit quaestio*.[609] If the Court is satisfied that the defendant was the factual cause of the plaintiff's harm, then the enquiry proceeds to whether the defendant's conduct is sufficiently closely (or "directly"[610]) linked to the harm for legal liability to arise.[611]

To hold a doctor liable simply because something went wrong would be to "impermissibly reason backwards from effect to cause."[612] As is stated by Strauss & Strydom[613] and Dutton[614], the issue of factual causation (determined by the *conditio sine qua non* theory) is usually a simple exercise, which works well in practice. In cases uncomplicated by "concurrent or supervening causes emanating from the unlawful conduct of other parties, the test provides a well-established basis for establishing a factual nexus."[615] As in other delictual matters, in applying the *conditio sine qua non* theory, the plaintiff need not establish the causal link with absolute certainty, but only on a balance of probabilities.[616] Dutton raised the following important issue[617]:

> Conversely, though, the standard of proving the causal link on a balance of probabilities must be met; such link cannot be assessed by speculating where, for example, medical evidence is deficient.

Different approaches are adopted in respect of the establishment of causation and future damages, and according to Dutton, the causal connection between "damages

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[607] Para 1 4ff *supra*.
[608] Carstens PA & Pearmain D (2007) (n1) 509ff; Dutton I (2015) (n562) 59 – 60.
[609] Carstens PA & Pearmain D (2007) (n1) 509; Dutton I (2015) (n562) 59.
[610] Carstens PA & Pearmain D (2007) (n1) 509.
[611] Dutton I (2015) (n562) 59 – 60.
[612] *Medi-Clinic Ltd v Vermeulen* 2015 1 SA 241 (SCA) para [27].
[613] Strauss SA & Strydom MJ (1967) (n387) 164.
[614] Dutton I (2015) (n562) 61.
[615] Dutton I (2015) (n562) 61.
[616] *Blyth v Van den Heever* 1980 1 SA 191 (A) 207; *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA) para [25]; *Minister of Finance and Others v Gore NO* 2007 1 SA 111 (SCA) para [33].
[617] Dutton I (2015) (n562) 63, 63 fn 20; *Minister van Veiligheid en Sekuriteit v Geldenhuys* 2004 1 SA 525 (SCA) para [41]; *Minister of Finance and Others v Gore NO* 2007 1 SA 111 (SCA).

and the defendant's act or omission must be established on a balance of probabilities."[618] In the context of the determination of factual conduct in respect of omissions in medical negligence matters, the question arises whether such conduct must be assessed subjectively, or objectively.[619] The Constitutional Court seems to favour an objective test.[620]

In more complex cases, the application of the *conditio sine qua non* theory results in potential injustice. As Dutton states[621]:

> Nowhere in the law is this more clearly demonstrated than in medical cases… Causation issues can be particularly challenging in the medical context because there is frequently a variety of possible causes of the harm in question, with only some of those being due to the negligence of the defendant. In these circumstances the strict application of the 'but-for' test, even on the principle that causation need only be established on a balance of probabilities, on occasion results in 'too restrictive an answer' and produces the sense of a harm occurring without a remedy.

The establishment of factual and legal causation in medical negligence matters will, of course, be subject to the very same problems and pitfalls which face litigants in delictual cases not involving medical treatment. The issue of factual causation in medical negligence matters has arisen *inter alia* in certain reported cases, and a selection of cases involving causation will be discussed *infra*.

6 2 2 *Blyth v Van den Heever*

In *Blyth v Van den Heever*[622] the plaintiff suffered an injury to his right radius and ulna, ultimately losing the use of his arm. A central issue to be decided was whether a factual *nexus* existed between the medical practitioner's allegedly negligent conduct and the harm suffered by the plaintiff. After an analysis of the relevant facts and evidence, it was held that[623]:

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[618] Dutton I (2015) (n562) 63, 63 fn 22: "Inherent in this process of hypothetical examination is considerable scope for speculation: *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA) para [25]".
[619] Dutton I (2015) (n562) 63.
[620] *Carmichele v Minister of Safety and Security* 2001 4 SA 938 (CC) para [76]; Dutton I (2015) (n562) 64.
[621] Dutton I (2015) (n562) 66.
[622] 1980 1 SA 191 (A).
[623] *Blyth v Van den Heever* 1980 1 SA 191 (A) 207.

In determining what in fact caused the virtual destruction of the appellant's arm, the court must make its finding on a preponderance of probability. Certainty of diagnosis is not necessary. If it were, then, in a field so uncertain and controversial as the one which I have thus far endeavoured to delineate, a definitive finding would become an impossibility. Bearing in mind that in this case appellant bears the burden of proof, the question is whether it is more probable than not that largescale ischaemia, coupled with sepsis, caused the damage.

The court ultimately decided that the defendant's failure to diagnose and treat the injury (as a reasonably skilled and careful medical practitioner would have done in the circumstances) resulted in the failure of the plaintiff's arm to heal properly. The plaintiff would have, had it not been for the defendant's negligent omission, regained the use of the arm.[624]

6 2 3 *Silver v Premier Gauteng Provincial Government*

In the matter of *Silver v Premier Gauteng Provincial Government*[625] the plaintiff was admitted to the Johannesburg General Hospital on 20 April 1994 suffering from pancreatitis. When he was discharged, his ability to walk properly had been permanently impaired. The plaintiff claimed that his disability was the result of an infection which entered his body and spread through a sacral bedsore. He further claimed that the bedsore was the result of the negligent omission on the part of the nursing staff to apply proper pressure part care while he was a patient in the hospital's general surgical ward. The defendant argued that the plaintiff's disability was not caused by the negligence of nursing staff at the hospital but as a result of complications following from pancreatitis which was present as a condition in the plaintiff at his time of admission. The alleged negligence of the nursing staff was described as a failure "to take proper precautions in preventing the development of a pressure sore" and that "in consequence of the negligent conduct the plaintiff developed a pressure sore which resulted in necrotising fasciitis and ultimately resulted in paralysis of the lower limbs."[626] It was common cause that the plaintiff's condition deteriorated rapidly after his admission to the general surgical ward; that he could not immediately be admitted

[624] *Blyth v Van den Heever* 1980 1 SA 191 (A) 207.
[625] 1998 4 SA 569 (W).
[626] Carstens PA & Pearmain D (2007) (n1) 828.

to the hospital's intensive care unit and that he was nursed in the hospital's general surgical ward.

It was further common cause that when he was admitted to the intensive care unit, the following observation was recorded: "Both buttocks grey in colour? Bedsores" and that the plaintiff's bedsores, while he was in the intensive care unit, degenerated into an open wound about 11cm² over the plaintiff's sacrum and extending to the buttocks on both sides. It was further common cause that the plaintiff was at risk for the development of pressure sores as a result of the fact that: (1) the plaintiff was and is a diabetic, with the result that skin perfusion in his case would be compromised; (2) that he had to be dialysed peritoneally, which gave rise to the risk that fluid leaks would occur and that the skin on which the plaintiff was lying became wet; (3) the plaintiff frequently suffered from an elevated temperature which would result in the perspiration and the skin on which he was lying to become moist; (4) the plaintiff had to be intubated in order that he could be mechanically ventilated, requiring sedation of the plaintiff with the result that he was incapable of moving of his own accord; (5) the plaintiff weighed approximately 87 kilograms; (6) the plaintiff was treated with inotropic drugs and he was hypotensive, all of which reduced perfusion of blood in *inter alia*, the plaintiff's skin.[627] Cloete J (as he then was), referring *inter alia* to *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[628] and *Tuck v Commissioner for Inland Revenue*[629] summarised the relevant legal principles as follows[630]:

> If the submissions made by the defendant's counsel are correct, then, accepting the plaintiff's hypothesis that the infection causing his disability could spread from a sacral bedsore, and if, in addition, such a bedsore is likely to have become a source of such an infection despite proper nursing care, the plaintiff cannot succeed in his claim based in delict as the factual test for causation would not have been satisfied… I am aware that the plaintiff's claim is founded in contract and, in the alternative, in delict. But I see no reason why the sine qua non test should not apply equally to the contractual claim in casu. The loss sustained by the plaintiff is said to have been caused by the breach of an implied term of an agreement that the hospital through its staff and employees would exercise due care, skill and diligence in providing nursing care. Precisely the same facts are relied upon as constituting a breach of the implied term as are relied upon as constituting a breach of the duty of care owed to the plaintiff. It would be

[627] Carstens PA & Pearmain D (2007) (n1) 828.
[628] 1984 2 SA 888 (A) 914C – 918A.
[629] 1988 3 SA 819 (A) 832F – G.
[630] *Silver v Premier Gauteng Provincial Government* 1998 4 SA 569 (W) 574 – 576.

anomalous if the same result did not follow irrespective of the cause of action. Furthermore, although the question of remoteness of damage for breach of contract is approached (in the absence of a contractual stipulation as to the basis on which compensation is to be made) by determining whether the damage flowed naturally and directly from the defendant's breach or is such a loss as the parties contemplated might occur as a result of such breach… it must, in my view, follow as a matter of logic that as a general rule, the test for factual causation would first have to be satisfied.

Carstens & Pearmain summarise the implications of the judgment as follows[631]:

This case involves the question of causation and whether the harm complained of would have arisen whether or not the nursing staff were negligent in caring for the patient. The court said that if the answer to this question was in the affirmative then there was no need to even consider whether or not the nursing staff had in fact been negligent in caring for the patient since the defendant could not be held for harm which would have occurred in the absence of his negligent and wrongful act and omissions. The reason behind this approach is evident from the debates concerning alternative causes and the approach of the South African law of delict to the effect that the defendant is not liable unless his conduct in fact caused the plaintiff's harm.

The learned writers observe in respect of the judgment that "[i]f there is another factor present which would independently of the defendant have in any event caused the harm then causation cannot be attributed to the acts or omissions of the defendant."[632] In *Silver v Premier Gauteng Provincial Government*[633], the court did not deal with the negligence of the nurses as it found an alternative cause for the plaintiff's injuries, which alternative cause would, in any event, have ousted the alternative cause of any negligent acts or omissions on the part of the nurses.[634] Carstens & Pearmain further opine that "had the nurses in fact been negligent, the *sine qua non* theory would in any event not have been satisfied and the defendant could not have been liable."[635]

[631] Carstens PA & Pearmain D (2007) (n1) 380. See also Boberg (1984) (n3) 380; Neethling J & Potgieter JM (2015) (n6) 183 fn 5.
[632] Carstens PA & Pearmain D (2007) (n1) 830.
[633] 1998 4 SA 569 (W).
[634] Carstens PA & Pearmain D (2007) (n1) 830 – 831. See also *MEC for Health, Eastern Cape v Mkhita and Another* [2016] ZASCA 176 (25 November 2016) paras [10] – [14].
[635] Carstens PA & Pearmain D (2007) (n1) 831.

6 2 4 *Lee v Minister of Correctional Services*

The decision of the Constitutional Court in *Lee v Minister of Correctional Services*[636] has led to some degree of uncertainty in respect of causation in the law of delict, and it is submitted, consequently, also in respect of factual causation in medical law in South Africa. As Kotze demonstrates[637]:

> Unfortunately, as has been illustrated… the majority in *Lee* professed not to be modifying the traditional but-for test at all but, in result if not by design, there seems to be little doubt that they have done so. It is respectfully submitted that it is difficult to conceive of a situation that engenders greater uncertainty than a court that is observed to alter the law without expressly identifying such modification, or the narrow field within which the modification may find application.

It is evident from the judgment above that, in some classes of claim the traditional *conditio sine qua non* theory is just not enough to deliver just outcomes.[638] In addition to leading to unjust outcomes, the *conditio sine qua non* is an "over-blunt and inadequate tool for securing constitutionally tailored justice in cases where prisoners have proved exposure to disease because of negligence on the part of prison authorities, but cannot pinpoint the source of their injury."[639] It is submitted that the same criticism may be levied against the application of the existing *conditio sine qua non* theory in medical negligence cases where the origin, source or development of a particular injury, together with negligent conduct on the part of a medical practitioner, makes pinpointing the cause of the plaintiff's injury difficult or impossible.

Dutton mentions the fact that both the Supreme Court of Appeal and the Constitutional Court recognised that the plaintiff in *Lee v Minister of Correctional Services*[640] faced a quandary, and, importantly, raises the question of "whether policy-based considerations should be shoehorned into our principles of factual causation and if so, on what terms, and this issue now seems set to be ventilated in our courts in the

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[636] 2013 2 SA 144 (CC).
[637] Kotze SR "Contemporary Perspectives on Factual Causation in the South African Law of Delict: A Study with Reference to Medical Negligence" (Unpublished LLM Dissertation, University of Pretoria) (2015) 135.
[638] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [100].
[639] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [101].
[640] 2013 2 SA 144 (CC).

foreseeable future."[641] Notwithstanding, with respect, the gloss of Mogoeng CJ in *Mashongwa v PRASA*[642], it is submitted that urgent guidance is needed in respect of the delineation of the "flexible" test for factual causation espoused in *Lee v Minister of Correctional Services*[643]. As Kotze states[644]:

> Unlike the House of Lords, however, the Constitutional Court in *Lee* made no attempt to limit or circumscribe the formulation of factual causation that it enunciated. The cases decided subsequent to *Lee*… indicate a worrisome trend towards the relaxation of the test for factual causation, not only in cases involving constitutional duties on the part of the state, but also with regard to medical negligence suits and general delictual claims. We therefore find ourselves in the uncanny situation where the courts are citing the Constitutional Court's judgment in *Lee* as authority for less stringent causal requirements actually being applied, whilst the judgment in *Lee* itself denies having made any modification to the common law… It is submitted that the modifying impact that the judgment in *Lee* has had on the proof of factual causation, coupled with the manner in which courts are applying the precedent it has set, represents a prodigious departure from traditional standards of the proof of delictual liability.

The direct applicability of the principles set out in *Lee v Minister of Correctional Services*[645] to state organs is evident from the judgment itself. Kotze opines that it is "conceivable that some of the same rights may be invoked by an individual outside the sphere of public law to ensure 'constitutionally tailored justice'."[646] It is argued that[647]:

> [I]n circumstances where a plaintiff is precluded from proof of her claim on grounds of either scientific ignorance, or the fact that the only direct knowledge regarding the negligent conduct resides with the defendant, the right to access to courts and a fair hearing contained in section 34 of the Constitution may well be employed in an argument motivating for the flexible application of the test for factual causation.

The majority of the Constitutional Court[648] emphasised that none of the traditional approaches to factual causation were jettisoned in favour of the new "flexible" approach, but the Constitutional Court failed to define the "flexible" approach itself. It is respectfully submitted that the Constitutional Court's gloss in *Mashongwa v*

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[641] Dutton I (2015) (n562) 68.
[642] 2016 3 SA 528 (CC).
[643] 2013 2 SA 144 (CC).
[644] Kotze SR (2015) (n637) 136.
[645] 2013 2 SA 144 (CC).
[646] Kotze SR (2015) (n637) 138.
[647] Kotze SR (2015) (n637) 138.
[648] Para 4 4 *supra*.

PRASA[649] has only provided guidance as to *when* the flexible test for factual causation is to be applied. It did not, unfortunately, define precisely *what* the flexible approach to factual causation entails. It may be, as Dutton suggests, that[650]:

> [I]n dealing with these challenging issues, our legal system must strike a balance between a proactive development of the law on the one hand, and a prudent preference for proper ventilation of the issues, on the other. The role of the legislature as the major engine for law reform must also be borne in mind, and it may well be that the somewhat radical departure from the clearly established common law principles which the English courts were, on occasion, prepared to take in relation to factual causation should be left for legislative consideration.

The implication for the law of delict (insofar as it dovetails with the principles governing liability in a private and public law context) is clear - *Lee v Minister of Correctional Services*[651] has led to a great measure of uncertainty. As Meerkotter illustrates[652]:

> The implications of the *Lee* judgment are potentially far-reaching and certainly extend beyond the affirmative remedy granted to Lee as an individual. Fundamentally, the judgment breaks away from the formalistic reasoning employed by the SCA. Instead, the CC favours reasoning which promotes justice and constitutional values – such an approach is necessary if our courts are truly to give effect to substantive justice as envisaged by the Constitution.

The majority of the Constitutional Court's decision heralded a new "flexible" approach to factual causation. The judgment and the extensive criticism which was raised in respect of the "flexible" approach to factual causation is discussed *supra*.[653] In addition to those grounds of criticism, it is submitted that certain additional grounds of criticism may be raised against the utility of the "flexible" approach to factual causation in a medical law context. The "flexible" approach to factual causation cannot, with respect, be properly described as a "test" for factual causation. Its terms, structure, and content

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[649] Para 4 4 *supra*. See also *Makhanya v Netcare Hospitals (Pty) Ltd t/a Netcare Femina Hospital and Another* [2016] ZAGPPHC 1022 (Unreported Judgment) (9 December 2016) paras 46 – 52.
[650] Dutton I (2015) (n562) 72 – 73. See also *Du Plessis v De Klerk* 1996 3 SA 850 (CC) [61]: "Judges can and should adapt the common law to reflect the changing social, moral and economic fabric of the country. Judges should not be quick to perpetuate rules whose social foundation has long since disappeared. Nonetheless there are significant constraints on the power of the Judiciary to change the law."
[651] 2013 2 SA 144 (CC).
[652] Meerkotter A (2015) (n228) 286.
[653] Para 3 2 *supra*.

(apart from general references to "flexibility" and "normative considerations") provide no specific criteria against which factual causation is to be determined. It further provides no discernable principles which are capable of general application in medical negligence cases.[654]

6 3 Uncertain Causation

6 3 1 Dilemmas in Proof of Causation in Medical Negligence Cases

It will be evident from what is discussed *infra*[655] that courts in other jurisdictions (like South African courts) experience difficulties in respect of multiple or uncertain causation in medical negligence litigation. As will appear from what is set out in Chapter 4 *infra*, the decisions of courts in other jurisdictions, considered in a comparative context, may be useful in providing potential solutions to difficulties in establishing causation in complex medical negligence matters. Although the present chapter concerns the principles of delict and medical law in South Africa, the universality of the difficulties inherent in establishing causation in complex medical law cases requires consideration of not only South African literature on the topic, but also a consideration of the main approaches of writers to causation in medical law in other jurisdictions. It is indeed so that structural and doctrinal differences exist between the South African law of delict (and medical law), and the law of torts in other jurisdictions, but it is submitted that the principal theoretical difficulties inherent in establishing causation in medical law cases are common to all relevant jurisdictions. The discussion which follows will, for the sake of proper contextualisation, also include reference to international literature on the general issues and principles which are involved.

It is impossible, due to the complexity and innumerable variables involved in medical negligence litigation, to provide a comprehensive categorisation or analysis of every conceivable factual scenario which may present itself in medical law cases. Every case should be approached on an individual basis, and with specific reference to its factual

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[654] It appears, with respect, to be more akin to casuistic legal policy than to legal principle or "test".
[655] Chapter 4 *infra.*

parameters. It may, however, be useful to briefly discuss the main categories of causes and the concomitant dilemmas in proving causation in medical law cases.

6 3 2 Uncomplicated Cases

An application of the varying approaches as set out by the courts and authorities as referred to herein *supra* will be mostly uncomplicated in cases where, as Neethling & Potgieter opine, an expert can give evidence in respect of, for example, the fatality of a gunshot wound to the head.[656] Where the expert in question testifies that a single high-calibre bullet penetrated the victim's skull, destroying most of his brain matter and instantly leading to the victim's death without the intervention or involvement of any other influence, pre-existing condition, or person, the conclusion to be drawn in respect of factual causation is both simple and quickly made – the gunshot, and nothing else, killed the victim. In the context of medical negligence cases the "gunshot" scenario may be likened to the situation of the radiographer who uses an excessively high setting when taking x-rays and consequently badly burns the (otherwise healthy) skin of his patient[657] or the surgeon who ruptures a patient's artery during a procedure and in so doing seriously disrupts adequate blood supply to the patient's (otherwise healthy) brain with resultant brain damage.[658] It is submitted that the application of the *conditio sine qua non* theory and common sense in single-cause scenarios will lead to an easily achievable and satisfactory result.[659] Where more than one cause, alternative causes, cumulative causes or concurrent causes are involved, the situation may obviously become more complex.

6 3 3 Multiple, Alternative, Cumulative, Concurrent or Uncertain Causes

An expert will usually have no difficulty in providing a court with sufficient data to determine factual causation in a single-cause or relatively uncomplicated multi-factorial situation. The problem becomes significantly more complex in situations

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[656] Neethling J & Potgieter JM (2015) (n6) 181, 188.
[657] *Dale v Hamilton* 1924 WLD 184.
[658] *Pringle v Administrator, Transvaal* 1990 2 SA 379 (W).
[659] For more examples of negligent conduct involving various factual permutations, see Carstens PA & Pearmain D (2007) (n1) 648 – 864 and the factual matrices discussed there. See also Claassen NJB & Verschoor T (1992) (n562) 31 – 56.

where multiple, alternative, cumulative or uncertain factors are involved, and no expert (doctor, medical practitioner or specialist) can determine, by the state of the art or medical science at the time, the precise cause of an event.[660] Khoury[661] describes the problem as follows:

> Already recognised as a problematic requirement, the proof of the cause of the damage suffered by the patient involves serious challenges when science is not able to identify the origin of a biological phenomenon or when it is controversial. This situation is far from exceptional in the sphere of medical liability, where the tribunal of fact is constantly confronted with causal problems which prevent one from determining the exact causes of the injury or the role played by the defendant in its realisation. These difficulties derive from the circumstances that scientific enquiry may be needed into areas of medicine in which the precise causal mechanisms are not yet fully understood; that the aetiology of certain illnesses, such as cancer, is still poorly understood; that one phenomenon may have several scientific explanations without the experts being able to identify which played a role in a specific case; that some conditions emerge years and even generations later or have subtle effects that are hard to assess; and finally, that the human body's reactions are often unpredictable and difficult to explain with current medical knowledge.

The uncertainties above may create two problematic situations – either it is impossible to determine whether a medical practitioner's negligence caused (or at all contributed) to the harm suffered, or while it is known that it did, it may be entirely impossible to measure the exact extent of such contribution.[662] The "common sense" approach may, therefore, up to a certain stage in the examination, prove useful, but become wholly unsuited once common human knowledge or experience fail to address a complicated uncertainty such as those frequently encountered in medical cases. These difficulties may be exacerbated by "the judge's (and the patient's) lack of scientific background, as well as by deficiencies in the medical records available in evidence."[663] Despite such difficulties, Khoury argues, a judge must still find in favour of, or against, a

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[660] In *Ocean Accident and Guarantee Corporation Ltd v Koch* 1963 4 SA 147 (A) the court had to decide whether the defendant, the third party insurer of a vehicle with which the driver negligently smashed into the rear of the plaintiff's vehicle, could be held liable for expenses incurred as a result of a thrombosis which was allegedly caused by a persistent state of anxiety, allegedly arising as a result of a neck injury which the plaintiff had sustained in the accident. The majority of the court held on appeal that on the medical evidence it was impossible to say that the eventual thrombosis was a result of the accident – see Neethling J & Potgieter JM (2015) (n6) 183 fn 3.

[661] Khoury L *Uncertain Causation in Medical Liability* (2006) 5.

[662] Khoury L (2006) (n661) 5.

[663] Khoury L (2006) (n661) 5.

plaintiff or plaintiffs.[664] Under the traditional rules of evidence, plaintiffs faced with uncertain or contradictory scientific or medical evidence in respect of causation may "as a consequence be doomed to failure."[665] The difficulty faced by judges in South Africa is, as elsewhere, the desire to assist an innocent plaintiff without over-extending the bounds of liability in respect of the defendant.[666] As Khoury argues[667]:

> This result has been a source of concern for the courts of common law and civil law. They have been faced with a difficult dilemma in refusing to disrupt the traditional rules concerning the standard and burden of proof of causation, yet being unwilling to let an innocent victim of a proven wrong go uncompensated. A complicating concern is the equally important desire not to prejudice equity for the defendant by holding him liable for the whole of the plaintiff's loss in cases where it is impossible to identify their exact contribution. It is in the light of these conflicting interests that the courts have had to answer the difficult question of *who should bear the consequences of the scientific evidential gaps.*

The learned writer continues as follows[668]:

> While proving causation is often straightforward, it can become overwhelmingly difficult when evidence is lacking or is uncertain as to the chain of events leading to the damage, as well as when there exist multiple possible explanations of the injury. This practical difficulty, far from being an academic hypothesis, regularly challenges the parties, as well as the judges who have to assess the causal requirement.

The problem is compounded, according to Freckelton by "problems of evaluation in relation to opinions that are not only complex, conflicting, and conceptually demanding but both partisan and subjectively based."[669] Causation evidence "not only

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[664] Khoury L (2006) (n661) 5.
[665] Khoury L (2006) (n661) 5. In South African medical law the incidence of the burden of proof is determined as a matter of substantive law from the nature of the particular rule of law that is sought to be enforced. See in general Schmidt CWH & Rademeyer H *Bewysreg* (2000) 77 – 101; Schwikkard PJ & Van der Merwe SE *Principles of Evidence* (2002) 537, 537 fn3; Zeffert DT, Paizes AP & Skeen A St Q *The South African Law of Evidence* (2003) 45 – 60; *Pillay v Krishna* 1946 AD 94; *Brand v Minister of Justice* 1959 4 SA 712 (A); *South Cape Corporation (Pty) Ltd v Engineering Management Services (Pty) Ltd* 1977 3 SA 534 (A) 548; *National Employers' General Insurance Ltd v Jagers* 1984 4 SA 437 (E); *Stellenbosch Farmers' Winery Group Ltd And Another v Martell Et Cie And Others* 2003 1 SA 11 (SCA). See also *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA) para [25]; *Minister van Veiligheid en Sekuriteit v Geldenhuys* 2004 1 SA 515 (SCA) para [41].
[666] See Khoury L (2006) (n661) in respect of a general synopsis in the context of uncertain causation in medical liability in Common Law jurisdictions. See also Chapter 4 *infra*.
[667] Khoury L (2006) (n661) 5. See also Freckelton IR & Mendelson D *Causation in Law and Medicine* (2002) 429 – 431.
[668] Khoury L (2006) 15. See also Freckelton IR & Mendelson D (2002) (n667) 429 – 431.
[669] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 430.

demands high-quality inferential reasoning on the part of experts but also a capacity on the part of counsel to subject the opinions of doctors, scientists, accountants and others to effective testing via cross-examination."[670]

The suggested approaches and proposed solutions to multiple uncertain causation cases in South African medical law will be discussed *infra*[671].

6 3 4 Expert Evidence

In *R v Jacobs*[672] the following was stated in respect of the evidence of medical experts:

> A medical report is not self-explanatory and a doctor should (apart from reading out and confirming his report on oath) explain the tests carried out by him and the relevance to his conclusions, because as was said by Ramsbottom J:
>
> 'It was for the magistrate to say whether he accepted the opinion of the district surgeon or the opinion of the doctor who was called by the defence, and unless the opinion of the district surgeon was supported by reason there was nothing to commend its acceptance by the magistrate. In cases of this sort it is of the greatest importance that the value of the opinion should be capable of being tested; and unless the expert states the ground on which he bases his opinion, it is not possible to test its correctness, so as to form a proper judgment upon it. Mr Rein said that it would be sufficient if a doctor said, after examining a man, that he was drunk. I'm very doubtful whether that it correctl I will go further, and say that I do not think that it is correct. It was not for the doctor to say that a man was drunk; that was a question that had to be proved to the satisfaction of the magistrate. It was for the doctor to observe and to decide what inferences he drew from the facts which he observed; and after he drew those inferences, it was for the court to say if correct inferences had been drawn.'

According to Freckelton, there is a long history of ambivalence on the part of the judiciary towards the involvement of experts in court proceedings.[673] This

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[670] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 430.
[671] Chapter 5 *infra.*
[672] 1941 OPD 7. See also Schwär TG, Loubser JD & Olivier JA *Die ABC van Geregtelike Geneeskunde* (1988) 18: "Siektetoestande kan dikwels dieselfde simptome vertoon (dink byvoorbeeld aan die differensiële diagnose van alkoholintoksikasie), of 'n dubbele patologie mag teenwoordig wees. Verder ontstaan die vraag oor hoe ver die geneesheer moet gaan met sy ondersoeke – is 'n kliniese ondersoek genoegsaam of moes 'n EKG-, EEG – of EMI-ondersoek gedoen gewees het? Die antwoord hierop is eenvoudig. Die geneesheer moet sy getuienis gee volgens die beginsels wat bo genoem is en die res aan die hof oorlaat."
[673] Freckelton IR *The Trial of the Expert: A Study of Expert Evidence and Forensic Experts* (1987) 124.

ambivalence is the result of the fact that courts do not always receive from experts "non-partisan, clearly articulated, and uncontroversial answers" to the questions posed to them by lawyers.[674] Apart from the difficulties which are inherent in the presentation and examination of complex scientific issues by experts and legal teams, expert evidence is subject to problems such as "expert shopping"; the powerful influence of the expert and the seemingly impressive nature of expert evidence; conscious or subconscious bias; source credibility; the comprehension (or non-comprehension) of expert evidence by those in court; source credibility; distraction by external factors, apparent expertise, dynamism and credibility.[675] The difficulties of comprehension faced by those in a courtroom where expert evidence is led (and cross-examined) are compounded by the use of technical terminology and theoretical precepts.[676] Freckelton raises an important issue in respect of the complexity of matters facing tribunals of fact[677]:

> This brings to the fore the desperately ill-equipped position which our tribunals of fact can find themselves in when faced with complex and disputed scientific evidence… The logistics of attempting to retain an effective hold on complex evidence over a long trial are extreme enough… only recently have expert witnesses been encouraged to use charts and diagrams to make their evidence easier to understand. But the difficulties are multiplied as the complexities of scientific evidence are more pressing and the fundamental disputes among the scientific witnesses the more difficult for lay comprehension.

Experts frequently (if not always) disagree on the significant issues in a matter. They may not only disagree on the salient facts, but also in respect of the technical and scientific basis upon which any conclusion is based. The question, as Freckelton illustrates, is[678]:

> [H]ow a jury can be expected to evaluate and then adjudicate upon scientific debates in which the experts cannot agree. This is made even more difficult when witnesses are not forthcoming with all the relevant information about the tests they have carried out and the inferences that can be drawn from

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[674] Freckelton IR (1987) (n673) 123.
[675] Freckelton IR (1987) (n673) 129 – 148. See also Mulheron H "Trumping Bolam: A Critical Legal Analysis of Bolitho's 'Gloss'*"* (2010) *Cambridge Law Journal* 609, 614ff.
[676] Freckelton IR (1987) (n673) 156 – 157.
[677] Freckelton IR (1987) (n673) 157 – 158; *R v Chamberlain* (1984) 51 ALR 225, 241.
[678] Freckelton IR (1987) (n673) 165.

them. Clearly, though, the courtroom is not the proper venue for the resolution of scientific debate. That is the province of academia and laboratories.

The fact remains, however, that the tribunal of fact must reach a verdict one way or another. Matters become infinitely more complicated where novel scientific evidence is produced in a courtroom. Where disputed scientific evidence is presented, and there is an irreconcilable divergence of opinion among expert witnesses, counsel's skills in cross-examination of expert witnesses becomes increasingly important.[679] Causation is frequently established as a result of inferences drawn from primary facts.[680] The accurate representation by expert witnesses of primary facts is therefore crucial, as the ultimate conclusions drawn by such experts are only as reliable as those primary facts upon which reliance is placed.[681]

Care should be taken not to rely on a large quantity of evidence of low probative value – the "simple addition of relatively unlikely or dubious possibilities" should not be permitted to result in a determination on a balance of probabilities.[682] The plaintiff who is unable to prove, on a balance of probabilities, that it is more probable than not that the defendant caused his injury, will, in terms of a binary approach to causation, receive nothing.[683] Plaintiffs will face a challenging struggle to convince a judge or magistrate that mathematical calculations involved in the establishment of percentile chances of loss should trump the overall discretionary faculties of a presiding officer.[684]

A plaintiff in a medical negligence case is required to present expert medical evidence in support of his or her allegations.[685] Expert medical evidence is essential in supporting, or refuting, a plaintiff's case.[686] The primary function of the expert is to assist the court in reaching a correct decision on issues which fall within the expert's

[679] Freckelton IR (1987) (n673) 174.
[680] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 439.
[681] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 439.
[682] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 440.
[683] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 453. See also para 3 2ff *supra*.
[684] Freckelton IR in Freckelton IR & Mendelson D (2002) (n667) 454.
[685] Carstens PA & Pearmain D (2007) (n1) 860.
[686] Carstens PA & Pearmain D (2007) (n1) 860.

specialised field.[687] Carstens & Pearmain summarise the principles which govern expert evidence in a medical negligence context as follows[688]:

> The value a court should attach to expert medical evidence with regard to the proof of medical negligence (that is, to determine whether the defendant medical practitioner's actions or omissions were negligent or not with reference to the yardstick of the average competent reasonable medical practitioner in the same circumstances) is contentious… The probative value of expert medical evidence is dependent upon the qualifications, skill and level of experience of the expert and the ability of the court to assess this testimony. More often than not the medical expert's testimony will be so technical in nature that the court will find it difficult to draw its own reliable inferences. This is particularly the case where medical experts who are called upon to testify on behalf of a plaintiff or the defendant medical practitioner in a medical negligence action have conflicting opinions or represent different but acceptable schools of thought in medical practice.

The evidence provided by expert witnesses in medical negligence cases is of great value, but the decision of what is reasonable under particular circumstances remains with the court – it will pay high regard to the views of the profession, but it is not bound to adopt such views.[689] In *Michael v Linksfield Park Clinic (Pty) Ltd*[690] the Supreme Court of Appeal determined that "the issue of reasonableness or negligence on the part of a defendant is one for the court to determine on the basis of the various and often conflicting expert opinions which are expressed."[691] The evaluation of expert evidence bearing on the conduct of the defendant, and any opinions expressed in respect thereof, must be based on logical reasoning.[692] The court also drew an important distinction between the scientific and the judicial measure of proof as

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[687] Carstens PA & Pearmain D (2007) (n1) 861.
[688] Carstens PA & Pearmain D (2007) (n1) 861; Schmidt CWH & Rademeyer H (2000) (n665) 77 – 101, 463; Schwikkard PJ & Van der Merwe SE (2002) (n665) 537, 537 fn3; Zeffert DT, Paizes AP & Skeen A St Q (2003) (n665) 45 – 60, 97; *Webb v Isaac* 1915 EDL 273; *Coppen v Impey* 1916 CPD 309; *Van Wyk v Lewis* 1924 AD 438 447 – 448; *S v Gouws* 1967 4 SA 527 (E); *Castell v De Greef* 1994 4 SA 408 (C) 409; Carstens PA "Nalatigheid en Verskillende Gedagterigtings Binne die Mediese Praktyk" (1991) *THRHR* 673; Strauss SA (1991) (n560) 122; Claassen NJB & Verschoor T (1992) (n562) 26; Van Oosten FFW (1996) (n560) para [89].
[689] *Van Wyk v Lewis* 1924 AD 438 447 – 448. Swanepoel M "Law, Psychiatry and Psychology: A Selection of Constitutional, Medico-Legal and Liability Issues" (LLD Thesis – UNISA) (2009) 172; Carstens PA & Pearmain D (2007) (n1) 861 – 862.
[690] 2001 3 SA 1188 (SCA); Carstens PA & Pearmain D (2007) (n1) 861 – 862.
[691] Swanepoel M (2009) (n689) 172. See also Carstens PA & Pearmain D (2007) (n1) 861 – 862.
[692] Carstens PA & Pearmain D (2007) (n1) 861 – 862.

discussed by the House of Lords in the case of *Dingley v The Chief Constable, Strathclyde Police*[693] where the following was stated[694]:

> One cannot entirely discount the risk that by immersing himself in every detail and by looking deeply into the minds of the experts, a judge may be seduced into a position where he applies to the expert evidence the standards which the expert himself will apply to the question whether a particular thesis has been proved or disproved – instead of assessing, as a Judge must do, where the balance of probabilities lies on a review of the whole of the evidence.

The basic guidelines and boundaries for the evaluation of expert evidence in medical negligence cases have been applied in several cases.[695] In *Twine & Another v Naidoo & Another*[696] the difficulties inherent in receiving and those standards which should apply to expert witnesses were discussed. Although the matter involved the evidence of handwriting experts, the principles set out therein are instructive and, it is submitted, apply equally in medical negligence matters. Vally J comprehensively discussed the role and duties of expert witnesses in complicated matters involving technical subject matter[697]:

> Given the divergent approaches adopted by the two experts it is, I believe, appropriate to comment on the role, duties, and functions of an expert witness as well as the role and functions of the court before analysing their respective testimonies. This is especially necessary as an expert witness, once an infrequent visitor to the court now enjoys a daily presence in the court. There are two broad reasons for this: (i) litigation has enjoyed an unprecedented growth over the last seven decades; and, (ii) over the same period the growth and development of scientific and technical knowledge of the natural, physical, social and commercial world has been vast. The latter has often resulted in the law being forced to play catch-up. The prevalence of expert testimonies has, however, produced challenges for the courts, some of which are fundamental to its duties and functions as a justice producing institution. This is particularly so as an entire industry of alleged experts selling their skills, knowledge and/or experience to litigants has developed, especially in personal injury cases where the defendant is the Road Accident Fund. Most of the challenges faced by the court arise from the fact that the basic principles about the role, relevance and value of an expert's testimony are often ignored by the alleged experts themselves and by the parties calling them. This, unfortunately, has resulted in the unnecessary wastage of court time and the unnecessary incurrence of costs by parties.

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[693] 2000 SC (HL) 77.
[694] *Dingley v The Chief Constable, Strathclyde Police* 2000 SC (HL) 77.
[695] *Louwrens v Oldwage* 2006 2 SA 161 (SCA); *McDonald v Wroe* 2006 3 All SA 565 (C).
[696] [2018] 1 All SA 297 (GJ).
[697] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) paras [18] – [19].

Vally J's judgment illustrates that the admission of expert evidence should be carefully guarded, as it is open to abuse.[698] Any witness claiming to be an expert should prove his or her credentials in order for his or her opinion to be admitted.[699] Expert evidence should only be admitted if it is relevant and reliable.[700] It should be presented only if it will assist the court in understanding a scientific or technical issue, or if it assists a court in establishing a fact either directly or indirectly by means of inferential reasoning, as opposed to speculative reasoning.[701] Expert evidence is superfluous if a court is in a position, without the expert evidence, to come to its own conclusions from the relevant proven facts.[702] Opinions that are "dressed up in scientific jargon" may render the task of a court inordinately difficult.[703] The fact that an expert witness has impressive scientific qualifications does not by that fact alone make his opinion on matters of human nature and behaviour more helpful than that of a judge or finder of fact.[704] Expert witnesses should bring specialised knowledge to court, being either experience, training or study-based knowledge and the expert's evidence should be

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[698] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18]. See *R v Jacobs* 1940 TPD 142 146 – 147; *R v Barry* 1940 NPD 130 132; *R v Theunissen* 1948 4 SA 43 (C) 46; *R v Nksatlala* 1960 3 SA 543 (A) 546C-D; *S v Mngomezulu* 1972 1 SA 797 (A) 798F-799; *Menday v Protea Assurance Co. Ltd* 1976 1 SA 565 (E) at 569B-C; *S v Adams* 1983 2 SA 577 (A) at 586A-C; *S v Van As* 1991 2 SACR 74 (W) 86; *S v M* 1991 1 SACR 91 (T) 100; *S v Shivute* 1991 1 SACR 656 (Nm) 661H; *Holtzhauzen v Roodt* 1997 (4) SA 766 (W) 772G-H; *S v Mthethwa* (CC03/2014) [2017] ZAWCHC 28 para [98]. See also *Kozak v Funk* 1995 CanLII 5847 (SK QB) 3; *Davie v Magistrates of Edinburg* [1953] SC 34, 40; *R v Turner* [1975] 1 All ER 70, 74; *Whitehouse v Jordan* [1980] UKHL 12; [1981] 1 All ER 267 (HL) 276; *National Justice Compania Naviera S.A. v Prudential Assurance Co. Ltd ("The Ikarian Reefer 1")* [1993] 2 Lloyds Rep 68, 81; [1995] 1 Ll L R 455 (CA) ("*The Ikarian Reefer 2")*; *Meadow v General Med Council* [2007] 1 All ER 1 (CA) para [21]; *Daubert v Merrell Dow Pharmaceuticals Inc.* [1993] USSC 99; 509 U.S. 579 (1993) 593; *Kumho Tire Co. v Carmichael* [1999] USSC 19; 526 U.S. 137 (1999) 159; Orofino S "Daubert v Merrell Dow Pharmaceuticals Inc.: The Battle over the Admissibility Standards for Scientific Evidence in Court" (1996) *Journal of Undergraduate Sciences* 109 – 111; Faigman DL "Mapping the Labyrinth of Scientific Evidence" (1995) Hastings Law Journal 555; Edmond G "Judicial Representations of Scientific Evidence" (2000) *The Modern Law Review* 216; Zonana H "Daubert v Merell Dow Pharmaceuticals: A new standard for scientific evidence in the courts?" (1994) *Bull Am Acad Psychiatry Law* 309 – 325; Smith, A C "Daubert v. Merrell Dow Pharmaceuticals" in Jamieson A & Moenssens A *Wiley Encyclopedia of Forensic Science* (2009).

[699] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].

[700] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].

[701] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].

[702] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18]; *S v Gouws* 1967 4 SA 527 (EC); *Coopers (South Africa) (Pty) Ltd v Deutsche Gesellschaft für Schädlingsbekämpfung* 1976 3 SA 352 (A) 371G – 371H: "As I see it, an expert's opinion represents his reasoned conclusion based on certain facts or data, which are either common cause or established by his own evidence or that of some other competent witness. Except possibly where it is not controverted, an expert's bald statement of his opinion is not of any real assistance. Proper evaluation of the opinion can only be undertaken if the process of reasoning which led to the conclusion, including the premises from which the reasoning proceeds, are disclosed by the expert."

[703] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].

[704] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].

entirely or substantially based on such specialised knowledge.[705] Where experts trespass outside their area of expertise, they should make it clear when a particular issue falls outside their area of expertise.[706] Experts should present their evidence with clarity and precision.[707] They should avoid obfuscation and vagueness.[708] Experts should state all of the relevant facts and assumptions on which their opinions are based and such facts should be proved by admissible evidence.[709] If an expert witness has been misinformed about the facts or has taken irrelevant facts into consideration in reaching his conclusion, his opinion is likely to be valueless.[710] Expert witnesses should provide independent assistance to the Court by providing an unbiased opinion in respect of matters falling within their area of expertise.[711] Expert witnesses are not advocates for any particular party and their independence should be fiercely guarded.[712] An expert witness' opinion should be capable of being tested and the expert should be able to provide the basis upon which he bases the opinion.[713] Vally J continued his exposition of the principles governing expert evidence as follows[714]:

This principle was expanded upon and extended, though not without controversy, by the U.S. Supreme Court in *Daubert* where the majority of the Court concurred in the *dictum* of Blackburn J, which endorses the approach of one philosopher of the scientific method (Karl Popper) who argued that in order for a theory or an explanation to be accepted as scientific it had to, in the main, be falsifiable. Blackburn J opined:

'Ordinarily, a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested. "Scientific methodology is what distinguishes science from other fields of human enquiry" …. "The criterion of the scientific status of a theory is its *falsifiability, or refutability, or testability*."'

[705] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[706] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[707] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[708] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[709] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[710] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[711] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[712] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[713] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18].
[714] *Twine & Another v Naidoo & Another* [2018] 1 All SA 297 (GJ) para [18] [emphasis added].

The court should actively evaluate the evidence. The cogency of the evidence should be weighed '*in the contextual matrix of the case with which (the Court) is seized.*' If there are competing experts it can reject the evidence of both experts and should do so where appropriate. The principle applies even where the court is presented with the evidence of only one expert witness on a disputed fact. There is no need for the court to be presented with the competing opinions of more than one expert witness in order to reject the evidence of that witness. This principle was eloquently articulated in *Davie* in the following terms:

Founding on the fact that no counter evidence on the science of explosives and their effects was adduced for the pursuer, the defenders went so far as to maintain that we were bound to accept the conclusions of Mr Teichman. This view I must firmly reject as contrary to the principles in accordance with which expert opinion evidence is admitted. Expert witnesses, however skilled or eminent, can give no more than evidence. They cannot usurp the functions of the jury or Judge sitting as a jury, any more than a technical assessor can substitute his advice for the judgment of the Court. Their duty is to furnish the Judge or jury with the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the Judge or jury to form their own independent judgment by application of these criteria to the facts proved in evidence. The scientific opinion evidence, if intelligible, convincing and tested, becomes a factor (and often an important factor) for consideration along with the whole other evidence in the case, but the decision is for the Judge or the jury. In particular the bare *ipse dixit* of a scientist, however eminent, upon the issue in controversy, will normally carry little weight, for it cannot be tested by cross-examination nor independently appraised, and the parties have invoked the decision of a judicial tribunal and not an oracular pronouncement by an expert.'

In certain cases of neurological, psychological and psychiatric evidence the expert is dependent on the honesty of the person who is the subject of the assessment for their evidence to be of any probative value to the court. This problem has manifested itself many times and the approach of the courts is succinctly captured in the following *dictum,* which while dealing with the evidence of an expert in psychiatry is no less applicable to an expert in the sciences of neurology or psychology:

The weight attached to the testimony of the psychiatric expert witness is inextricably linked to the reliability of the subject in question. Where the subject is discredited the evidence of the expert witness who had relied on what he was told by the subject would be of no value.

Should the subject of the assessment not testify, it would render the views of the expert meaningless as it was based on the untested hearsay of the subject of the assessment. In *Shivute* the court, confronted with exactly this situation, held that '*[t]he accused's failure to testify stripped the opinion evidence of the expert witness of almost all relevance and weight.*' The principle was re-stated in *Mngomezulu,*

where the Court said that unless the psychiatric or psychological evidence is linked to facts before court, it is just '*abstract theory*.' Expert witnesses who repeatedly provide expert opinions to parties – and sometimes only for plaintiffs or only for defendants – should be careful not to burden the court with what some justices of the U.S. Supreme Court called "*expertise that is fausse and science that is junky.*" Evidence which is repeated from case to case or an opinion that is mildly altered from case to case is in danger of falling foul of this principle. The court should scrutinise these opinions very carefully and should not hesitate in refusing them admission, nor should it be swayed by the impressive scientific qualifications of the expert for these are irrelevant, as pointed out in *Menday*:

However eminent an expert may be in a general field, he does not constitute an expert in a particular sphere unless by special study or experience he is qualified to express an opinion on that topic. The dangers of holding otherwise - of being overawed by a recital of degrees and diplomas - are obvious; the Court has then no way of being satisfied that it is not being blinded by pure 'theory' untested by knowledge or practice. The expert must either himself have knowledge or experience in the special field on which he testifies (whatever general knowledge he may also have in pure theory) or he must rely on the knowledge or experience of others who themselves are shown to be acceptable experts in that field. In *Van Heerden v. SA Pulp and Paper Industries* Blackwell J consequently refused to accept the evidence of a scientist with general chemical qualifications on a special matter on which he had made no special study nor acquired any special experience. Where, therefore, an expert relies on passages in a text-book, it must be shown, firstly, that he can, by reason of his own training, affirm (at least in principle) the correctness of the statements in that book; and, secondly, that the work to which he refers is reliable in the sense that it has been written by a person of established repute or proved experience in that field. In other words, an expert with purely theoretical knowledge cannot in my view support his opinion in a special field (of which he has no personal experience or knowledge) by referring to passages in a work which has itself not been shown to be authoritative. Again the dangers of holding the contrary are obvious.

[19] The above principles were developed in the course of the courts experiencing some significant challenges when faced with the issue of whether to admit expert evidence or not. The law is obviously still in a state of development in this area and the list catalogued in the previous paragraph is not exhaustive. *There is no doubt that expert evidence plays a valuable role in assisting the courts and other triers of fact (tribunals and arbitrations) in establishing the true facts and doing justice by the parties. However, courts have expressed their misgivings about admitting expert evidence when such evidence overlooks or contravenes one or more of the above-stated principles, some of which are elementary. In such cases courts have not hesitated in refusing to admit the evidence.*

It is respectfully submitted that the judgment of Vally J in *Twine & Another v Naidoo & Another*[715] provides an essential guideline in respect of the standards and principles which govern expert witnesses in medical negligence cases. Once expert witnesses have complied with the principles above, it is incumbent upon judges to carefully weigh the evidence and express a judicial, as opposed to a scientific, pronouncement on the issues before it.[716] In the American case of *Daubert v Merrell Dow Pharmaceuticals*[717] the Supreme Court of the United States suggested four (controversial) considerations in respect of the reliability of expert witnesses in trial matters[718]:

1. Is the theory or the technique relied upon falsifiable, refutable or testable?

2. Is the theory or technique in question subject to peer review and publication as a means of increasing the likelihood of detecting substantive flaws in the relevant methodology?

3. Is the known or potential error rate involved acceptable, and do standards exist (and are maintained) controlling the technique's operation?

4. Has the technique or theory gained general acceptance within the relevant scientific community?

Kirby cautions against the fallacy of *post hoc ergo propter hoc*, stating that "decision-makers must often be reminded (and remind themselves) of the fallacy of *post hoc ergo propter hoc*, i.e. because an event follows another in point of time does not necessarily mean that it was caused by the other."[719]

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[715] [2018] 1 All SA 297 (GJ).
[716] Edmond G & Mercer D "Rebels Without a Cause?: Judges, Medical and Scientific Evidence and the Uses of Causation" in Freckelton IR & Mendelson D (2002) (n667) 87 – 90.
[717] (1993) 509 US 579.
[718] Edmond G & Mercer D (2002) (n716) 91. See also Kirby M (2002) "The Judicial Review Expert Evidence: Causation, Proof and Presentation" at http://www.hcourt.gov.au/assets/publications/speeches/former-justices/kirbyj/kirbyj_expert.htm (accessed on 19 February 2018): One of the proposed solutions to conflicting expert evidence by the court in this article is: "[B]y appointing its own expert in the discipline concerned… Such a person, it is hoped, would objectify the process of decision-making; ensure the most reliable and up to date evidence for the decision-maker; and maintain standards of scrupulous impartiality such as befits the making of contested decisions in courts of law or independent tribunals…[however] anyone who has had even a brief acquaintance with the practical running of cases in courts will know that such a solution would not necessarily be just or appropriate." See also *Kumho Tires v Carmichael* 526 US 137 (1999).
[719] Kirby M (2002) (n655) 10.

In *Oppelt v Department of Health, Western Cape*[720] the Constitutional Court considered the principles of determining causation through expert evidence. The Constitutional Court discussed the principles set out *inter alia* in *International Shipping Co (Pty) Ltd v Bentley*[721], *Siman & Co (Pty) Ltd v Barclays National Bank Ltd*[722], *Minister of Police v Skosana*[723], *Micheal & Another v Linksfield Park Clinic*[724], *Bolitho v City and Hackney Health Authority*[725]and *Lee v Minister of Correctional Services*[726]. The Constitutional Court held that the Supreme Court of Appeal deviated from the approach in *Michael & Another v Linksfield Park Clinic*[727] in not giving due recognition to the scope of Dr Newton's study, even though no expert evidence was led which suggested that Dr Newton's statistical evidence was not valid. The Constitutional Court further held that in dismissing the claim the Supreme Court of Appeal erred in the following five respects:

> [38] First, Dr Newton testified that the dislocation of the spinal cord causes pressure and obstruction in the spinal canal which, when left unattended, results in the secondary ischaemic injury to nerve cells, to the extent that the cells cease to function. This evidence passes the reasonable and logical requirement for the acceptance of expert evidence set in *Linksfield*. The Supreme Court of Appeal erred when it concluded that the scientific evidence that supports his theory is 'questionable'. *The conclusion deviates from the Linksfield principle that where the logic of a medical approach is not in dispute, the court must not assess the cogency of scientific evidence by scientific standards, but by the legal standard of the balance of probabilities*.
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> [39] *Second, there was no scientific data or evidence that challenged, refuted or doubted the acceptability of the data Dr Newton collected and relied upon in coming to his expert conclusion*. Numerous articles referred to during Dr Newton and Dr Welsh's evidence confirmed the benefits of early reduction. By the time of the trial, Dr Newton's research had been partially peer-reviewed, accepted and was about to be published in a medical journal that Dr Welsh described as highly reputable. Furthermore, Dr Newton steadfastly maintained that his method did not constitute the least reliable class of data… The court thus erred when it found that Dr Newton conceded that his study constituted the least reliable class of data.

[720] 2016 1 SA 325 (CC).
[721] 1990 1 SA 680 (A) 700.
[722] 1984 2 SA 888 (A) 915.
[723] 1977 1 SA 31 (A) 35.
[724] 2001 3 SA 1188 (SCA) paras [34] – [40].
[725] [1998] AC 232 (HL).
[726] 2013 2 SA 144 (CC).
[727] 2001 3 SA 1188 (SCA).

[40] Third, Dr Welsh's testimony was largely limited to the observation that Dr Newton's approach *was not the medical norm, because there had not yet been enough opportunity to replicate or refute his findings. This feature does not serve to refute Dr Newton's evidence at the level of factual probability*. *A lack of general acceptance of Dr Newton's theory cannot, without more, warrant a rejection of his theory*. This is especially so because Dr Newton's evidence was largely unchallenged and his conclusions were arrived at on the basis of a case series, the publication of which was imminent at the time of the trial. He gave a plausible explanation on why he could not present the class I data that had a control group because the experiments were based on animal models. Great strides that have been made in the medical field have emanated from experiments on animals and review studies.

[41] *Fourth, the Supreme Court of Appeal fell into the trap of focusing on scientific proof instead of assessing where the balance of probabilities lies, based on an evaluation of the whole evidence*.

[42] Fifth, the court's criticism of Dr Newton's sample as small is unfounded and fails to take into account that it was isolated to specific spinal cord injuries over a period of about 12 years. The sample was based on the actual number of patients who were treated for rugby injuries at Conradie.

The Constitutional Court further held that "logical theories put forward by experts, and not gainsaid by other experts, should not be scoffed at without a basis."[728] The Constitutional Court then (referring to the flexible test in *Lee v Minister of Correctional Services*[729] and stating that the "but for" test is not the "be all and end all"[730]) held that, in the plaintiff's case, a "'mental removal of the defendant's omission' points to an indisputable causal link between the omission and the resultant quadriplegia."[731] The Constitutional Court then found that the requisite causal link had been established on a conspectus of all of the evidence.[732]

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[728] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC) 342 para [44]. See also Wietske F & Gordon A "The Trouble With Oppelt and the Treatment of Expert Evidence" (2016) http://www.mondaq.com/southafrica/x/473868/Healthcare/The+Trouble+with+Oppelt+and+the+Treatment+of+Evidence+in+Medical+Negligence+Matters.
[729] 2013 2 SA 144 (CC) para [41].
[730] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC) 342 paras [47] & [48].
[731] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC) 342 para [49].
[732] *Oppelt v Department of Health, Western Cape* 2016 1 SA 325 (CC) 342 para [50]. See also *Media 24 Books (Pty) Ltd v Oxford University Press Southern Africa (Pty) Ltd* 2017 2 SA 1 (SCA).

Oppelt v Department of Health, Western Cape[733] provides a good example of a case in which judges were called upon to determine the adequacy of causal evidence in a legal setting while simultaneously being called upon to reconstruct and synthesise factual, scientific and legal principles to obtain a practical result.[734] In *TS & Another v Life Healthcare Group (Pty) Ltd & Another*[735] during the birth of a child, the child suffered birth asphyxia, which resulted in his later developing cerebral palsy. His parents claimed damages against the hospital at which the mother, Mrs S, gave birth, as well as the attending obstetrician, Dr Suliman. The parents claimed that in attending to the mother's labour, they had acted negligently, which negligence caused the harm. The defendants undertook, jointly and severally, to pay the plaintiffs an amount in settlement of quantum and liability. It was held, however, that the hospital had failed to prove a causal link between Dr Suliman's negligence and the cerebral palsy suffered by the child. Dealing with expert evidence in the context of causation, Ploos van Amstel J stated the following in dealing with the question of whether an earlier attendance by Dr Suliman would have prevented injury to the child[736]:

> [32] The question is whether this would have avoided the harm that caused the cerebral palsy. Dr Van Helsdingen's evidence was that he could not say that the baby would have been saved if it were delivered by Caesarean section at some time between 19h30 and 20h00. He also said, in response to a question about causation, 'I cannot even begin to answer the question whether that would have salvaged the baby and I don't think anybody can tell you that, M'Lord'. It was pointed out to Dr Van Helsdingen by counsel for the hospital that he and Dr Cronje had stated in a joint minute that it was likely that the brain damage had occurred after 20h00 or perhaps after 21h00. When he was asked whether there was a specific reason for that opinion, his answer was, 'No, I don't think there is, it is almost impossible to estimate how long it

[733] 2016 1 SA 325 (CC) 342.
[734] Edmond G & Mercer D "Rebels Without A Cause?: Judges, Medical and Scientific Evidence and the Uses of Causation" in Freckelton IR & Mendelson D (2002) (n667) 87.
[735] 2017 4 SA 580 (KZD). See also the judgment of the Supreme Court of Appeal in *Life Healthcare (Pty) Ltd v Suliman* (529/17) [2018] ZASCA 118 (20 September 2018) in respect of factual causation at para [12]ff: "I now turn to deal with the causal link between the negligent action of Dr Suliman and the resultant harm. Establishing factual causation can be a difficult exercise as it must be demonstrated that 'but for' the doctor's action or inaction harm would not have occurred. (See *Lee v Minister of Correctional Services* [2012] ZACC 30; 2013 (2) SA 144 (CC) para 38 and *Mashongwa v Passenger Rail Agency of South Africa* [2015] ZACC 36; 2016 (3) SA 528 (CC) para 65 as authority.) In view of the findings and the order of the court a quo, the main thrust of this appeal was that the court a quo was unable to find that 'had he acted as it is said he should have, the tragic outcome would have been avoided'."
[736] *TS & Another v Life Healthcare Group (Pty) Ltd & Another* 2017 4 SA 580 (KZD) paras [32] – [34] [emphasis added].

takes; it depends on the degree of hypoxia. I think it was estimated on the basis of what the CTG picture showed after 20:00'.

[33] *It is trite that a court cannot simply accept the say-so of an expert who expresses an opinion on a matter within his field of expertise. The court must consider whether it can safely accept the opinion, and it will have regard to whether the opinion appears to be reasonable and logical and what the reasons for it are. The opinion expressed in the joint minute that the damage probably occurred after 20h00 and perhaps 21h00 was not supported by reasons and appears to have been no more than an estimate based on the CTG graphs after 20h00.* What in those graphs supported the estimate was not explained. And when Dr Van Helsdingen was asked whether there was a specific reason for the opinion, he said he did not think so. *He was very clear in saying that he could not say when the brain damage occurred or whether the baby would have been saved by a Caesarean section at about 20h00*. He said it was possible that by then the Rubicon had been crossed. It is true that Dr Suliman did not contend that a Caesarean section at 20h00 would have been too late, but I think it is clear that he simply did not know.

[34] The onus to prove a causal link between Dr Suliman's negligence and the cerebral palsy suffered by the baby was on the hospital. This had to be established on a balance of probabilities. In this case it had to be shown that, if Dr Suliman had gone to the hospital an hour after the 18h35 phone call, as the experts said a reasonable obstetrician would have done, the baby would not have suffered cerebral palsy. In the light of the evidence of Dr Van Helsdingen, I agree with counsel for the doctor that this was not established on a balance of probabilities.

In *Lomalisa v M*[737] the Court stated the following in respect of the expert evidence of an expert witness called by the Respondent in a medical negligence matter involving cerebral palsy:

[54] Dr Sevenster was called as an expert witness by the Respondent. His evidence is not without criticism…

[55] No attempt was made by Dr Sevenster in his expert summary or during his evidence to distinguish between the responsibilities of: Dr Ofori, who made the decision to refer the respondent to the appellant for an induction, the first defendant, who clearly failed to monitor the plaintiff and the baby, the appellant and Dr Kingela, the paediatrician who attended to the

[737] [2017] ZANWHC 58 (17 August 2017).

> baby after the delivery. There was no attempt by Dr Sevenster to explain the effect of a dose of 100mcg instead of a dose of 50mcg of Cytotec. He was clearly not qualified to do so. There was no attempt made by Dr Sevenster to indicate at what stage the baby was injured. No attempt was made by Dr Sevenster to exclude other possible causes of the cerebral palsy. No attempt was made to consider the events in the NICU during the period 10 December 2008 to 29 December 2008.
>
> [56] Although Dr Sevenster made various unqualified concessions during cross-examination, he again qualified those concessions during re-examination. His evidence is simply untrustworthy. Not much reliance should have been placed on it by the trial Court.

Some writers argue that the integration of scientific and legal principles is highly problematic and that the two disciplines should remain separate and discrete.[738] Edmond & Mercer argue that the tendency toward "what might be described as forms of hybridised law-science knowledge, with legal concerns entering into the practice and representations of science and medicine, provide interesting challenges for judges and commentators endeavouring to explain legal causation in relation to specific circumstances where there are competing expert opinions."[739] Edmond & Mercer state the following in respect of what is expected of courts in matters involving complex technical evidence[740]:

> In summary, when constructing legal versions of scientific causation, judges need to engage in processes of simplification and synthesis to show they comprehend the scientific and medical controversy but also to provide an intelligible and tractable model of the evidence that can be applied to the construction and justification of their decisions. The role of courts in mass litigation has shown judges going further and in a sense actually constructing more overt models of legal-scientific knowledge about causation, relying on a diverse assortment of meta-scientific resources.

It should be remembered, however, as Edmond & Mercer note, that factors such as "judicial fatigue, a lack of resources, pressures of expedition, consistency, and reflexivity" all have an influence on the construction of legal categories and decision-

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[738] Edmond G & Mercer D (2002) (n716) 88. See also in general Huber P *Galileo's Revenge: Keeping Junk Science out of the Courtroom* (1991); Edmond G & Mercer D "Trashing 'Junk' Science*"* (1998) *Stanford Technology Law Review* http://stlr.stanford.edu/STLR/Core_Page/index.html.
[739] Edmond G & Mercer D (2002) (n716) 88.
[740] Edmond G & Mercer D (2002) (n716) 91.

making in respect of medical and scientific causation.[741] Reece[742] (in an analysis of an Australian case which exhibits a measure of congruity with the factual matrix in *Lee v Minister of Correctional Services*[743]) considered judicial endeavours to establish medical and legal causation where the plaintiff claimed that he had contracted an infectious disease. In *Birkholz v RJ Gilbertson Pty Ltd*[744] the plaintiff claimed that he contracted brucellosis as a result of working in the defendant's abbatoir. The Supreme Court of Australia dismissed his claim on the basis that, although he might have been infected as a result of his employment, no precise method existed to establish the precise possible path or mechanism of infection, or what means could have been adopted by his employer to remove the risk of infection. On appeal, the Supreme Court held that it was not only more probable that he had contracted brucellosis through handling infected animals, but if he had been provided with better protective clothing, the infection might have been avoided. The court suggested that, even if the plaintiff failed to ascertain the precise method of infection, the court could still have found for the plaintiff. King CJ's reasoning is an example of the adoption of a normative approach to factual causation[745]:

> Has the failure to take those precautions been shown to have caused or materially contributed to the contracting of the disease by the appellant? It might be argued as a matter of strict logic, that the fact that the given precautions would substantially diminish the risk, does not prove that failure to take those precautions materially contributed to the appellant's infection unless it can be established how that infection occurred. But the law's view of causation is less concerned with logical and philosophical considerations than with the need to produce a just result to the parties involved.

The impact of social factors in shaping standards of proof for medical causation is, according to Edmond & Mercer, less overt.[746] They state the following in this regard[747]:

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[741] Edmond G & Mercer D (2002) (n716) 93.
[742] Reece H "Pedro Juan Cubillo v Commonwealth of Australia: Right Result, Wrong Method" in Reece H *Law and Science: Current Legal Issues* (1998) 95; Edmond G & Mercer D (2002) (n716) 93.
[743] 2013 2 SA 144 (CC).
[744] (1985) 38 SASR 121.
[745] *Birkholz v Gilbertson Pty Ltd* [1985] 38 SASR 121 130.
[746] Edmond G & Mercer D (2002) (n716) 95.
[747] Edmond G & Mercer D (2002) (n716) 95; Sanders J "The Benedictin Litigation: A Case Study in Life Cycles of Mass Torts" (1992) *Hastings Law Journal* 301.

On some occasions there may be a tendency for legal, scientific and medical concerns to be incorporated or fused together. In some contexts such as… case congregations, where the determinations by courts take on a cumulative character, establishing not only legal but scientific precedent, courts may be far more circumspect in acknowledging a gap between legal and scientific assessments of causation. This is a regular feature of high profile mass tort litigation where tremendous human and economic stakes and public interest place considerable pressure on judges to make sure 'they get it right'.

The approach adopted by Edmond & Mercer is one which is informed by an alternative approach to uncertain causation in medical cases where judges strategically construct "images of scientific and legal causation drawing from a variety of epistemic domains, policy considerations and practical contingencies."[748] Their approach eschews an approach based on "simplistic or textbook-style definitions, comparisons and recriminations."[749]

The involvement of expert witnesses in the determination of causation in problematic situations forms an important part of any discourse on the topic of uncertain causation, and the conflicting views of opposing experts may contribute or compound uncertainty. It is therefore important to emphasise that any decision involving the opposing views of experts will always involve difficult decisions on the part of judges or tribunals of fact. Khoury argues as follows in this respect[750]:

[T]he assessment of causation must equally be based on the judge's common sense and on the whole of the evidence, lay and scientific, and that expert opinions on causation are in theory not determinative of the tribunal's conclusions. This principle has led English courts to distinguish between the judicial attitude to controversial medical expert opinion with regard to fault and causation. They have also insisted on judges not resorting to the rules regarding the burden of proof to abdicate their responsibility for resolving a difference in medical opinion with regard to causation. Finally, doctrinal writers have stressed the necessity for the judge to decide for himself which view is to be preferred, since it is his responsibility to decide whether the standard of proof is satisfied.

The Canadian case of *St-Jean v Mercier*[751] confirmed the abovementioned position in the following terms[752]:

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[748] Edmond G & Mercer D (2002) (n716) 120.
[749] Edmond G & Mercer D (2002) (n716) 120.
[750] Khoury L (2006) (n661) 74.
[751] [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17. See Chapter 4 para 4 13 *infra*.
[752] *St-Jean v Mercier* [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17 paras 56 – 57.

A trial judge must reach a legal conclusion based on the scientific evidence and other evidence presented. Not to come to a definitive conclusion on a balance of probabilities amounts to an undue advantage granted to the defendant, who might simply need to come up with a plausible but contrary scientific theory in order to negative the plaintiff's claim. Such an approach is tantamount to an alteration of the standard of proof since the trial judge is no longer looking at which scientific theory is most probable. It is an error of law in the analysis of causation for a trial judge to conclude that he or she does not have the authority to make a final legal determination in the face of competing theories.

There is room for the principle of judicial neutrality in the analysis of fault. It is appropriate for the courts not to take a position when there are competing but recognised medical theories on what is competent professional practice or an appropriate diagnosis… However, it is not appropriate to be similarly neutral on matters of causation and thereby refrain from determining whether causation has been established on the legal standard of a balance of probabilities.

It is submitted that both Khoury's view[753], and the view of the Canadian court in *St-Jean v Mercier*[754] quoted above, are applicable also to the determination of causation in medical negligence matters in South Africa. Where controversies in respect of causation arise in a particular case, Khoury argues that such controversies should be decided by emphasising the whole of the evidence; by assessing the relative value of all the experts' evidence and weighing their credibility; weighing their independence; weighing their experience and qualifications; their objectivity; and the value of their reliance on scientific literature and the facts of the case.[755] In this regard the parallels between Khoury's views and the views of Vally J in *Twine & Another v Naidoo & Another*[756] are remarkable. Ultimately, it remains the prerogative of the presiding officer, having weighed the evidence of the competing experts in light of the facts of the case in question, to decide the matter using the whole of the evidence, "common sense" and policy considerations.[757]

6 3 5 Loss of a Chance

[753] Khoury L (2006) (n661) 74.
[754] [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17 paras 56 – 57.
[755] Khoury L (2006) (n661) 75.
[756] [2018] 1 All SA 297 (GJ).
[757] Khoury L (2006) (n661) 75ff.

The doctrine of the loss of a chance allows plaintiffs to recover as against defendants for the loss of a chance to avoid a consequence, as opposed to claiming in respect of the consequence itself.[758] The application of the doctrine permits a plaintiff to recover in instances where a plaintiff is unable to prove, on a balance of probabilities that the consequence in question would not have resulted in any event.[759] The amount of damages to be awarded to a plaintiff in cases involving the loss of a chance may be difficult to assess. In *De Klerk v ABSA Bank*[760] the Supreme Court of Appeal distinguished the quantification of damages from causation. In the aforementioned case the appellant had claimed damages arising out of an allegedly fraudulent or negligent misrepresentation which had caused him to make a poor investment with the third respondent, who was an assurer. He claimed that, had he invested his funds with the third respondent in another investment, he would have received a far better return on his investment. The Court *a quo* granted absolution from the instance as the appellant had failed to adduce any evidence proving his loss. The appellant himself had not testified that he would have invested his money elsewhere had the money been available to him.[761] The Court re-iterated the requirements for absolution from the instance but emphasised that causation had to be distinguished from quantification of damages as different standards of proof applied.[762] Schutz JA, referring to English cases on damages, summarised the position as follows[763]:

> Transposing these *dicta* to the facts of this case, at the end of the trial De Klerk will have to have proved, on a balance of probability, that he would have invested at least some of the moneys used to make the monthly payments (causation). But if he surmounts that hurdle, then I think that the court may be entitled, in quantifying the amount of his damages to form an estimate of his chances of earning a particular figure. This figure will not have to be proved on a balance of probability but will be a matter of estimation.

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[758] Van den Heever P *The Application of the Doctrine of a Loss of a Chance to Recover in Medical Law* (2007) 1 - 65. The present discussion is not intended to constitute a comprehensive discourse on the doctrine of the loss of a chance - see Van den Heever P (2007) 1 – 65 for a comprehensive comparative exposition of the relevant principles pertaining to the doctrine. See also https://www.hoganlovells.com/publications/ill-take-my-chances (accessed 26 March 2018); Chapter 4 para 3 3 9 *infra*.

[759] Van den Heever P (2007) (n758) 1; Healy J *Medical Negligence: Common Law Perspectives* (1999) 221; Luntz H in Freckelton IR & Mendleson D *Causation in Law and Medicine* (2002) 154; Fagan A "Aquilian Liability for Negligently Caused Pure Economic Loss – Its History and Doctrinal Accommodation" (2014) *South African Law Journal* 288

[760] 2003 4 SA 315 (SCA).

[761] *De Klerk v ABSA Bank* 2003 4 SA 315 (SCA) 316G – 317A.

[762] *De Klerk v ABSA Bank* 2003 4 SA 315 (SCA) 317B.

[763] *De Klerk v ABSA Bank* 2003 4 SA 315 (SCA) par [28].

The judgment emphasises the difference between proof of causation and proof of damages – causation must be proved on a balance of probabilities. The proof of damages, however, might require a lower standard which would be met by estimation of damages. Allocating value to the loss of a chance is not a simple task.

The "doctrine of a loss of a chance" does not presently form part of South African medical law. Van den Heever noted in 2007 that there "are no reported cases of loss of a chance in a clinical negligence context and the position therefore remains uncertain."[764] The doctrine of the loss of a chance attempts to mitigate the unjust results of an "all-or-nothing" result obtained through a strict application of the *conditio sine qua non* theory. Van den Heever argues as follows in respect of the apparent strengths of the doctrine[765]:

> The particular strength of the doctrine lies in the fact that it does not require that the defendant's contribution be the greater cause and that it is constructed to provide a more accurate and equitable valuation of the impact of the defendant's conduct on the plaintiff. It thus promises justice both to the plaintiffs and defendants since more of the former will be entitled to recover damages, although these damages will be reduced to reflect the degree of the defendant's contribution, and the latter will be liable to pay damages only in proximate proportion to their causal contribution to the injury.

Van den Heever advocates the virtues of the doctrine by arguing that the traditional approaches to causation, and the accepted standards of proof such as a preponderance or balance of probabilities, do not "actively encourage scientific or statistical analysis of causation."[766] According to the learned writer, expert witnesses are "permitted to formulate their 'weighty opinions in terms which exploit the multi-shaded minutia of science in the context of proof by a preponderance of probabilities'."[767] The nature of expert evidence and the inexact and instinctive "guesswork" involved in reaching the expert opinions which form the basis of such evidence results in a non-empirical

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[764] Van den Heever P (2007) (n758) 60.
[765] Van den Heever P (2007) (n758) 1 – 2. See also the discussion of the doctrine in chapter 4 para 3 3 9 *infra*; *Hotson v East Berkshire AHA* [1987] 1 AC 750; Luntz H "Loss of Chance in Medical Negligence" (2010) *University of Melbourne Law School Research Series* 14; Stauch MS, Wheat K & Tingle J *Text, Cases and Materials on Medical Law and Ethics* (2015) 317; Khoury L (2006) (n661) 99.
[766] Van den Heever P (2007) (n758) 2.
[767] Van den Heever P (2007) (n758) 2; Healy J (1999) (n759) 229.

approach to causation.[768] The aforementioned approach may be influenced, or even determined by judges' impressions of demeanour and credibility, as opposed to the empirical and more scientific results provided by statistics.[769] He argues as follows[770]:

> By contrast statistics are derived systematically from previous experience of similar cases and provide a much more accurate probability weighing for each potential cause. The loss of chance model seeks to minimise the uncertainty that the traditional model ultimately accentuates because the use of statistics illustrates over a range of similar cases how frequently the unknown conditions appear. Statistics should serve to focus the court's attention more efficiently and more accurately on culpability and contribution to risk creation and injury.

Stauch supports the use of the doctrine, arguing that statistics which are empirically compiled provide a more acceptable basis for determining causation as opposed to the established approaches to causation.[771] Stauch further advocates the use of statistical evidence in medical negligence cases where such statistical evidence is available.[772] Healy argues that the traditional doctrinal and evidentiary approaches to causation are lacking in transparency and clarity.[773] The traditional approaches to evidence and causation, according to Healy, do not actively encourage empirical analysis in the determination of causation.[774]

Conversely, statistical evidence may be useful, and, it is submitted, provide more empirically accurate statistical evidence in respect of a series of events. Statistical evidence is most certainly useful in multiple-cause scenarios. Such evidence may prove that chemical X caused cancer in four hundred and ninety-nine cases, but that is not to say, it is submitted, that it caused cancer in the five hundredth case. The following example is instructive in this regard[775]:

> A person is knocked down by a taxi whose colour is not observed. The incident occurs in a town where there are only two taxi firms: one has three blue cabs, the other has one yellow cab. The example is

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[768] Van den Heever P (2007) (n758) 2.
[769] Van den Heever P (2007) (n758) 2.
[770] Van den Heever P (2007) (n758) 2 – 3.
[771] Stauch MS "Causation, Risk and Loss of Chance in Medical Negligence" (1997) *Oxford Journal of Legal Studies* 205 205ff.
[772] Stauch MS (1997) (n771) 224 – 225.
[773] Healy J (1999) (n759) 221ff.
[774] Healy J (1999) (n759) 221ff.
[775] *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10 (SC) para [95]. See also Chapter 4 para 3 3 4 7 *infra*.

supposed to show that it would be inappropriate to infer from those facts alone that it was more probable than not that the accident was caused by the negligence of the blue cab firm (though there is a 75% statistical probability of this).

The example provided above may be over-simplistic if compared with the complexities involved in medical negligence cases. It is submitted, however, that the example illustrates the danger of reliance *solely* on statistical evidence in determining causation.[776]

The Constitutional Court was presented with the opportunity to consider the impact of epidemiological evidence in *Lee v Minister of Correctional Service*s[777] and Cameron J remarked as follows in respect of the epidemiological evidence presented in the aforementioned case in respect of Tuberculosis infections[778]:

> What the parties' agreed statement of facts tells us about the epidemiology of TB underscores how inapt the blunt application of the common law test is. TB is a 'formidable infectious disease' that constitutes a serious public health problem, and South Africa 'has one of the highest incidence rates of tuberculosis in the world' – which means that the rate of transmission in this country is one of the highest anywhere. And prisons are a 'favourable environment for contracting tuberculosis'. The authorities at Pollsmoor were 'pertinently aware of the risk to prisoners of contracting tuberculosis' – yet they failed to observe their own standing orders.

6 3 6 Standard of Proof

6 3 6 1 Medical Negligence Cases

The principles pertaining to proof in medical negligence cases have been mentioned elsewhere in this dissertation.[779] A plaintiff must prove his or her case in a medical negligence action based in delict or contract on a preponderance (or balance) of

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[776] See Chapter 5 *infra*.
[777] 2013 2 SA 144 (CC). It did not, with respect, fully utilise that opportunity to examine the viability of formally recognising the doctrine in South African law.
[778] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [103]. Cameron J's remarks as set out at para [103] of the judgment constitute the only mention of statistical evidence in the entire judgment. It is regrettable that the Constitutional Court did not grasp the opportunity in the aforementioned case to comprehensively examine the value of statistical evidence in multiple uncertain causation situations.
[779] Paras 6 2 1, 6 3 2 *supra*.

probabilities.[780] It is submitted that the fact that proving causation in medical negligence cases may be difficult should not be seen as an incentive to lower the standard of proof. It is submitted that difficulty in proving causation in medical negligence cases should not be equated to *impossibility* in proving causation.[781]

6 3 6 2 Disciplinary Enquiries

Disciplinary enquiries and the disciplinary committee established to hear complainst against medical practitioners in terms of the Health Professions Act 56 of 1974[782] are, for all practical purposes, courts.[783] Strauss states that "[i]ts procedure is akin to that of a court of law, although it is not quite as formal and the rules of admissibility of evidence are not applied quite as rigidly."[784] In disciplinary inquiries of the Health Professions Council of South Africa[785] the onus must be discharged by the pro-forma complainant on a balance of probabilities.[786] In *De la Rouviere v SA Medical and Dental Council*[787] Van Heerden J stated the following in respect of the application of the rules of evidence by a disciplinary tribunal before the Health Professions Council of South Africa (formerly the SA Medical and Dental Council)[788]:

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[780] *Minister of Police v Skosana* 1977 1 SA 31 (A); *Muller v Mutual and Federal Insurance Co Ltd* 1994 2 SA 425 (C); *Smit v Abrahams* 1994 4 SA 1 (A).

[781] See Chapter 5 para 4 2 1 1ff *infra*.

[782] See also Regulations Relating to the Conduct of Inquiries Into Alleged Unprofessional Conduct Under the Health Professions Act, 1974 (Published under Government Notice R102 in *Government Gazette* 31859 of 6 February 2009) Regulation 9 (Procedure at Inquiry); Regulation 11 (Appeal); *Roux v Health Professions Council of South Africa and Another* [2011] ZASCA 135 (21 September 2011) paras [15] – [20].

[783] Strauss SA (1991) (n560) 373. See also Taitz J "The Disciplinary Powers of the South African Medical and Dental Council" (1988) *Acta Juridica* 56; Carstens PA & Pearmain D (2007) (n1) 855 – 856; *McLoughlin v South African Medical and Dental Council* 1947 2 SA 377 (W); *SA Medical and Dental Council v Lipron* 1949 3 SA 277 (A); *Sem v South African Medical and Dental Council* 1948 3 SA 571 (T); *Tucker v SA Medical and Dental Council* 1980 2 SA 207 (T); *Pretorius v SA Geneeskundige en Tandheelkundige Raad* 1980 2 SA 354 (T); *Veriava v President, SA Medical Council and Dental Council* 1985 2 SA 293 (T); *Thuthekana v Health Professions Council of South Africa* [2004] 4 All SA 493 (T); *VRM v Health Professions Council of South Africa; De Beer v Health Professions Council of South Africa* 2005 1 SA 332 (T).

[784] Strauss SA (1991) (n560) 373; *Groenewald v SA Medical and Dental Council* 1934 TPD 404; *McLoughlin v South African Medical and Dental Council* 1947 2 SA 377 (W); *SA Medical and Dental Council v Lipron* 1949 3 SA 277 (A); *Helgesen v South African Medical and Dental Council* 1962 1 SA 800 (N); *Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad v Kruger* 1972 3 SA 318 (A).

[785] Established in terms of section 2 of the Health Professions Act 56 of 1974.

[786] *De la Rouviere v SA Medical and Dental Council* 1977 1 SA 85 (N) 104B – E; *HPCSA v Prof T Noakes* page 3803 line 5 (reported at http://www.thenoakesfoundation.org/wp-content/uploads/2017/04/HPCSA-Prof-T-Noakes-Vol-25-2017-04-21-Edited-1.doc) (accessed on 30 April 2018);

[787] 1977 1 SA 85 (N) 98 – 99.

[788] *De la Rouviere v SA Medical and Dental Council* 1977 1 SA 85 (N) 99E – G (quoting from *McLoughlin v South African Medical and Dental Council* 1947 2 SA 377 (W) 395).

In *McLoughlin v South African Medical and Dental Council* Ramsbottom J expressed the view that the extent to which a domestic or private tribunal was to be held bound by the rules of procedure and evidence would depend on the nature of the tribunal and the rules, if any, which had been laid down for its procedure.

In *McLoughlin v South African Medical and Dental Council*[789] it was held that[790]:

The Council and the disciplinary committee are bodies of a very different kind. They are entrusted with the most important duties; they have the power to compel the attendance of witnesses; evidence is given on oath and any person who gives false evidence on oath before the Council or the committee or who refuses to answer commits an offence; the parties have the right to appear by counsel and witnesses are examined and cross-examined; a legal assessor may be appointed 'to advise on matters of law procedure and evidence' (sec. 42(4)). *In my opinion, a body of this kind should be held much more strictly to the rules of procedure and evidence than a body such as described by* Maugham J *in the passage I have quoted*. And in the case of the South African Medical Council, Parliament has not left it to the Council to apply the principles of 'natural justice' but has provided for precise rules of procedure.

It is submitted that any disciplinary tribunal which is faced with an inquiry which involves a question of causation is, in principle, bound not only by the rules and procedures prescribed in the Regulations Relating to the Conduct of Inquiries into Alleged Unprofessional Conduct Under the Health Professions Act 1974[791] but also be bound to the established legal principles set out in this chapter. Legal assessors are frequently appointed as members of a board of inquiry before the Health Professions Council of South Africa and it is submitted that such legal assessors should be properly acquainted with the basic principles pertaining to causation both in a civil law and criminal law context. It is submitted that the Health Professions Council of South Africa's disciplinary tribunals are, in view of the decisions in *Freedom Under Law v NDPP and Others*[792] and *National Director of Public Prosecutions and Others v Freedom Under Law*[793], not entitled to adjudicate on causation for the purposes of criminal or civil liability.

[789] 1947 2 SA 377 (W).
[790] *McLoughlin v South African Medical and Dental Council* 1947 2 SA 377 (W) 99 E – G.
[791] (Published under Government Notice R102 in *Government Gazette* 31859 of 6 February 2009).
[792] 2014 1 SA 254 (GNP).
[793] 2014 4 SA 298 (SCA).

6 3 6 3 Determination of Causation by Road Accident Fund Appeal Tribunal

In *Road Accident Fund Appeal Tribunal & Others v Gouws*[794], the Supreme Court of Appeal considered the question of whether causation was to be determined by the Road Accident Fund Appeal Tribunal for purposes of classification of a plaintiff's injury as "serious" or "non-serious". The appeal further concerned the powers of the Road Accident Fund Appeal Tribunal and whether it is within the aforementioned Tribunal's statutory remit to finally determine the nexus between the injuries allegedly sustained by the plaintiff on which a claim for compensation is based in terms of the Road Accident Fund Act 56 of 1996. The appellants, which included The Road Accident Appeal Tribunal, The Health Professions Council of South Africa (HPCSA) and the four members who, at its instance, served on the Tribunal, contended that it is indeed within the Tribunal's statutory power to make a determination of causation in compensation cases under the Road Accident Fund Act 56 of 1996. The first respondent, Mr Gouws, who was a claimant for purposes of s 17 of the Road Accident Fund Act 56 of 1996 contended otherwise. The court *a quo* found in favour of Mr Gouws. Mr Gouws allegedly sustained injuries as a result of being struck by a motor vehicle whilst walking in a parking area and being flung over two vehicles in the vicinity. The collision was said to have occurred on 24 July 2010. On 16 August 2012 Mr Gouws lodged a claim for compensation with The Road Accident Fund (the Fund), a statutory insurer, under section 17 of the Act. In terms of section 17(1), the Fund, inter alia, is obliged:

> To compensate any person (the third party) for any loss or damage which the third party has suffered as a result of any bodily injury . . . caused by or arising from the driving of a motor vehicle by any person at any place within the Republic, if the injury . . . is due to the negligence or other wrongful act of the

[794] [2017] ZASCA 188; [2018] 1 All SA 701 (SCA) (13 December 2017). Case summary at http://www.saflii.org.za/za/cases/ZASCA/2017/188media.doc (Accessed 1 May 2018).

driver or of the owner of the motor vehicle or of his or her employee in the performance of the employee's duties as employee.

The proviso in section 17(1) reads as follows:

Provided that the obligation of the Fund to compensate a third party for non-pecuniary loss shall be limited to compensation for *a serious injury* as contemplated in subsection (1A) and shall be paid by way of a lump sum.

Section 17(1A) reads as follows:

(a) Assessment of a serious injury shall be based on a prescribed method adopted after consultation with medical service providers and shall be reasonable in ensuring that injuries are assessed in relation to the circumstances of the third party.

(b) The assessment shall be carried out by a medical practitioner registered as such under the Health Professions Act 1974 (Act 56 of 1974).

Three methods of determining what constitutes a serious injury for purposes of the Act presently exist. They are identified in Regulation 3 of the Road Accident Fund Regulations (the Regulations). Firstly, the Minister of Transport may publish, after consultation with the Minister of Health, a list of injuries which are for purposes of section 17 of the Act not to be regarded as serious injuries. No injury shall be assessed as serious if that injury meets the description of an injury which appears on the list. Secondly, if the injury resulted in 30 percent or more Impairment of the 'Whole Person as provided in the AMA Guides', the injury shall be assessed as serious. Thirdly, an injury which does not result in 30 percent or more Impairment of the Whole Person may only be assessed as serious if that injury resulted in a serious long-term impairment or loss of a body function, constituted permanent serious disfigurement, resulted in severe long-term mental or severe long-term behavioural disturbance or disorder or resulted in loss of a foetus. Prior to the submission of Mr Gouws' claim, he underwent an assessment by a medical practitioner as required by the Regulations. In her assessment, Dr de Graad concluded that Mr Gouws required a shoulder replacement on the left and an arthrodesis of the left thumb. At the time of his accident Mr Gouws was a shift boss at a mine. Dr de Graad believed that the injuries restricted him from doing his normal work. She considered Mr Gouws to have suffered serious

long-term impairment or loss of a body function. On 18 October 2012 Mr Gouws' claim for compensation in relation to general damages was rejected by the Fund on the erroneous basis that Dr de Graad had not assessed the injury as being serious. In the event of a dispute arising concerning the assessment by a medical practitioner, the Regulations provide for an appeal process to the Tribunal consisting of three independent medical practitioners appointed by the Registrar of the second appellant, the Health Professions Council of South Africa (HPCSA). Mr Gouws' appeal was adjudicated at a formal level in accordance with the Regulations. On 26 August 2014, Mr Gouws was informed of the outcome of his appeal. The Tribunal upheld the Fund's rejection of the serious assessment injury report. It did so on the basis that it could not find a link between Mr Gouws' serious injury and the driving of a motor vehicle. It noted that Mr Gouws was a karate instructor.

In the court *a quo*, it was held that there was nothing in the language of the legislation concerned which empowered the Tribunal to determine whether the injuries assessed by it were caused by or arose from the driving of a motor vehicle. It therefore reviewed and set aside the decision of the Tribunal and it remitted the matter to the Tribunal for reconsideration by a different panel to be constituted by the Registrar of the HPCSA.

Before the Supreme Court of Appeal, the Tribunal accepted that there was no express provision in the Act or the Regulations that conferred on it the power to determine finally whether the injuries submitted to it for assessment were caused by or arose out of the driving of a motor vehicle. Counsel on behalf of the Tribunal persisted with the position adopted in the court a quo, namely that it was implicit in the legislation that the Tribunal had that power. It was submitted on behalf of the Tribunal that the scheme of the Act and the Regulations was to ensure that deserving and qualifying claims are met. This, so it was argued, could only be achieved if the cause and the extent of the injury or injuries involved were determined. Section 17 of the Act, so it was contended, makes it clear that the injury for which a claimant is to be compensated must be caused by or arise from the driving of a motor vehicle.

The Supreme Court of Appeal rejected the submissions on behalf of the Tribunal. The power contended for was far reaching. It was oppressive to claimants and denied them access to courts on an issue traditionally reserved for adjudication by them. Such

dramatic change had to be expressly catered for. Furthermore, the power given to the Tribunal was to decide the question of the seriousness of the injury and was not of a broad discretionary kind, allowing for the power contended for to be implied. A finding against the suggested power does not enervate the provisions of the Act. The Fund maintains the right to challenge or concede causation. The Tribunal does not have the power to decide finally the question of causation. The appeal was dismissed with costs. The Supreme Court of Appeal affirmed the findings of the court *a quo*, particularly in light of a concession by counsel on behalf of the HPCSA that the determination of legal causation is reserved for the courts.[795]

6 3 6 4 Inquests

In proceedings before an Inquest Court, the presiding magistrate must reach a finding on a preponderance of probabilities.[796] Carstens & Pearmain emphasise the fact that[797]:

> The proof of medical negligence is important in the context of judicial inquests, specifically where a patient died due to unnatural causes (e.g. anaesthetic death) and the possible negligence of the attending physician has to be investigated… The judicial inquest is often the 'front runner' of a later criminal prosecution on a charge of culpable homicide against a physician. It is to be noted that a judicial inquest is not a criminal trial but an inquisitorial inquiry aimed at transparency for the administration of justice and to install confidence.

The learned writers further state that[798]:

> At the inquest conducted by a magistrate or judge, the presiding officer will have before him/her the *post mortem* report and other documentation relevant to the death of the patient. Normally the pathologist/doctor who conducted the *post mortem* examination will be subpoenaed to testify at the inquest. In terms of section 16(2) of the Inquest Act the presiding officer has the duty to make the following findings: a) the identity of the deceased; b) the cause or likely cause of death; c) the date of

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[795] [2017] ZASCA 188; [2018] 1 All SA 701 (SCA) (13 December 2017) para [31].
[796] Carstens PA & Pearmain D (2007) (n1) 855, 855 fn 874. See also Section 16(2) of the Inquests Act 58 of 1959; *Claassens v Landdros Bloemfontein* 1964 4 SA 4 (O); *In Re Goniwe And Others (Inquest)* 1994 3 SA 877 (SE) 880B.
[797] Carstens PA & Pearmain D (2007) (n1) 855, 855 fn 874; *Timol v Magistrate Johannesburg* 1972 2 SA 281 (T) 278H – 288H; *Wessels v Additional Magistrate Johannesburg* 1983 1 SA 530 (T) 532E – G; *S v Ramaligela* 1983 2 SA 424 (V) 430D.
[798] Carstens PA & Pearmain D (2007) (n1) 856; *Freedom Under Law v National Director of Public Prosecutions and Others* (26912/12) [2013] ZAGPPHC 271; [2013] 4 All SA 657 (GNP); 2014 (1) SA 254 (GNP); 2014 (1) SACR 111 (GNP) (23 September 2013).

death; d) whether the death has been caused by an act or omission on the part of someone that *prima facie* constitutes an offence – the only relevant offence here in the context of medical negligence is culpable homicide. At the end of the inquest an assessment has to be made whether on the evidence as a whole, all the elements for this crime, on a preponderance of probabilities are present.

A *"prima facie*" case will exist if the allegations, as supported by statements and available real documentary evidence are of such a nature that, if proved in a court of law by the prosecution on the basis of admissible evidence, the court should convict.[799] The findings of the presiding officer are of great importance seen in the light of a possible prosection of a medical practitioner, and the *post mortem* examination and the pathologist's findings are crucial.[800] The main objects of an inquest are therefore to determine the cause of death, the circumstances surrounding the death, whether any person was responsible for such death, and whether the death can be attributed to the commission of any offence.[801] In *Marais NO v Tiley*[802], the court emphasised the important underlying purpose of an inquest[803]:

The underlying purpose of an inquest is to promote public confidence and satisfaction; to reassure the public that all deaths from unnatural causes will receive proper attention and investigation so that, where necessary, appropriate measures can be taken to prevent similar occurrences, and so that persons responsible for such deaths may, as far as possible, be brought to justice.

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[799] *Freedom Under Law v National Director of Public Prosecutions and Others* (26912/12) [2013] ZAGPPHC 271; [2013] 4 All SA 657 (GNP); 2014 (1) SA 254 (GNP); 2014 (1) SACR 111 (GNP) (23 September 2013) para [77]; *In Re Goniwe and Others (Inquest)* 1994 3 SA 877 (SE) 878I – 879A; Du Toit EJ *Commentary on the Criminal Procedure Act* (2004) 1 – 4T-7

[800] Carstens PA & Pearmain D (2007) (n1) 856; Schwär TG, Loubser JD & Olivier JA (1988) (n672) 412; Strauss SA (1991) (n560) 436ff; Saayman G & Van Oosten FFW "Forensic Medicine in South Africa – Time for a Change?" (1994) *Med & Law* 129; Muller K & Saayman G "Forensic Science in Medicine: What a Doctor Should Know" (2003) *South African Family Practice* 41; *De'Ath* (*substituted by Tiley) v Additional Magistrate, Cape Town* 1988 4 SA 763 (C); 1990 2 SA 899 (A); *Padi en 'n Ander v Botha NO en Andere* 1996 3 SA 732 (W): "Dit is my respekvolle mening dat Stegmann R se vertolking van die doel van die prima facie vereiste en sy opvatting dat art 16(2)(d) sekerheid bo redelike twyfel verg, foutief is. In hierdie opsig deel ek Zietsman RP se bedenkinge en volstaan met respek by sy beskouing. Wat die toepassing van die prima facie-maatstaf betref, onderskryf ek die benadering van Levy R dat 'n geregtelike beampte sy bevinding nie met verwysing na die geloofwaardigheid en aanvaarbaarheid wat die getuienis voor hom in 'n strafverhoor kan hê, moet bepaal nie. Soos Levy R noem, kan 'n geregtelike doodsondersoek die voorspel tot 'n strafvervolging wees, maar hoef dit nie noodwendig daarop uit te loop nie. Dit is 'n onafhanklike, opsigselfstaande proses wat as sodanig van gewigtige belang is. Die regterlike beampte moet sy bevindinge op sy eie indrukke en insigte vestig en sy bevindinge is op volvoering van sy eie taak gerig. Hy is nie geroepe om hom in die skoene van die Prokureur-generaal of die strafhof in te beeld nie. Oor die betekenis van 'n geregtelike doodsondersoek kan op dicta wat op 878 van die Goniwe-uitspraak aangehaal word, gelet word."

[801] *Claassens en 'n Ander v Landdros, Bloemfontein en 'n Ander* 1964 4 SA 4 (O) 10D-F; *Timol and Another v Magistrate, Johannesburg and Another* 1972 2 SA 281 (T) 287H - 288A; *Marais NO v Tiley* 1990 2 SA 899 (A); *Van Vuuren v Esterhuizen NO en 'n Ander* 1996 4 SA 603 (A).

[802] 1990 2 SA 899(A) 901E-F, 902A – B.

[803] *Marais NO v Tiley* 1990 2 SA 899 (A) 901F – G.

In *Van Vuuren v Esterhuizen NO en 'n Ander*[804] Howie JA held as follows in respect of the similarities and differences between inquests and criminal proceedings:

Weliswaar verskil 'n doodsondersoek en 'n strafgeding voortvloeiende uit dieselfde onnatuurlike sterfgeval daarin dat die vraag by eersgenoemde is, onder andere, of strafregtelike aanspreeklikheid aan die kant van 'n persoon, bekend of onbekend, prima facie bevind kan word terwyl by laasgenoemde die vraag is of strafregtelike aanspreeklikheid aan die kant van die betrokke beskuldigde buite redelike twyfel bevind kan word. Maar in die lig van die pasaangehaalde dictum in *Marais NO v Tiley* is dit duidelik dat wat beide vorms van proses in gemeen het, is 'n openbare ondersoek na die omstandighede van 'n dood, wat die voorlegging en opweging van getuienis behels, welke ondersoek dan op 'n bevinding uitloop (ongeag of dit 'n positiewe of 'n negatiewe is) met betrekking tot sodanige omstandighede en die bestaan al dan nie van strafregtelike aanspreeklikheid. Gevolglik is dit nie net verstaanbaar dat art 21(2) van die Wet bepaal dat die twee nie tegelykertyd moet plaasvind nie, maar in die lig van die vereisde ondersoek en bevinding verg 'n behoorlike uitleg van 'strafgeding' en 'criminal proceedings' in arts 5 en 21 van die Wet na my mening dat die beoogde strafprosedure drie eienskappe in besonder moet hê. Hulle is: 'n ondersoek na die feite, 'n opweging van die voorgelegde getuienis en 'n bevinding met betrekking tot strafregtelike aanspreeklikheid. Klaarblyklik het 'n strafverhoor daardie eienskappe maar verrigtinge ingevolge art 119 van die Strafproseswet nie. Die prosedure ingevolge art 119 is nie deel van die strafverhoor self nie, maar 'n voorverhoorproses*: S v Singh* 1990 (1) SA 123 (A) te 130E-F; *S v Mabaso and Another* 1990 (3) SA 185 (A) te 202D-E. Dit behels geen voorlegging van getuienis of ondersoek na die feite nie. By afsluiting kan die beskuldigde nie op 'n uitspraak aandring nie: *S v Hendrix and Others* 1979 (3) SA 816 (D) te 818C-F. Die proses loop dus op geen bevinding uit nie: Hiemstra Suid-Afrikaanse Strafproses 5de uitg te 330. Bygevolg beteken 'strafgeding' en 'criminal proceedings' in die Wet 'n strafverhoor en was die verrigtinge wat die onderhawige doodsondersoek voorafgegaan het dus nie 'n strafgeding nie. Instelling van die doods-ondersoek is dus deur niks in art 5 belet nie.

For the purposes of section 16 of the Inquests Act 58 of 1959 the findings of a magistrate or judge are not decisive. In *Freedom Under Law v NDPP and Others*[805] Murphy J commented as follows in respect of the nature of evidence presented at an inquest in the context of section 16 of the aforementioned Act[806]:

The magistrate's conclusion is anyhow not decisive. Guilt or innocence is a matter for the trial court tasked with the responsibility of determining culpability. Section 16(2) of the Inquests Act only requires a magistrate conducting an inquest to determine whether the death was brought about by any act or

[804] 1996 4 SA 603 (A) 613 – 614.
[805] 2014 1 SA 254 (GNP).
[806] *Freedom Under Law v National Director of Public Prosecutions and Others* (26912/12) [2013] ZAGPPHC 271; [2013] 4 All SA 657 (GNP); 2014 (1) SA 254 (GNP) para [89].

omission that amounts *prima facie* to an offence on the part of any person and, insofar as this is possible, a finding as to whom the responsible offenders might be. The DPP is besides not bound by the findings of the inquest.

In *National Director of Public Prosecutions and Others v Freedom Under Law*[807] Brand JA confirmed the view of Murphy J referred to above.[808] It is submitted that, for the purposes of conducting an inquest, the established principles in respect of causation which have been set out in this chapter *supra* may be considered by a magistrate or a judge. The evidence provided in terms of the inquest and the finding made in respect of causation will constitute a *prima facie* finding in terms of the generic terms of section 16(2) of the Inquests Act 58 of 1959. Any final finding in respect of causation for the purposes of the establishment of liability in terms of the law of delict or the criminal law must, it is submitted in the light of the judgment in *National Director of Public Prosecutions and Others v Freedom Under Law*[809], ultimately be made by a court. It is submitted that "causation" as contemplated in section 16(2) of the Inquests Act 58 of 1959 is therefore a much broader concept than causation for the purposes of establishing criminal or civil liability.

6 3 7 *Res Ipsa Loquitur*

The maxim *res ipsa loquitur* and its use in negligence cases received the attention of the Supreme Court of Appeal in *Goliath v MEC for Health, Eastern Cape*.[810] A surgical swab was left in the plaintiff's abdomen during a hysterectomy performed at a provincial hospital. It resulted in infection and further surgery to remove the swab. The plaintiff sued in delict, alleging negligence on the part of the doctors and nursing staff who performed the hysterectomy. The High Court dismissed the claim, and on appeal to the Supreme Court of Appeal, it was held that the maxim *res ipsa loquitur* was merely a convenient phrase used to describe the proof of facts sufficient to support an inference of negligence and thereby to establish a *prima facie* case against a defendant. It was not a "magic formula", and it involved no change in the onus on a

[807] 2014 4 SA 298 (SCA).
[808] *National Director of Public Prosecutions and Others v Freedom Under Law* 2014 4 SA 298 (SCA) para [14]: "It was not for the magistrate to determine Mdluli's guilt on a murder charge, either beyond reasonable doubt or a balance of probabilities."
[809] 2014 4 SA 298 (SCA).
[810] 2015 2 SA 97 (SCA).

plaintiff or suspension of common sense. The Supreme Court of Appeal indicated that the time might have come to dispense with the *res ipsa loquitur* maxim from the legal vocabulary.[811]

6 3 8 Multiple Causes: Divisibility and Indivisibility of Harm

According to Van der Walt & Midgley, multiple causation "may occur where two or more people[812] jointly and contemporaneously contribute to the harm, for example in collision cases or where a person causes harm, and thereafter someone compounds the loss; or where the harm is caused partly by a person and partly by natural forces, either contemporaneously or successively."[813] The ordinary flexible test for legal causation will apply in such instances, but courts may also use rules relating to the divisibility of harm, and which rules have evolved as a matter of policy.[814] Where harm was caused partly by natural forces and partly by a single defendant[815], or two or more persons caused the harm contemporaneously[816], the harm is presumed to be indivisible.[817] The plaintiff is obliged only to prove a material factual link between the conduct of the defendant and the harm suffered.[818] The onus is then on the defendant to prove that the harm was divisible and further to prove the extent of his or her liability.[819]

In factual scenarios involving successive conduct, where the events or the conduct of the persons involved were not contemporaneous, no presumption of indivisibility arises, and the plaintiff is compelled to establish the exact extent of the defendant's liability.[820] In such cases, the defendant should be held liable only for the harm which

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[811] *Goliath v MEC for Health, Eastern Cape* 2015 2 SA 97 (SCA) 97G – J. See also Carstens PA & Pearmain D (2007) (n1) 857 – 860.
[812] Van der Walt JC & Midgley JR (2005) (n1) 210 fn 2: "It does not matter if they are plaintiff and defendant, or joint wrongdoers."
[813] Boberg PQR (1984) (n3) 404 – 406; Van der Walt JC & Midgley JR (2005) (n1) 210; Rabie PJ & Faris J (2005) (n1) 250.
[814] Van der Walt JC & Midgley JR (2005) (n1) 210; Rabie PJ & Faris J (2005) (n1) 239.
[815] Van der Walt JC & Midgley JR (2005) (n1) 210; Rabie PJ & Faris J (2005) (n1) *Kakamas Bestuursraad v Louw* 1960 2 SA 202 (A) 222; *Humphreys NO v Barnes* 2004 2 SA 557 (C) paras [16] – [17].
[816] Van der Walt JC & Midgley JR (2005) (n1) 210; *Prinsloo v Luipaardsvlei Estates & GM Co Ltd* 1933 WLD 6 23 – 24.
[817] Van der Walt JC & Midgley JR (2005) (n1) 210.
[818] Rabie PJ & Faris J (2005) (n1) 250; Van der Walt JC & Midgley JR (2005) (n1) 211.
[819] Rabie PJ & Faris J (2005) (n1) 250; Van der Walt JC & Midgley JR (2005) (n1) 211.
[820] Rabie PJ & Faris J (2005) (n1) 250; Van der Walt JC & Midgley JR (2005) (n1) 211; *Bekker v Constantia Insurance Co Ltd* (1983) 1 PH J13 (E); *Minister of Communications & Public Works v Renown Food Products* 1988 4 SA 151 (C) 153 – 154.

has been caused by him or her personally.[821] The Supreme Court of Appeal, has, however, adopted a different approach in such matters in the case of *Minister of Safety & Security v Rudman*[822] stating that it would "do the best it can in such circumstances."[823] The Supreme Court of Appeal decided the extent of the defendant's portion of harm, and, whether the parties involved could be regarded as joint wrongdoers for purposes of the Apportionment of Damages Act 34 of 1956.[824] Neething discussed the judgment as follows[825]:

> Voorts word beslis dat B en Bo ook nie as mededaders beskou kan word nie omdat hulle nie dieselfde skade – soos deur die [Wet] op Verdeling van Skadevergoeding 34 van 1956 artikel 2(1) vereis word… veroorsaak het nie. Dieselfde skade het volgens die hof betrekking op al die skade wat die eiser gely het. Waar die eiser se skade dus deels deur Bo alleen en deels deur B en Bo saam veroorsaak is (omdat Bo ook aanspreeklik is vir die skade wat na die onderbreking van die KPR deur B ingetree het – B se ingryping word dus nie as 'n *novus actus interveniens* gesien nie… Hulle is dus afsonderlike daders wat elk in beginsel volgens gewone deliksbeginsels slegs aanspreeklik is vir die besondere skade wat hulle veroorsaak het.

If the plaintiff's total loss is "divisible", in that portions of it can be attributed to particular causes, each cause is, according to Boberg "(if legally responsible) liable only for that portion of the harm which it caused."[826] If, on the other hand, the harm is "indivisible", the causes "(if legally responsible) incur joint and several liability for the whole harm.[827] Then, and in such an event, any cause which seeks to escape liability for the whole harm bears the onus of proving that it caused only a part thereof.[828] In *B and Another v Moore and Another*[829] the Court held as follows in respect of negligent omissions[830]:

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[821] Rabie PJ & Faris J (2005) (n1) 250; Van der Walt JC & Midgley JR (2005) (n1) 211; *Minister of Safety & Security v Rudman* 2005 2 SA 16 (SCA).
[822] 2005 2 SA 16 (SCA) para [91].
[823] 2005 2 SA 16 (SCA) para [91]. See also *Life Healthcare (Pty) Ltd v Suliman* (529/17) [2018] ZASCA 118 (20 September 2018) para [18].
[824] Section 2(1) Apportionment of Damages Act 34 of 1956; Neethling J (2006) (n306) 377 – 378.
[825] Neethling J (2006) (n357) 378.
[826] Boberg PQR "Multiple Causation, Contributory Negligence, Mitigation of Damages, and the Relevance of These to the Failure to Wear a Seat Belt*"* (1980) *SALJ* 204, 206.
[827] Boberg PQR (1980) (n826) 206.
[828] Boberg PQR (1980) (n826) 206.
[829] [2017] 3 All SA 799 (WCC).
[830] *B and Another v Moore and Another* [2017] 3 All SA 799 (WCC) para [69] [emphasis added]. See also *Humphrys v Barnes* 2004 2 SA 577 (C) 581.

It is particularly apt when the harm that has ensued is closely connected to an omission of a defendant that carries the duty to prevent the harm. Regard being had to all the facts, the question is whether the harm would nevertheless have ensued, even if the omission had not occurred… It is also settled that a plaintiff can hold a defendant liable whose negligence has materially contributed to a totality of loss resulting partly also from the acts of other persons or from the forces of nature, even though no precise allocation of portions of the loss to the contributing factors can be made. It is not for the plaintiffs to prove which part of the loss the defendant caused. *The harm is presumed to be indivisible, and the plaintiff need prove only that the defendant contributed materially to the totality of it. The onus is then on the defendant to rebut the presumption by proving that the harm is in fact divisible and that he did not cause all of it (which he does by proving which part he did cause*).

Where contributory negligence is involved, the presumption of indivisibility of harm again arises in order to assist the defendant and all of the plaintiff's damages will be taken into account for purposes of reducing the defendant's liability, unless the plaintiff can prove that the harm can be divided and the plaintiff's (contributory) fault related to only part of the harm.[831]

7 SUMMARY AND CONCLUSION

It is submitted that the South African law of delict, (and medical law) after *Lee v Minister of Correctional Services*[832], requires, in determining causation, that the two-stage approach to causation should be followed.[833] It may be necessary to consider the element of factual causation at the outset of, or during the contemplation of, a trial.[834] Factual causation should be determined by utilising the *conditio sine qua non* theory.[835] In most instances the application of the *conditio sine qua non* theory will not prove problematic, and factual causation may be established. In instances where the *conditio sine qua non* theory proves problematic due to multiple or uncertain causes, or where the *conditio sine qua non* theory is not applicable, resort must be made to "common sense" standards.[836] In exceptional cases, where the principles of the *conditio sine qua non* theory does not provide a solution, and if knowledge and

[831] Rabie PJ & Faris J (2005) (n1) 250; Van der Walt JC & Midgley JR (2005) (n1) 211. See also the "seat belt" cases discussed by Boberg PQR (1980) (n826) 204; Visser PJ "Bydraende Nalatigheid en Veiligheidsgordels" (1982) *THRHR* 62ff; Boberg PQR (1984) (n3) 418 – 439.
[832] 2013 2 SA 144 (CC).
[833] Para 1 3 *supra*.
[834] *First National Bank of SA Ltd v Duvenhage* 2006 5 SA 369 (SCA).
[835] Chapter 3 paras 2 – 3 *supra*.
[836] Chapter 3 para 2 1 *supra*.

experience indicate a factual nexus between an act and a particular consequence, such an act should be considered to be a "cause-in-fact."[837] The plaintiff must establish that it is more likely than not that, but for the defendant's wrongful and negligent conduct, the plaintiff's harm would not have ensued. The plaintiff is not required to establish this causal link with certainty but must do so on a preponderance of probabilities.[838] Where the traditional *conditio sine qua non* theory is adequate to establish factual causation, it may not be necessary to resort to the "flexible" test for factual causation described in *Lee v Minister of Correctional Services*[839]. Where the traditional *conditio sine qua non* theory is not adequate to establish factual causation, or where the strict application of the traditional *conditio sine qua non* theory will lead to an injustice, resort may be made to the "flexible" test for factual causation as set out in *Lee v Minister of Correctional Services*.[840] The aspects above and their implications for medical law in South Africa will be discussed in more detail *infra*.[841]

It is submitted that the principles set out in this chapter *supra* will find application in any enquiry into causation in medical law cases in South Africa. In situations where factual causation is to be determined, and the *conditio sine qua non* theory cannot provide suitable results, and until the Constitutional Court provides clarity in respect thereof, the "flexible" test for factual causation as set out in *Lee v Minister of Correctional Services*[842] will find application. If such "flexible" test for factual causation resolves the difficulty, the investigation will proceed to the test for legal causation, which would act as a limiting device in respect of liability. The traditional (or purist[843]) binary approach to factual causation will leave a litigant in the shoes of Dudley Lee, or, it is submitted, plaintiffs in complex medical negligence matters without any legal remedy.[844]

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[837] Chapter 3 para 2 1 *supra* fn 34.
[838] *Za v Smith* 2015 4 SA 574 (SCA) para [30]; *Minister of Finance v Gore* 2007 1 SA 111 (SCA) paras [32] – [33].
[839] 2013 2 SA 144 (CC).
[840] *Mashongwa v PRASA* 2016 3 SA 528 (CC); para 4 4 *supra*. *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41].
[841] Chapter 5 *infra*.
[842] 2013 2 SA 144 (CC).
[843] Visser PJ (2006) (n21) 586; Neethling J & Potgieter JM (2015) (n6) 195.
[844] As was the case in *Minister of Correctional Services v Lee* 2012 3 SA 617 (SCA).

It is submitted that the process of determination of factual causation after *Lee v Minister of Correctional Services*[845] in any particular medical negligence matter in South Africa should involve a consideration of the following principles: (a) the two-stage approach to causation should be followed.[846] It may be necessary to consider the element of factual causation at the outset of, or during the contemplation of, a trial[847]; (b) factual causation should be determined by utilising the *conditio sine qua non* test[848]; (c) in instances where the *conditio sine qua non* theory proves problematic due to multiple or uncertain causes, or where the *conditio sine qua non* theory is not applicable, resort must be made to "common sense" standards[849]; (d) in exceptional cases, where the principles of the *conditio sine qua non* theory do not provide a solution, and if knowledge and experience indicate a factual nexus between an act and a particular consequence, such an act should be considered to be a "cause-in-fact"[850]; (e) the plaintiff must establish that it is more likely than not that, but for the defendant's wrongful and negligent conduct, the plaintiff's harm would not have ensued - the plaintiff is not required to establish this causal link with certainty, but must do so on a preponderance of probabilities;[851] (f) where the traditional *conditio sine qua non* theory is adequate to establish factual causation, it may not be necessary to resort to the "flexible" test for factual causation as set out in *Lee v Minister of Correctional Services*[852]; (g) where the traditional *conditio sine qua non* theory is not adequate to establish factual causation, or where the strict application of the traditional *conditio sine qua non* theory will lead to an injustice, resort may be made to the "flexible" test for factual causation as set out in *Lee v Minister of Correctional Services*[853]; (h) the *conditio sine qua non* theory may not be apposite where there are concurrent or supervening causes and that even in the application of the *conditio sine qua non* test

[845] 2013 2 SA 144 (CC).
[846] Para 1 3 *supra*.
[847] *First National Bank of SA Ltd v Duvenhage* 2006 5 SA 369 (SCA).
[848] Para 2 *supra*; para 3 *supra*.
[849] Para 2 1 *supra*. See also Dutton I (2015) (n562) 67 fn 45: "The reference to 'common sense' causation must not, however, allow the eliding of proof of negligence in relation to particular harm and a foreseeable result of the same type of harm with proof that the breach was a factual cause of that harm in the specific case at hand, together with failure to adequately consider whether there was, on the evidence another possible source of the harm."
[850] Para 2 1 fn 34 *supra*.
[851] *Za v Smith* 2015 4 SA 574 (SCA) para [30]. See also *Minister of Finance v Gore* 2007 1 SA 111 (SCA) paras [32] – [33].
[852] 2013 2 SA 144 (CC).
[853] *Mashongwa v PRASA* 2016 3 SA 528 (CC); para 4 4 *supra*. See further *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41].

common sense may have to prevail over strict logic[854]; (i) the substitution exercise of determining hypothetical lawful conduct involves an evaluation of normative considerations. The determination of a question of fact cannot depend on social and policy considerations, but policy considerations may play a role in determining legal causation;[855] (j) the normatively determined lawful conduct referred to in (i) as an alternative is not primarily aimed at making an "is" question and "ought" question, but it is inevitably at least a mixed question of fact and law[856]; (k) legal causation in any medical law matter should then, and after the determination of factual causation as set out *supra*, be determined in terms of the flexible approach set out in *S v Mokgethi*[857]. The best-known recognised theories in respect of the determination of legal causation are the theory of adequate causation[858], the "direct consequences" theory[859], the theory of "fault"[860], reasonable foreseeability criterion[861] and the "flexible" approach.[862]

South African courts utilise a flexible approach to the determination of legal causation, which approach was delineated in *S v Mokgethi*[863] and which approach was later confirmed in several cases dealing with private law.[864] In *S v Mokgethi*[865] Van Heerden JA held that there is no single and general criterion for legal causation which is applicable in all instances and a flexible approach is accordingly suggested.[866] The essence of the flexible approach as set out in *S v Mokgethi*[867] is the question of whether there is a close enough relationship between the wrongdoer's conduct and its consequence for such consequence to be imputed to the wrongdoer in view of policy considerations based on reasonableness, fairness, and justice.[868] When considering the test for legal causation, the test should be utilised as a flexible one in which factors such as reasonable foreseeability, directness, the absence or presence of a *novus actus*

[854] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [49].
[855] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [51].
[856] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [51].
[857] *S v Mokgethi* 1990 1 SA 32 (A).
[858] Neethling J & Potgieter JM (2015) (n6) 203; Van der Walt JC & Midgley JR (2005) (n1) 210. See also the discussion of adequate causation in Snyman CR (2002) (n16) 81ff.
[859] Neethling J & Potgieter JM (2015) (n6) 205; Van der Walt JC & Midgley JR (2005) (n1) 206.
[860] Neethling J & Potgieter JM (2015) (n6) 207; Van der Walt JC & Midgley JR (2005) (n1) 205.
[861] Neethling J & Potgieter JM (2015) (n6) 214; Van der Walt JC & Midgley JR (2005) (n1) 208.
[862] Neethling J & Potgieter JM (2015) (n6) 200; Van der Walt JC & Midgley JR (2005) (n1) 202.
[863] 1990 1 SA 32 (A); Chapter 3 par 3 *supra*.
[864] Neethling J & Potgieter JM (2015) (n6) 200.
[865] 1990 1 SA 32 (A).
[866] Neethling J & Potgieter JM (2015) (n6) 200.
[867] 1990 1 SA 32 (A).
[868] *S v Mokgethi* 1990 1 SA 32 (A) 40 – 41; Neethling J & Potgieter JM (2015) (n6) 201.

interveniens, legal policy, reasonableness, fairness, and justice all play their part. [869] The existing criteria for legal causation (such as reasonable foreseeability etc.) remain important tools in determining legal causation, albeit as subsidiary criteria.[870] The flexible approach for legal causation requires that the subsidiary (or existing) criteria for establishing legal causation are to be utilised as aids in answering the basic question of imputability of harm.[871] Differences in emphasis in various decisions on the role of criteria such as reasonable foreseeability or direct consequences are quite acceptable "as long as justice prevails in the end."[872] The various theories of legal causation are at the service of the imputability question and not *vice versa*.[873] Any restriction of the principle lies in the principle itself.[874] The flexible approach can allay fears of so-called "limitless liability".[875] All the circumstances of a case should be considered, and the facts of each case should be carefully considered as such facts play an important role when the umbrella concept (or flexible criterion) is applied.[876] The criteria and principles set out hereinabove all have, together with the separate enquiry into wrongfulness, an important role as "control and balancing devices in order to establish a fair balance in fixing the limiting liability"[877] and "which aims to strike a fair balance between the interests of the plaintiff and the defendant."[878]

It is submitted that, as the law currently stands, the addition of the "flexible" test for factual causation in *Lee v Minister of Correctional Services*[879] will allow plaintiffs in medical law matters to bridge an evidentiary hurdle which would previously have been insurmountable. It is further submitted that reliance by plaintiffs on the "flexible" test for factual causation (assuming legal causation will follow with reasonable certainty) may become a panacea for all manner of evidentiary deficiencies facing such plaintiffs. If the normal enquiry into factual causation (*conditio sine qua non*) cannot assist a

[869] *Groenewald v Groenewald* 1998 2 SA 1106 (SCA) 1114.
[870] Neethling J & Potgieter JM (2015) (n6) 201, 201 fn 116.
[871] Neethling J &Potgieter JM (2015) (n6) 202.
[872] Neethling J & Potgieter JM (2015) (n6) 202.
[873] Neethling J & Potgieter JM (2015) (n6) 202, 202 fn122. *Contra* Van der Merwe NJ & Olivier PJJ (1989) (n8) 211 – 212.
[874] Van der Walt JC & Midgley JR (2005) (n1) 205 fn 21; *Smit v Abrahams* 1992 3 SA 158 (C); *Bonitas Medical Aid Fund v Volkskas Bank Ltd* 1992 2 SA 42 (W) 49.
[875] Neethling J & Potgieter JM (2015) (n6) 202.
[876] Van der Walt JC & Midgley JR (2005) (n1) 203.
[877] Van der Walt JC & Midgley JR (2005) (n1) 204.
[878] Van der Walt JC & Midgley JR (2005) (n1) 204.
[879] 2013 2 SA 144 (CC).

plaintiff, such a plaintiff need only rely on the "flexible" test for factual causation and appeal to courts to apply some form of "normative" principles when establishing factual causation. It is submitted that the principles of factual causation as they presently stand require some form of temperance and delineation, lest the pendulum swing too far in the direction of plaintiff litigants. Medical practitioners may face, as a result of the development of the "flexible" test for factual causation in *Lee v Minister of Correctional Services*[880], a veritable deluge of litigation which would ordinarily not have crossed the evidentiary chasm posed by a strictly and rigidly applied *conditio sine qua non* theory. Insofar as the content of the "flexible" test for factual causation is concerned, the situation (and uncertainty described above) created by *Lee v Minister of Correctional Services*[881] is one which, at present, favours plaintiffs in medical negligence litigation.[882] The requirement that a plaintiff is obliged to prove factual causation on a preponderance of probabilities, and the limitation of liability in terms of the various tests for legal causation, may offer countermeasures to unlimited liability in medical negligence cases. These aspects, and potential solutions to plaintiff-centred or defendant-centred approaches will be discussed in greater detail in Chapter 5 *infra*.

It is submitted that the approach espoused by our courts to date have not, despite the steps set out in (a) – (k) *supra*, provided absolute certainty and clarity in respect of the determination of difficult questions of uncertain causation in medical negligence matters. The complexities involved in determining causation in the absence of scientific certainty, or in the presence of various opposed expert opinions may render the ordinary tests for causation referred to above incapable of providing useful solutions and legal certainty to litigants. In Chapter 5 the various comparative approaches, contentious issues, and proposed recommendations will be discussed.

[880] 2013 2 SA 144 (CC).
[881] 2013 2 SA 144 (CC).
[882] Kotze SR (n637) 139 – 140.

CHAPTER 4

CAUSATION IN SELECTED FOREIGN JURISDICTIONS

1 INTRODUCTION

1 1 Historical Overview

Roman lawyers did not develop a comprehensive set of principles regarding causation or the limitation of liability. Such principles were only developed by seventeenth and eighteenth-century jurists such as Grotius and Domat.[1]

1 2 General: Civil & Common Law Systems

A comparative study between the legal systems of the European Continent[2] and those legal systems which have their origins in English law[3] must, at its outset, draw a distinction between the traditional doctrinal differences between Continental (or "Civil" jurisdictions) and that of Anglo-American/Common Law[4] jurisdictions

[1] Zweigert H & Kotz H *An Introduction to Comparative Law* (1998) 597. This section is not intended to constitute a comprehensive exposition of the historical development of the principles of causation in European and Anglo-American legal systems but intended to provide an overview of relevant principles in general terms. See also in general Parisi F & Fon V *"*Comparative Causation" (2004) *American Law and Economics Association* 345; Youngs R *English, French and German Comparative Law* (2007); *Fairchild v Glenhaven Funeral Services Ltd* [2002] 3 All ER 305 (HL) 378 – 380: "Perhaps the most telling illustration of the universality of the problem with which the House is faced comes from two passages in the digest… I would take from these passages the clear implication that classical Roman jurists of the greatest distinction saw the need for the law to deal specially with the situation where it was impossible to ascertain the identity of the actual killer among a number of wrongdoers. If strict proof of causation were required, the plaintiff would be deprived of his remedy in damages for the death of his slave."

[2] For example - the codified legal systems of Germany, France, the Netherlands, Italy, Austria *et cetera*. The present comparative study will, for the greater part, be limited to the discussion of causation in the German, English, Canadian and Australian legal systems.

[3] Formally and properly named the legal system of England and Wales (with related Common Law or "Commonwealth" jurisdictions historically descended from that system). For the sake of convenience, reference will be made in this dissertation to "English law" or "England" when referring to the law of England & Wales.

[4] The main focus will be made on the law of England and Wales ("England"). Insofar as reference is made to causation (or "causality") in Common Law jurisdictions reference will be made only to the

(hereinafter referred to as "Common Law" jurisdictions). Zweigert & Kotz emphasise the fact that, whereas legal scholars on the Continent "ironed out the old distinctions between the several delicts to the point where a general principle of delictual liability became not only a possibility but an actuality in most legal systems"[5], Common Law jurists have "largely adhered to the separate types of case and separate torts which developed under the writ system."[6]

Both the Common Law and European legal systems recognise that "despite its innocuous appearance, the question of causation is infused with legal considerations".[7] Causation is about "linking the event triggering the liability of the defendant with the damage suffered by the victim, in other words answering the question: under the circumstances of the case and assuming other conditions for liability are met, ought *this* defendant to be held liable for *this* damage?"[8]

2 GERMANY

2 1 General

According to Van Gerven, Lever & Larouche[9], the issue of causation in German law has "drawn the most attention from courts and legal writers", whereas in Common Law systems the traditional cause-in fact (supplemented by "remoteness of damage")

principles pertaining to causation in such jurisdictions without a comprehensive discussion of the legal development of such systems.

[5] Zweigert H & Kotz H (1998) (n1) 605. See also Baragwanath D "The Interpretative Challenges of International Adjudication Across the Common Law/Civil Law Divide" (2014) *Cambridge Journal of International and Comparative Law* 450 462 – 471; Plakokefalos I "Causation in the Law of State Responsibility and the Problem of Overdetermination: In Search of Clarity" (2015) *The European Journal of International Law* 471 472 – 478.

[6] Zweigert H & Kotz H (1998) (n1) 605. For an introductory exposition of the origins and development of Common Law and Civil Law, see Zweigert H & Kotz H (1998) (n1) 74 – 84 (Romanistic systems), 85 – 97 (Code Civil), 132 – 142 (Germanic law), 143 – 156 (German Civil Code); 180 – 204 (Development of English Common Law); Evans J *English and European Legal Systems* (2001) chapter 1.

[7] Van Gerven W, Lever J & Larouche P *Cases, Materials and Text on National, Supranational and International Tort Law* (2000) 395.

[8] Van Gerven W, Lever J & Larouche P (2000) (n7) 395.

[9] Van Gerven W, Lever J & Larouche P (2000) (n7) 395 – 396. See also Giesen D *International Medical Malpractice Law* (1988) 163ff, 172.

approach is followed.[10] In German law, the question of causation[11] is considered not within the specific framework of the law of delict, but within the law of obligations[12] under imputability of damage and the general theory of *Schadenerzatz* (reparation of damages).[13] Under the *Bürgerliches Gesetzbuch* (BGB)[14] the patient has the election of bringing an action either in contract or tort or both.[15] In terms of contractual liability, the patient may sue on the basis of the doctor's alleged breach of his contractual duties[16] and which liability is based on fault in that, even after a breach of contract is made out, the defendant has the chance to exculpate himself by showing lack of fault (intention or negligence).[17] As far as liability in delict is concerned, sections 823(1) and (2) and 826 of the BGB read as follows[18]:

§823 (1) Anyone who intentionally or negligently injures life, body, health, freedom, ownership or any other right of another in a manner contrary to law shall be obliged to compensate the other for the loss arising.

(2) The same liability is incurred by a person who infringes a law intended to protect another person. If such a law may be infringed without culpability, liability to compensate shall be incurred only in the event of culpability.

§826 Anyone who intentionally causes harm to another in a manner *contra bonos mores* is liable to compensate the other for the harm thereby occasioned.

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[10] Van Gerven W, Lever J & Larouche P (2000) (n7) 395 – 396.

[11] "*Kausalzusammenhang*" or "*Ursächlichkeit*". See also Deutsch E *Artzrecht und Arzneimittelrecht* (1983) paras 111 – 113; Brenner G *Arzt und Recht* (1983) 178ff in respect of a general discussion of the forms of negligence and liability which are recognised in German medical law; Giesen D "Civil Liability of Physicians for New Methods of Treatment and Experimentation" (1976) *Int'l & Comp LQ* 180 182 – 188.

[12] More specifically within the heading of "*Schadenszurechnung*" (compare Afr: "*Skadetoerekening*"). See Van Gerven W, Lever J & Larouche P (2000) (n7) 396, 396 fn 13. See also Stauch MS "Medical Malpractice and Compensation in Germany" (2011) *Chicago-Kent Law Review* 1139 1143.

[13] With an emphasis on the normative nature of the issue. Under §823(1) liability attaches to violations of protected interests or "*Rechtsgüter*" such as life, health, bodily integrity, ownership or "other rights". See Giesen D (1976) (n11) 183; Deutsch E (1983) (n11) paras 148 – 149; Van Gerven W, Lever J & Larouche P (2000) (n7) 396; Stauch MS (2011) (n12) 1143 *inter alia* in respect of treatment without informed consent.

[14] Re-promulgated on 2 January 2002, amended 2013. Compensation for non-physical loss or damage can only be claimed on the ground of delictual liability – see §253(1) BGB; §839 BGB, Art 34 *Grundgesetz*. Criminal liability is governed by the Strafgesetzbuch (StGB). See generally Cämmerer E von *Das Problem des Kausalzusammenhange im Rechte, besonders im Strafrechte* (1956).

[15] Giesen D (1976) (n11) 182 – 188; Stauch MS (2011) (n12) 1143.

[16] Stauch MS (2011) (n12) 1143.

[17] Stauch MS (2011) (n12) 1143. See also the discussion in para 2 9 1 and para 2 9 9 *infra*.

[18] See Fagan A "Aquilian Liability for Negligently Caused Pure Economic Loss – Its History and Doctrinal Accommodation" (2014) *South African Law Journal* 288 310 – 312.

Fault in the form of intention or negligence is again a requirement for delictual liability.[19] The sections of the BGB mentioned above are regarded as the source of the main provisions which create liability and which serve as the main source of the principles in respect of causation in German law.[20] German legal writers agree on the distinction between the two main stages in the determination of causation, i.e. the determination of *haftungsbegründende Kausalität* and *haftungsausfüllende Kausalität* (and which distinction is relevant mostly in the context of section 823 (1) BGB).[21] The first leg of the enquiry has been described as the "cause-in-fact" or "factual" phase.[22] The second phase of the enquiry is more "normative" in nature and driven to a great degree by policy.[23] Once it has been established that the defendant's conduct was a *conditio sine qua non* of the harm suffered by the plaintiff, the courts "almost universally proceed to the second limb of the double test and ask whether the defendant *should* in fact be held liable for the damage which he is the established author."[24]

2 2 *Haftungsbegründende Kausalität*

Haftungsbegründende Kausalität is translated as "causation as a foundation for liability"[25] and is the causal link between the conduct of the defendant and the result which leads to liability.[26] For example, and simply put, if a plaintiff has suffered a

[19] Stauch MS (2011) (n12) 1145: "German law also offers the possibility of compensation independent of fault… foremost are injuries caused by medicinal drugs. Thus in 1976, in the wake of the Thalidomide (Contergan) disaster, the German Parliament enacted the *Arzneimittelgesetz* [AMG] [Medicinal Products Act]. This provides in section 84 for liability against pharmaceutical manufacturers in cases where a medicinal product, used as prescribed, causes injury that, in light of the overall level of medical scientific development, may be regarded as unacceptable." See also Deutsch E (1983) (n11) paras 111 – 113; paras 115 – 116. For a description of the German health care system see Weide U "Health Care Reform and the Changing Standard of Care in the United States and Germany" (2000) *NY L Sch J Int'l L* 249.

[20] Van Gerven W, Lever J & Larouche P (2000) (n7) 396.

[21] Giesen D *Wandlungen des Arzthaftungsrechts* (1983) 26ff, 40 – 41.

[22] Kaufs *The German Law of Torts: A Comparative Treatise* (2002) 103 mention that American scholars refer to this leg of the test (with some justification) as the "cause-in-fact stage" of the enquiry. See also Deutsch E (1983) (n11) paras 148 – 149; Giesen D (1988) (n9) 165 fn 19: "[S]ome German authorities would, of course, refine the matter by proceeding to a three-stage test from *Äquivalenz* to *Ädequanz* to *Normzwecktheorie* (scope of the rule theory)."

[23] Markesinis BS & Unberath H (2002) (n22) 103.

[24] Giesen D (1988) (n9) 170; RG 13 October 1922 RGZ 105, 264; 22 June 1931 RGZ 133, 126; 13 December 1933 RGZ 142, 383; BGH 11 May 1951 BGHZ 2, 138; 18 October 1951 MDR 1952, 214; 23 October 1951 BGHZ 3, 261; 24 April 1952 NJW 1952, 1010; 2 July 1957 BGHZ 25, 86; 9 January 1962 VersR 1962, 351; 12 February 1963 VersR 1963, 486; 24 March 1964 NJW 1964, 1363; 13 July 1971 NJW 1971, 1982; 13 July 1971 BGHZ 57, 25; 26 June 1972 BGHZ 59, 139; 29 October 1974 BGHZ 63, 189.

[25] Van Gerven W, Lever J & Larouche P (2000) (n7) 396.

[26] Van Gerven W, Lever J & Larouche P (2000) (n7) 396.

broken leg *haftungsbegründende Kausalität* exists if the defendant's conduct caused the broken leg.[27] The infringement of a protected interest is an essential requirement in establishing unlawfulness as it links the conduct of the defendant to an unlawful result.[28] Deutsch summarises the position in respect of damage (negative *interesse* and diminution of a plaintiff's estate) and its relationship to causation as follows[29]:

Der dem Patienten entstandene Schaden wird nach der sog. Differenzhypothese festgestellt, d.h. durch Vergleich des Vermögensshadens vor und nach dem schuldhaft schädigenden Ereignis. Dazu sind zwei Kausalverläufe zu ermitteln. Der eine ist der tatsächliche Ablauf der Ereignisse, beim anderen wird gefragt, wie die Vermögenssituation ohne den Behandlungsfehler aussähe. Der Vergleich beider Kausalverläufe erbringt den Negativstand des Vermögens als Folge des Behandlungsfehlers. Bei der Ermittlung desjenigen Geschehensverlaufs, der durch Wegdenken des schädigenden Ereignisses gewonnen wird, macht die notwendige konkrete Betrachtung in der Praxis die Einbeziehung vieler Merkmale erfoderlich.

2 3 *Haftungsausfüllende Kausalität*

Haftungsausfüllende Kausalität is broadly typified as "causation as a determinant of the scope of liability"[30] and is the causal link between the conduct of the defendant and the items of damage alleged by the plaintiff.[31] In terms of the principle, the defendant is liable only for the damage which is causally connected with his or her conduct.[32] In German law the distinction above is necessary as different standards of proof apply to each aspect, i.e. the plaintiff bears the onus of proof in respect of *haftungsbegründende*

[27] Van Gerven W, Lever J & Larouche P (2000) (n7) 396.
[28] Van Gerven W, Lever J & Larouche P (2000) (n7) 396.
[29] Deutsch E (1983) para 148: "So sind z.B. die Erwerbsfähigkeit und die Leberserwartung des Opfers zu berücksichtigen. Ein gutes Beispiel gibt das Urteil BGH, NJW 72, 1515: Ein Weingärtner was als Alkoholiker mit einem Delirium tremens in die psychiatrische Klinik eingeliefert worden. Dort wurde er von einem Schizophrenen erschlagen, den man mit ihm zusammen in einen Raum gelegt hatte. Trotz des Fehlers der Ärze wies das OLG die Klage ab, der BGH hebt under verweist zurück. Die Bestimmung des enstandenen Schadens habe von der mutmaßlichen Lebenserwartung des Verstorbenen auszugehen, die von der Lebenserwartung der Personengruppe des Getötenen einerseits und seinem besonderen Gesundheitzzustand andererseits abhängig sei."
[30] Van Gerven W, Lever J & Larouche P (2000) (n7) 397. See also Giesen D (1983) (n21) 40 – 43; Laufs A & Ulsenheimer K *Handbuch des Arztrechts* (1992) 960 – 962; Markesinis BS & Unberath H (2002) (n22) 103; BHG NJW 1983, 998; BGH NJW 1987, 705, VersR 1986, 1121; BGH NJW 1989, 767; BGH NJW 1991, 748.
[31] Van Gerven W, Lever J & Larouche P (2000) (n7) 397.
[32] Deutsch E (1983) (n11) para 114; Van Gerven W, Lever J & Larouche P (2000) (n7) 397.

Kausalität whereas the court can assess *haftungsausfüllende Kausalität* on available evidence.[33]

2 4 *Äquivalenztheorie* (Equivalence or "But For" Theory)

German law utilises the equivalence theory, or, as it is more commonly known in other jurisdictions, the well-known *conditio sine qua non* theory.[34] Under this theory, every condition without which the damage would not have occurred is a cause of the damage.[35] The traditional approaches followed in respect of the determination of *haftungsbegründende Kausalität* are, firstly, elimination (*Hinwegdenken/Hinweggedacht*) which "assumes the notional elimination of the propositus from the scene"[36] and, secondly, substitution which "far from eliminating the propositus from the scene, assumes, on the contrary, that he was there and acted lawfully, the other conditions remaining the same except insofar as they would have been altered by the lawful conduct of the person in question."[37] Markesinis & Unberath mention that the first leg of the inquiry can, also, in instances where the application of

[33] Van Gerven W, Lever J & Larouche P (2000) (n7) 397, 397 fn 15; Markesinis BS & Unberath H (2002) (n22) 106: "The simplicity (or apparent simplicity) of the *conditio sine qua non* theory led some authors to consider extending its application to the domain of legal cause. Indeed, this is still the case in the area of criminal law since in that branch of the law the element of fault (invariably intention though there do exist criminal offences where negligence will suffice, e.g. §§222, 229 StGB) provides as good corrective device against the risk of extensive liability." See also Jescheck HH & Weigend T *Lehrbuch des Strafrechts, Allgemeneir Teil* (1996) 260; De Sousa Mendes P & Carmo J "A Semantic Model for Causation in Criminal Law and the Need of Logico-Legal Criteria for the Attribution of Causation" (2013) *Law, Probability and Risk* 207 208.

[34] Giesen D (1983) (n21) 40 – 41; Deutsch E (1983) (n11) para 149; Markesinis BS & Unberath H (2002) (n22) 103; Youngs R (2007) (n1); Stauch MS (2011) (n12) 1152. See also generally Chapter 3 supra.

[35] Van Gerven W, Lever J & Larouche P (2000) (n7) 397. See also Markesinis BS & Unberath H (2002) (n22) 103 citing two examples i.e. the example of a doctor who negligently examines or treats a patient who then dies from another ailment and the example of a chemist who negligently renews a prescription without previously consulting the patient's doctor will not be liable once it is shown that the doctor, had he been asked, would certainly have continued the treatment with the same drug, there will not be a causal link there between the negligence and the patient's injury or death. See also Giesen D (1983) (n21) 40 – 41: "Das ist Abwandlung der albekannten Formel dann der Fall, wenn der Schaden des Patienten ohne den Behandlungsfehler des Arztes nicht aufgetreten wäre. Dies nachzuweusen ist normalerweise Sache des klagenden Patienten. Das Gericht wird zu prüfen haben, ob der Schaden entstanden waäre, wenn der beklagte Arzt die gebotene Sorgfalt beachtet hätte. Eine verspätete ärztliche Behandlung ist kausalrechtlich irrelevant, wenn der Patient auch bei rechtzeitiger Behandlung nich mehr zu retten gewesen wäre; das Versäumnis, einen Patienten mit Bluthochdruck rechtzeitig zu behandeln bzw. einen Patienten augenärztlich zu untersuchen, ist für den Schaden nicht ursächlich, wenn auch die rechtzeitige Bluthochdruckbehandlung den Schlaglanfall nicht hätte verhindern können bzw. die rechtzeitige Augenuntersuchung kein anderes Ergebnis gehabt hätte al seine später vorgenommene."

[36] Markesinis BS & Unberath H (2002) (n22) 104.

[37] Markesinis BS & Unberath H (2002) (n22) 104.

the "standard" or *condition sine qua non* theory produces serious injustice, involve issues of normative evaluation and therefore "acquire strong normative overtones."[38] German authors agree that this theory cannot be conclusive for *haftungsausfüllende Kausalität* since the scope of liability could be extended almost infinitely.[39]

2 5 *Ädequanztheorie* (Adequacy Theory)

The adequacy theory was developed at the turn of the twentieth century and can be expressed in both positive and negative formulation.[40] Under the positive formulation, the conduct of the defendant is the adequate cause of the damage if it is in general apt to cause a result, such as happened, or at least "if it significantly increased the probability of that result happening" and, under the negative formulation the conduct of the defendant is not the adequate cause of the damage "if it could produce the result in question only under particularly unique and quite improbable circumstances to which no attention would be paid if events had followed a normal course."[41] A defendant is not held liable in instances where for consequences which appeared, in hindsight, to be "unusual and outside all calculability"[42], "totally unusual and of an unexpected kind"[43], "outside all legally recognisable experience"[44] or "outside all probability."[45] A condition which makes no difference in the chances of a type of harm arising cannot be "adequate".[46] The German Federal Supreme Court summarised the tenets of the adequacy test in the following terms[47]:

> An event is only an adequate condition for a result complained of if it has increased the objective possibility of a result of the kind which occurred. In assessing this, only two factors have to be taken into consideration: a) all circumstances available to an optimal observer at the time when the result occurred, and b) all additional circumstances known at the time to the author of the condition resulting in the harm complained of.

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[38] Markesinis BS & Unberath H (2002) (n22) 103. See also Chapter 3 para 3 2.
[39] Van Gerven W, Lever J & Larouche P (2000) (n7) 397.
[40] Van Gerven W, Lever J & Larouche P (2000) (n7) 397. See also Deutsch E (1983) (n11) para 149; 1930 63 RG 211; 1937 70 RG 257; OGH 1949 NJW 910; 1949 1 OGH 357.
[41] Van Gerven W, Lever J & Larouche P (2000) (n7) 397. See also Deutsch E (1983) (n11) para 149; 1887 15 RG 151; OLG Bremen 1964 33 DAR 273; 1971 23 BGH 133.
[42] Giesen D (1988) (n9) 185; RG 25 October 1907 RGZ 66, 407.
[43] Giesen D (1988) (n9) 185; RG 9 December 1907 JW 1908, 41; 26 May 1930 RGZ 129, 128.
[44] Giesen D (1988) (n9) 185; RG 15 June 1933 RGZ 141, 169.
[45] Giesen D (1988) (n9) 185; RG 23 November 1936 RGZ 152, 397.
[46] Giesen D (1988) (n9) 186; RG 15 February 1913 RGZ 81, 359; 27 October 1914 JW 1915, 28.
[47] Giesen D (1988) (n9) 186 quoting from BGH 23 October 1951 BGHZ 3, 261.

Honoré opines that the adequacy theory is essentially a probability-based theory.[48] Deutsch mentions successive instances of medical negligence in the context of medical law and the adequacy theory[49]:

Ein besonderes Problem auf dem Felt der Adäquanz stellt der sog. Zweite oder nachfolgende Arztfehler dar. Unter diesem Stichwort versteht man folgende Problematik: Der durch einen Schädiger ursprünglich verursachte Schaden wird anschließend noch dadurch verschlimmert, daß dem hinzugezogenen Arzt ein Behandlungsfehler unterläuft. Hat der Erstschädiger dennoch für den gesamten Schaden einzustehen? Zu dieser Frage bezieht die Praxis in differenzierender Weise Stellung: Der bei der ärtzlichen Therapie unterlaufene 'normale' Behandlungsfehler wird no gals im Erwartungsbereich liegend, also als adäquat kausal angesehen, d.h. der Erstchädiger hat auch dafür einzustehen. Ein schwerer ärtzlicher Kunstfehler fürht dagegen zur Inadäquanz des Schadens. Das ist der Fall, wenn der Arzt elementare Vorsichtsmaßnahmen außser acht läßt oder die Regeln der Medizin in besonders unverständlicher und schwerer Weise verlezt; dan trifft nur ihn die Haftung.

Giesen discusses the main principles of the theory as follows[50]:

Steht fest, daß der Behandlungsfehler ursächlich für den eingetretenen Schaden war (Äquivalenztheorie), is im Zivilrecht weiter zu prüfen, ob die vom Arzt gesetzte Bedingung dem engetretenen (Schadens-)Erfolg adäqaut war und somite in haftungsauslösendes Ereignis sein kann (Ädequanztheorie) und auch ist, wenn zwischen den maftungbegründenden Ereignis und dem Schaden zugleich ein Rechtswidrigkeitszusammenhang besteht. Für die Bejahung des adäquaten Ursachenzusammenhangs muß das Verhalten des Arztes bei objektiver nachträglicher Betrachtung im allgemeinen un nicht nur unter besonders unwahscheinlichen Umständen geeignet gewesen sein, den (Schadens-)Erfolg herbeizuführen.

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[48] Honoré AM "Causation and Remoteness of Damage*"* in Tunc A *International Encyclopedia of Comparative Law* (1971) Vol XI Chapter 7; Van Gerven W, Lever J & Larouche P (2000) (n7) 397.

[49] Deutsch E (1983) (n11) 149. See also RG JW 11, 754: "Ein Lehrer veranlaßte einen 10jährigen Schüler, einem unaufmerksamen Mädchen 'eine herunterzuhauen'. Bei der Ausführung verletzte sich der Schüler an dem zur Abwehr hochgehaltenen Schieferschtift des Mädchens. Der zur Behandlung hinzugezigene Arzt versäumte es, die Reste des Schieferschtifts aus der Wunde zu entfernen. Sie heilte nur langsam und drei Finger blieben steif. Das RG läßt den Lehrer auch für den Fehler des Arztes haften. Nach allgemeiner Erfahrung sei ein immer sachgemäßes Verhalten des Arztes nicht stets zu erwarten und deshalb ein Behandlungsfehler adäquat kausal. Der Ursachenzusammenghang wäre nur dann unterbrochen, wenn der Arzt 'alle ärztliche Regel und Erfahrung…gröblichst außer acht gelassen hätte'."; RG JW 12, 322: "Eine Frau wurde beim Zussammenstoß einer Straßenbahn mit einem Fuhrwerk verletzt. Der Arzt meinte, die Schmerzen der Verletzen rührten von einer Gebärmutterverlagerung her und operierte sie. Die Operation gelang, die Schmerzen wicher indes nicht. Das Gericht legt die Kosten für die Operation und die Nachbehandlung dem Straßenbahngesellschaft zur Last, den man hafte auch für den durch eine irrige Diagnose oder eine unrichtige Behandlung des zur Heilung zugezogenen Arztes verursachten Schaden, es sei den, es handele sich um einen besonders schwerwiegenden ärtzlichen Kunstfehler." See also Giesen D (1983) (n21) 41 – 43.

[50] Giesen D (1983) (n21) 41. See also BGH 2 March 1965 VersR 1965, 583; BGH 27 October 1981 VersR 1982, 147 148; BGH 11 May 1951 BGHZ 2, 138 141; BGH 14 October 1971 BGHZ 57, 137 140, 142; BGH 25 September 1952 BGHZ 7, 198 203 – 204; 28 April 1982 VersR 1982, 756.

Giesen records that the German Federal Court, although insisting that adequate causation is required in order to establish liability, admits that "the concept of legal adequacy has been variously interpreted at different times."[51] Adequate causation has, nevertheless, always been utilised to as a "filter to eliminate those consequences of the defendant's conduct for which he should not be held liable" and it further operates as a device to limit socially undesirable consequences.[52] The German courts have stated on occasion[53]:

> [O]nly if the courts remain conscious of the fact that the question [of adequacy] is not really one of causation but of determining the limits within which the author of a condition can fairly be made liable for its consequences… can they avoid schematising the 'adequate cause' formula and guarantee correct results.

2 6 *Schutzzweck Der Norm* (Scope of Rule Theory)

Later German authors developed the theory of the *Schutzzweck der Norm* (translated as the "scope of rule" theory).[54] According to this theory, damage can be recovered only when it is within the scope of protection of the norm which has been infringed.[55] This theory takes the assessment of causation away from the actual circumstances of the case towards the analysis of the infringed norm and which Honoré describes as a "legal policy theory".[56] Giesen states the following in respect of the development of the theory[57]:

> 'Causing' and 'occasioning' harm have become grounds for responsibility sufficiently similar to justify the use by legal writers of the expression 'causal connection' to refer to them both, and courts have also

[51] Giesen D (1988) (n9) 172.
[52] Giesen D (1988) (n9) 172.
[53] Giesen D (1988) (n9) 175; BGH 23 October 1951 BGHZ 3, 261; BGH 27 Jan 1981 BGHZ 79, 259.
[54] Van Gerven W, Lever J & Larouche P (2000) (n7) 398; Deutsch E (1983) (n11) para 150: "Verwandt mit der Voraussetzung der adäquaten Kausalität ist das Erfordernis, daß der Schaden im Schutzbereich der verletzen Norm liegen muß. Als Norm ist hier das jeweils konkrete Sorgfaltsgebot der Behandlung nach der ärtzlichen Wissenchaft anzusehen. So ist es etwa Sinn und Zweck der Forderung, einen Gipsverband nicht zu eng anzulegen, den Patienten vor Durchblutungsstörungen zu schützen – mit der Folge, daß bei Verletzung dieses Gebots nur solche Schäden zu ersetzen sind, die aus den Durchblutungsstörungen resultieren; allein diese Schäden liegen im Schutzbereich der verletzen Norm, nicht aber andere gesundheitliche Mängel." See also Laufs A & Ulsenheimer K (1992) (n30) 849ff.
[55] Laufs A & Ulsenheimer K (1992) (n30) 651; Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[56] Van Gerven W, Lever J & Larouche P (2000) (n7) 398 398 fn 27. See also Honoré (1971) (n48) 60 para 97; Laufs A & Ulsenheimer K (1992) (n30) 650 – 651.
[57] Giesen D (1988) (n9) 169 – 170.

often meant to include both causing and occasioning harm without differentiation. It is true that this tendency confers on the courts so wide a discretion in judging what forms of harm are within the scope of the legal rule violated, that the criteria used will in practice resemble that blend of *conditio sine qua non* and 'legal policy' or 'sense of justice' advocated by those theorists who have already proclaimed the death of all causation theories in favour of legal policy theories like the Scope of Rule Theory (*Normzweckttheorie*).

2 7 *Risikobereich* (Sphere of Risk)

Under the development of the "scope of rule" theory, and relatively more recently, a new line of reasoning has been put forward which can be translated as "sphere of risk" or *Risikobereich*.[58] This theory has not yet fully been developed into a full-fledged theory. According to this theory, every person has to bear a certain amount of risk, and some risks by their very nature fall within his or her *Risikobereich*, which includes a "general risk associated with existence".[59] It, therefore, follows, according to Van Gerven, Lever & Larouche[60], that when the occurrence of damage represents no more than the realisation of a risk which was within the *Risikobereich* of the plaintiff, the damage cannot be imputed to the defendant. This "scope of risk" is one step removed from the actual circumstances of the case and it implies a "value judgment" in respect of the risk or risks which one should be required to bear in the ordinary course of one's life.[61]

2 8 Application of Various Theories

2 8 1 BGH 23 October 1951, BGHZ 3, 261

There does not appear to be any preference amongst German authors in respect of any particular theory: some favour the adequate cause[62] theory whereas some use the various theories in a complementary fashion.[63] In BGHZ 3, 261 (the "*Vessel Sunk in*

[58] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[59] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[60] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[61] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[62] Van Gerven W, Lever J & Larouche P (2000) (n7) 398, 398 fn 33.
[63] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.

Lock" case)[64], two ships, the *Edelweiss* and the *Heinrich Hirdes 9* were moored side-by-side in a lock. The lock was constructed in such a way that its width at water level decreased as the water level was reduced. The vessels' respective operators were requested to specify the width of their vessels before the water level was lowered, to ensure that the operation could be safely performed. The operator of the *Heinrich Hirdes 9* mistakenly understated the width of his ship. As the water level was lowered, the two ships became stuck in the lock. The lock personnel refilled the lock to free the vessels, which manoeuvre was incorrectly executed and in the course of its execution the *Edelweiss* was submerged and sank. The insurer of the *Edelweiss* sued the insurer of the *Heinrich Hirdes 9*. By way of defence, it was pleaded that the mistakes of the lock personnel, and not the inaccurate statement of the width of the *Heinrich Hirdes 9,* caused the incident. The court *a quo* gave judgment for the plaintiff, and the court of appeal confirmed the judgment. The *Bundesgerichtshof* (BGH) reversed the judgment of the court of appeal and remitted the case for further examination. In its judgment, the court stated that:

> The appellant rightly states that the court of appeal was mistaken in its discussion of causation as a condition for the liability of the defendant. For one, the assumption that the fault of the operator of the [*Heinrich Hirdes 9*] directly caused the injury is not correct.

This finding, however, does not permit any conclusions to be reached in respect of the *haftungsbegründende Kausalität* between the conduct of the ship's operator and the resulting damage.[65] It is well-established in case law and legal writing that the range of such "logical" causes (i.e. "causes-in-fact") is far too large to justify imposing the full burden of the consequences of each such cause on the person who initiated it.[66] The notion of "adequate causation" was thus created in academic writing; according to the decision of the *Reichsgericht* of 18 November 1932[67]:

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[64] BGH 23 October 1951; Van Gerven W, Lever J & Larouche P (2000) (n7) 399 - case report as translated by A Hoffman and Y P Salmon in Van Gerven W, Lever J & Larouche P (2000) (n7) 399 fn 36.
[65] Van Gerven W, Lever J & Larouche P (2000) (n7) 398.
[66] Van Gerven W, Lever J & Larouche P (2000) (n7) 398 – 399.
[67] 22 June 1931, RGZ 133, 126 127 (as quoted in Van Gerven W, Lever J & Larouche P (2000) (n7) 400. 36).

[Adequate causation] is meant to allow individual events that are the conditions for a result – in the logical sense that the result would not have happened "but for" them – to be eliminated from causation in the legal sense. Those conditions that are logically the furthest removed from the result in question must be eliminated, since one would be led to unfair results if these conditions were to be taken into account for legal purposes.

The assessment of causation must extend to, but no further than[68]:

(a) All circumstances that an optimal observer could know at the time of the occurrence of the event; and

(b) Any additional circumstances which were indeed known to the person responsible for the occurrence of the event.

The theory was discussed by the *Reichsgericht* in the following terms[69]:

Adequate causation is established *if an event was generally suitable to lead to the occurrence of the result, and not only under particularly unique and quite improbable circumstances to which no attention would be paid if events had followed a normal course*.

The BGH emphasised that the point of departure for the enquiry must not be forgotten, i.e. that there should be a "search for a corrective device which reduces the range of logical consequences to those consequences that can be reasonably imputed [to the defendant]."[70] The BGH cautioned that the stated formulation of the theory could become "overly schematised, thus jeopardizing the attainment of fair results; this danger can only be avoided if the courts keep in mind that the inquiry does not actually concern causation, but rather the determination of the limits up to which a person who brought about an event can, in all fairness and reasonableness, be made liable for the consequences of such an event; this is in truth an autonomous condition for liability in its own right."[71]

[68] Van Gerven W, Lever J & Larouche P (2000) (n7) 400.
[69] Van Gerven W, Lever J & Larouche P (2000) (n7) 400.
[70] Van Gerven W, Lever J & Larouche P (2000) (n7) 400.
[71] Van Gerven W, Lever J & Larouche P (2000) (n7) 400.

The BGH found that the inaccurate answer of the crewman on board the *Heinrich Hirdes 9* was the cause of the incident. It utilised the *conditio sine qua non* theory but noted that such theory led to unacceptable results and overly broad liability.[72] The BGH also adopted the positive and the negative formulation of the adequacy theory as set out herein *supra*. The court also preferred the above-mentioned view of Traeger, who devised the idea of an "optimal observer" and that probability would have to be assessed from the perspective of all circumstances which would have been known to the "optimal observer" at the time of the event as well as all circumstances which the defendant himself knew, taking into account general experience.[73] The "optimal observer" is a somewhat nebulous concept and, as Van Gerven, Lever & Larouche illustrate, the more he or she is "is deemed to know about the circumstances which surrounded the sequence of events, the more that sequence will be seen as a probable consequence of the alleged tortfeasor's conduct."[74] If the "optimal observer" is given great perspicacity and perceptiveness and given almost perfect knowledge of all of the circumstances which could be known at the time of the event, a court looking at the facts with hindsight will tend to endow the "optimal observer" also with knowledge of those circumstances.[75] If that is so, then very few consequences would appear not to be the probable consequence of the conduct of the defendant and, accordingly, the adequacy theory would not significantly curtail the perceived excesses of the *conditio sine qua non* test.[76] According to Van Gerven, Lever & Larouche, authors who still advocate the adequacy theory opine that either the "optimal observer" should be made less optimal, or that some teleological element in addition to probability should be included in the adequacy theory.[77]

As stated, the BGH moved the adequacy theory beyond the issue of causation when it held that the "inquiry does not actually concern causation, but rather the determination of the limits up to which a person who brought about an event can, in all fairness and reasonableness, be made liable for the consequences of such an event; this is in truth

[72] Van Gerven W, Lever J & Larouche P (2000) (n7) 400. See also 1934 67 RG 12 (*conditio sine qua non*); OLG Köln 1957 GA 22; OLG Celle 1958 NJW 271; BGH 1960 GA 111.
[73] Van Gerven W, Lever J & Larouche P (2000) (n7) 400.
[74] Van Gerven W, Lever J & Larouche P (2000) (n7) 402.
[75] Van Gerven W, Lever J & Larouche P (2000) (n7) 402.
[76] Van Gerven W, Lever J & Larouche P (2000) (n7) 402.
[77] Van Gerven W, Lever J & Larouche P (2000) (n7) 402 fn 43, 402 fn 44.

an autonomous condition for liability in its own right."[78] The reference to fairness was problematic; the introduction of an element of fairness (which is entirely divorced from "natural" causation) in order to "correct the excesses of the *conditio sine qua non* theory" raised questions about the adequacy theory's suitability to achieve such fairness.[79] Considerations of fairness subsequently found articulation with the *Schutzzweck der Norm* ("Scope of Rule") theory, which somewhat removed the inquiry into causation further away from a mere consideration and examination of factual events.[80] Markesinis & Unberath demonstrate, in respect of the establishment and limitation of liability by German courts, that[81]:

> [I]t is not surprising that more recent court decisions have shown a marked inclination to state that the problem they have to solve is not 'exactly one of causality but rather the discovery of a corrective device which can limit the purely logical consequences in the interests of equity.

2 8 2 BGH 16 February 1972, BHGZ 58, 162

In the *"Drivers on the Pavement"* case[82], a military lorry collided with a car and so blocked a street in Bremen. Impatient drivers passed the scene of the collision by driving in the adjacent bicycle and pedestrian paths, and in so doing damaged them. The drivers were not sued for such damage, and instead, the City of Bremen sued the Federal Republic which was legally responsible for damage caused by the military.[83] The court *a quo* rejected the claim. The court of appeal reversed the judgment of the court *a quo* but the BGH re-instated the judgment of the court *a quo*.[84] The BGH held that the collision between the vehicles which blocked the street must be seen as the adequate cause of the damage to the pavement as it normally follows from an accident that impatient drivers would try to circumvent the scene of the collision and thereby damage the pavement.[85] This was not the end of the inquiry: the BGH held that the case should be subjected to a normative assessment (*wertende Betrachtung*). It is apparent from the judgment that considerations of fairness "should come into play,

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[78] Van Gerven W, Lever J & Larouche P (2000) (n7) 402.
[79] Van Gerven W, Lever J & Larouche P (2000) (n7) 402 402 fn 47.
[80] Van Gerven W, Lever J & Larouche P (2000) (n7) 403.
[81] Markesinis BS & Unberath H (2002) (n22) 108; BGHZ 30, 154, 157; BGHZ 3, 261, 267.
[82] BGH 16 February 1972 quoted by Van Gerven W, Lever J & Larouche P (2000) (n7) 403.
[83] Van Gerven W, Lever J & Larouche P (2000) (n7) 403.
[84] Van Gerven W, Lever J & Larouche P (2000) (n7) 403.
[85] Van Gerven W, Lever J & Larouche P (2000) (n7) 404.

quite separately from considerations relating to the causation as such, but… the BGH seems to consider that adequacy does not involve considerations of fairness."[86] Some German authors hailed the judgment as a definitive departure from causation as such and as a move towards imputability, although the BGH left room for consideration of both adequacy and fairness.[87] The normative assessment of the BGH relies, according to Van Gerven, Lever & Larouche, on an examination of road traffic rules and concludes that such rules protect the owners of the property near public highways only to the extent that they prohibit drivers from driving on the pavement or forcing other drivers to do so in order to avoid an accident.[88]

2 8 3 BGH 25 September 1952, BGHZ 7, 198

The plaintiffs claimed compensation from the defendant in respect of damage suffered due to the death of their mother. Their mother died as a result of complications which arose during an abortion carried out by the defendant. The defendant performed the abortion at the deceased's home and for a fee. During performance of the procedure, the defendant recognised (but misunderstood) a strange structure within the deceased's womb and was under the impression that the strange structure was the remains of an afterbirth. After rinsing the deceased's womb, the defendant placed the deceased on a sofa and ordered bedrest for three days. He instructed the deceased to consult him at his surgery within two weeks of the operation. He left the house at approximately four o' clock. The deceased complained of severe abdominal pains approximately 25 minutes after the performance of the procedure. A pain killer was obtained but the deceased's condition deteriorated significantly. A gynaecologist attended to the deceased at six o'clock and found a severe internal haemorrhage and a severe tear in the deceased's womb. The gynaecologist operated and encountered a ruptured womb artery. He bandaged the source of the deceased's bleeding and performed a blood transfusion, but the deceased passed away before the operation was completed. The Court of Appeal held that the defendant had caused the death of the deceased by piercing the wall of her womb and by causing damage to the deceased's womb artery. It held, however, that the defendant was not negligent in causing the injury. The

[86] Van Gerven W, Lever J & Larouche P (2000) (n7) 404.
[87] Van Gerven W, Lever J & Larouche P (2000) (n7) 404.
[88] Van Gerven W, Lever J & Larouche P (2000) (n7) 404.

various factors involved in the ultimate determination of the court included such factors as are relevant to the determination of the standard of care to be applied and the determination of causation. In respect of the standard of care expected in the case at hand, the court held that[89]:

> The experts were unanimously of the opinion that an injury such as happened here could have been inflicted by even the most conscientious and experienced medical man in the course of an abortion; in following it the Court of Appeal made no mistake of law. Thus, such and injury *could*, but *need not*, have resulted from a careless and improper use of the instruments. The Court of Appeal acted consistently in examining whether such a careless act of the defendant in the present case was to be inferred either according to the prima-facie evidence or by way of circumstantial evidence. It said no to both questions. Whether this was a typical course of events affording sufficient *prima facie* evidence required, in the first place, a formulation of the results and experience and then its application to the present situation. Such a formulation is a conclusion of fact inferred from general circumstances and can, in these proceedings, be checked for correctness only in so far as it is drawn from established facts. The facts themselves cannot be checked; they must be proved by the person who seeks to found them on a *prima facie* case. The burden of proof is thus on the plaintiffs just as the other party must prove the possibility of a deviation from the typical course of events. When, therefore, the Court of Appeal reached the result, on the basis of expert opinions, that 'no formulation from the results of experience can be established that the piercing of a womb in an abortion can as a rule be traced to careless use of instruments by a doctor', the unassailable finding of fact followed, that according to medical experience the injury in question was 'possible even with careful use of instruments' and could 'find its explanation in the peculiar characteristics, not visible to the doctor, of the womb'. That under these circumstances experience afforded no prima-facie evidence was based on no error of law.

The Court of Appeal declined to attribute fault to the defendant in respect of his general conduct. The Court of Appeal, however, held that the defendant was at fault in respect of his conduct immediately after performance of the operation. The court held that the defendant should not have left the patient in a questionable situation without removing the afterbirth and he ought to have had the patient admitted to hospital. The defendant's failure to admit the patient to hospital was regarded by one of the expert witnesses as "untelligible". The complications which ensued required further post-operative care in hospital. The court declined to find any liability for the consequences because it inferred from the evidence of experts that immediate transfer to hospital would have improved the patient's chances, but that death might have resulted even if the patient

[89] Markesinis BS & Unberath H (2002) (n22) 646.

had been immediately transferred to hospital.[90] Markesinis & Unberath provide the following commentary in respect of the reasons provided by the court[91]:

It could 'not decide beyond reasonable doubt that if the defendant had done his duty immediately after the operation or even when informed by Sp. that the patient was in pain, her life would have been saved.' These considerations do not make it clear whether the Court of Appeal had sufficiently in mind what was needed to prove causation. According to longstanding case-law it is not the strict rule of evidence in §236 ZPO but that in §287 that applies here… Under §287 ZPO the court is not prevented from being convinced by the evidence and the circumstances that there is an adequate causal connection, even if the possibility cannot without reasonable doubt be excluded that the damage could have occurred without the defendant's fault. If, as here, the blameworthy conduct consisted in an omission, the question of adequate causation ought to be formulated as 'whether that omission was in the ordinary way capable of producing a result, and not only under peculiar, quite improbable circumstances, not to be contemplated in the normal course of events.' It is not, therefore, a question of whether the injurious consequence could not have occurred in the normal course, or rather would have been produced only by special circumstances of that kind. Here the Court of Appeal had merely found that a dutiful conduct would not certainly have prevented the result, and that finding cannot be regarded as sufficient to exclude the omission as the cause of the result. The Court of Appeal ought to have considered in accordance with §287 ZPO – if need be after further questioning the experts – whether it could have produced such a result.

The reasons for the judgment are questioned by Markesinis & Unberath on the basis that the denial of a causal connection was not correct under the circumstances. They argue that too much emphasis was placed on the unlawfulness of the operation (and the infringement of the patient's bodily integrity) as opposed to the actual causal connection between the events.[92] They opine as follows in this regard[93]:

If one starts from the position – as one must – that the entry of the aforementioned dangerous circumstances falls within the adequate consequences of an abortion, the further adequate causal connection cannot be denied on the ground that there was some possibility of preventing the fatal outcome. This denial of causation is based on a fallacy similar to that which appeared in relation to the causality of the delayed transfer to the hospital. Once a danger to the patient's life appeared in any way, no peculiar and quite improbable circumstances were needed to lead to death, but, on the contrary, medical skill was needed to prevent it. Whether the prospects of success in those attempts to avert it

[90] Markesinis BS & Unberath H (2002) (n22) 647.
[91] Markesinis BS & Unberath H (2002) (n22) 647.
[92] Markesinis BS & Unberath H (2002) (n22) 648.
[93] Markesinis BS & Unberath H (2002) (n22) 648.

were more or less great cannot alter the fact that a failure is the adequate consequence of a danger to life.

2 8 4 BGH 17 October 1955, BGHZ 18, 286

The plaintiff's husband died after receiving an inoculation against typhus after the close of the Second World War. He had three inoculations in total after which he became ill. A malignant swelling appeared in the deceased's body and he died on 27 February 1948. The plaintiffs claimed for loss of support and blamed the doctor who had administered the inoculation for his death. The court held that a staphylococcus suppuration had occurred which had developed within two years into a malignant swelling with the appearance of sarcoma, from which the deceased had died. Causation was attacked by the defendant. The Court of Appeal held that the deceased's death did not occur as a result of any *novus actus interveniens* or as a result of any actions by the deceased, but it occurred independently of any intervening causes. Markesinis & Unberath draw attention to the "value-judgment" which was involved in reaching conclusions in the circumstances of the case[94]:

> It must be noted that the question of adequacy between condition and consequence cannot be answered in a purely logical, abstract way by numerically computing the frequency of the occurrences of such a consequence, but that in a value-judgment those out of the many conditions in a physical sense must be excluded which on a reasonable view of things cannot be regarded as circumstances giving rise to liability; in other words, the limit must be found by a value judgment 'up to which a liability for the consequences of a condition can be reasonably imputed to its originator.' In making such a value judgment it must be of importance (for the purpose of setting the limits of liability) whether the originator of the condition consciously took into account the more or less remote possibility of damage resulting from it or would not have acted otherwise if he had thought of the possibility of such damage. In that case the limit of liability must be set relatively wide… That an inoculation – whatever the kind – leads to the death of the person inoculated does not lie beyond the bounds of experience… *If therefore, an inoculation has directly caused a death, i.e. without the co-operation and further intervening causes, an adequate causal connection must be said to exist irrespective of the precise manner in which it came about (e.g. through infection, as in this case, or because of a particular predisposition of the inoculated person).*

[94] Markesinis BS & Unberath H (2002) (n22) 649 – 650. See also RG 27 June 1913 (injury to a finger).

2 8 5 BGH 30 June 1987, BGHZ 101, 215

The plaintiff was injured during sporting activities. The doctor who attended her suspected a ruptured spleen and referred her to a district hospital. A surgeon decided to open the plaintiff's abdominal cavity and, finding that the left kidney had been damaged, removed it. The plaintiff was transferred to a university clinic with renal failure where it was discovered that the plaintiff had lacked a right kidney from birth. She was initially treated by means of an artificial kidney. The plaintiff's mother donated a kidney to the plaintiff. The plaintiff was subsequently discharged from the hospital. The plaintiff sued the doctor who had removed her kidney and the district hospital for damages. The court found that there was no doubt that a causal nexus existed between the removal of the plaintiff's kidney and her mother's donation of a kidney. The possibility of the donation of a kidney was not so remote as to be entirely out of consideration. The causal nexus was not severed by the mother's decision to donate her kidney to her daughter as the situation was induced by the dangerous situation created by the surgeon and the district hospital.[95]

2 8 6 Criticism of Various Theories

Criticism of the "scope of rule" theory is that it fails to offer any generally applicable principle and that it relies on the development of case law relating to specific norms and type of cases.[96] It does, however, lead to a denial of liability in cases where an analysis based on the adequacy theory alone would impute the damage to the conduct of the alleged defendant.[97] The theory is useful where the liability of a defendant is alleged to originate in a violation of a specific rule or norm (*Schutznorm*) or official duty (*Amptsflicht*) and which leads to damage to a plaintiff.[98] Importantly, the theory plays a critical role in the determination of causation under most risk-based liability regimes (*Gefährdungshaftung*) where the central issue is whether the injury to the plaintiff constituted a specific manifestation of the exceptional risk which underpins

[95] Markesinis BS & Unberath H (2002) (n22) 660 – 662. See also Deutsch E (1983) (n11) 205 para 305; BGH NJW 2003, 2311.
[96] Van Gerven W, Lever J & Larouche P (2000) (n7) 405.
[97] Van Gerven W, Lever J & Larouche P (2000) (n7) 405.
[98] Van Gerven W, Lever J & Larouche P (2000) (n7) 405.

the liability regime.[99] The BGH held that considerations based on the division of risks or "sphere of risks"(*Risikobereich*) amongst members of society were to play an increasing role in the determination of imputability by German courts.[100] The practical usefulness of the adequacy theory is limited as it does not effectively exclude problematic cases and imposes a very low threshold.[101] As a result, another theory had to be created, based on the protective purpose of the duty in question.[102] The *Schutzwecklehre* is a flexible approach as it can react to the particularities of each case. It also allows the importation of the policy arguments while "maintaining a legalistic tone".[103]

2 9 Discussion: Causation in Medical Law in Germany

2 9 1 General

German medical law is premised on the provisions of the BGB which arise from contracts and torts.[104] Laufs & Ulsenheimer describe the scope of German medical law (*Arztrecht*) as follows[105]:

Die Arztrecht umfaßt die Summer der Rechtsnormen, unter denen der Arzt und seine Berufstätigkeit stehen. Es erscheint freilich weder in einem abgesloschennen System noch in einer umfassenden Kodifikation, wenngleich einzelne Berufgesetze, Verordnungen und besondere Satzungen erlassen sind; hervorzuheben ist das SGB V, insbesondere dessen drittes und viertes Kapitel. Immerhin enthalten

[99] Van Gerven W, Lever J & Larouche P (2000) (n7) 405.
[100] Van Gerven W, Lever J & Larouche P (2000) (n7) 405. Where a plaintiff is responsible for creating a sphere of risk, a defendant cannot properly be held responsible for such risks – see BGH 2 July 1991 "*Panic in the Piggery*" discussed by Van Gerven W, Lever J & Larouche P (2000) (n7) 405.
[101] Markesinis BS & Unberath H (2002) (n22) 113.
[102] Markesinis BS & Unberath H (2002) (n22) 113.
[103] Markesinis BS & Unberath H (2002) (n22) 113.
[104] BGB §823. See also for a general discussion of the applicable legal principles and causes of action Giesen D (1976) (n11) 181 – 188; Giesen D *Arzhaftungsrecht* (1981) 158; Grossen JM & Guillod O "Malpractice Law: American Influence in Europe" (1983) *Boston College International & Comparative Law Review* 1 5; Giesen D (1988) (n9) 3, 8, 11 – 70, 73 – 161; Deutsch E "Professional Negligence: A Comparative View" (1990) *VUWLR* 287 288ff; Laufs A & Ulsenheimer K (1992) (n30) 54ff, 619ff; 649ff; Giesen D "Medical Malpractice and the Judicial Function in Comparative Perspective" (1993) *Medical Law International* 3 8; Bernat E "Liability Risks in Gynaecology and Obstetrics under German and Austrian Law" (1995) *Med & Law* 413 414, 417ff; Spranger TM *Medical Law in Germany* (2011) 71 – 82. In Germany, the contract is a contract for the provision of services – see BGB §611. See also BGHZ 13 May 1955, 214. On 26 February 2013 the *Patientenrechtegesetz* became effective in Germany – see http://www.bundesaerztekammer.de/recht/gesetze-und-verordnungen/patientenrechtegesetz/ (accessed on 4 May 2018).
[105] Laufs A & Ulsenheimer K (1992) (n30) 988.

die großen Zivil-, Straf- und Verfahrensgesetze verstreut Vorschriften, die sic him besonderen an den Arzt richten.

Various causes of action have developed and have been recognised in German medical law.[106] The most prominent causes of action are defective treatment, incorrect diagnosis, incorrect prescription of medication, lack of disclosure and unauthorised treatment.[107] The medical practitioner's duty of care towards his patient is measured by against that which a colleague would ordinarily do under similar circumstances.[108] The traditional *conditio sine qua non* test is applied in civil jurisdictions including Germany and courts in Germany enquire whether the damage or harm complained of would have occurred had the physician exercised due care.[109] Stauch opines that, as with the common law "but for" test "there is little *theoretical* difficulty with [the *conditio sine qua non*] approach in medical malpractice cases" and that "instances of genuine causal over-determination, which can pose trouble for a *sine qua non* analysis, are very rare."[110] Stauch continues as follows[111]:

Similarly, it is unusual, once the factual causation hurdle is satisfied, for objections to be taken on the grounds of no legal (or proximate) causation: usually the patient's injury is squarely within the risk from which the doctor was obliged to protect him. Nevertheless, as is well known, considerable difficulties remain of an evidential nature, namely how to decide, against a backdrop of concurrent risk factors (the typical situation in medical cases), that it was the doctor's fault – rather than one of those other factors – that featured in the causal set for injury.

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[106] Quaas M & Zuck R *Medizinrecht* (2008) 284. In respect of disclosure and informed consent, see in general Giesen D & Hayes J "The Patient's Right to Know – A Comparative Analysis" (1992) *Anglo-American Law Review* 101 – 122; Giesen D (1983) (n21) 47ff; Stauch MS (2011) (n12) 1149, 1156. For the measure of damages awarded in German medical law see Palmer E "Germany: Medical Liability in a Universal Health Care System" in *Medical Liability: Canada, England and Wales, Germany and India* (Library of Congress) (2009).

[107] Laufs A & Ulsenheimer K (1992) (n30) 988 – 989; Deutsch E & Spickhoff A *Medizinrecht* (2008) 129 – 135; BGH 7 June 1982 – VI ZR 284/81, VersR1983, 983 - 984 (incorrect diagnosis and amputation of left leg).

[108] Deutsch E "Rechtswidrigkeitzusammenhang, Gefahrerhöhnung und Sorgfaltausgleichung bei der Artzhaftung" in Ficker HC *Festschrift Für Ernest von Caemmerer* (1978) 329 331.

[109] Giesen D (1988) (n9) 178; 15 February 1913 RGZ 81, 359; 13 October 1922 RGZ 105, 264; 5 December 1927 RGZ 119, 204; 13 December 1933 RGZ 142, 383; 26 April 1937 RGZ 155, 37; 29 April 1942 RGZ 169, 117; BGH 11 May 1951 BGHZ 2, 138; 13 December 1951 BGHZ 4, 192; 14 October 1971 BGHZ 57, 137; Bamberg 16 October 1947 NJW 1949, 225; Düsseldorf 1 June 1978 VersR 1980.

[110] Stauch MS (2011) (n12) 1152. See also Giesen D (1988) (n9) 177 – 178; BGH 29 April 1958 BGHZ 27, 181; 14 October 1971 BGHZ 57, 137; 15 December 1982 BGHZ 86, 128; 24 October 1985 BGHZ 96, 157; 7 July 1987 NJW 1987, 2923; BG 17 November 1970 GE 96II 392; OGH 22 May 1978 JBI 1979, 148.

[111] Stauch MS (2011) (n12) 1152.

Where a patient's condition is such that he or she is, in any event, beyond all help a physician's omission or delay in attending to such a patient is causally irrelevant.[112] Where a physician's negligent failure to attend to or treat her patient's hypertension at an early stage (or at all) would not, in a case of high blood pressure, have averted a subsequent stroke[113] or, in the case of glaucoma[114] the loss of the patient's eyesight, such a failure on the part of the medical practitioner is causally irrelevant.[115] Giesen states that[116]:

> If accidents negligently caused by the defendant result in the need for medical diagnosis and treatment, infusions, injections and operations, these accidents will normally be adequate conditions for such medical intervention irrespective of whether the intervention was skilful or substandard. If, for example, injuries caused by the defendant result in the need for injections which damage the plaintiff, the original conduct will be considered as an adequate caused of such further damage, unless of course the injections are not related to the injuries and are administered only with a view to future immunisation. Similarly, if an accident victim undergoes an operation for his injuries and surgery is extended to deal with an unrelated condition discovered as a result of either the accident or the operation itself, the original accident will not be an adequate cause of his death under the extended surgery. The German Imperial Court once stated that it is well within the normal course of events and human experience that mistakes happen in the course of medical treatment, both the kind which simply cannot be avoided, even though the highest possible care and skill is applied, and of the kind which would not happen without the physician's negligent conduct.

In the case of omissions, the adequacy test will be used by courts to enquire whether a specific omission "was capable in general, and not only in particularly peculiar and totally improbable circumstances understandably brushed aside as far-fetched in the normal course of events, of producing the results complained of."[117] German courts will hold a medical practitioner liable in respect of foreseeable harm even though only

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[112] Giesen D (1988) (n9) 178; BGH 25 September 1952 BGHZ 7, 198; BGH 26 September 1961 VersR 1961, 1021; Düsseldorf 7 May 1986 VersR 1987, 1219.
[113] BGH 2 March 1965 VersR 1965, 583.
[114] BGH 27 October 1981 VersR 1982, 147.
[115] Giesen D (1988) (n9) 179.
[116] Giesen D (1988) (n9) 187 – 188; RG 22 June 1911, 754; RG 3 June 1921 RGZ 102, 230; RG 13 October 1922 RGZ 105, 264; BGH 17 October 1955 BGHZ 18, 286; BGH 2 July 1957 BGHZ 25, 86; BGH 9 Jan 1962, VersR 1962, 351; BGH 12 February 1963 VersR 1963, 486; 5 February 1965 VersR 1965, 491; BGH 22 March 1966 VersR 1966, 637; BGH 29 May 1969 VersR 1969, 802; BGH 28 January 1986 NJW 1986, 2367; Stuttgart 28 January 1987 NJW, 2934.
[117] Giesen D (1988) (n9) 188; BGH 25 September 1952 BGHZ 7, 198; Stuttgart 28 January 1987, 2934.

the type or kind of harm (and not the precise circumstances of the harm) had been foreseeable.[118]

2 9 2 Burden of Proof

2 9 2 1 Civil Standard of Proof

In German law the burden of showing that a faulty breach of duty by a doctor or hospital, as well as a factual causal link between such breach and the plaintiff's injury, lie primarily with the plaintiff.[119] This evidentiary burden must be satisfied to the strict German civil standard of proof of "judicial conviction".[120] In German law, proof requires the "judge's full conviction that the factual matters alleged are true, and if material doubt remains, it is not enough that they are probably true."[121] German law does not ordinarily permit of an exception to the strict standard of proof, dealing with problems procedurally by lowering or reversing the burden of proof in certain circumstances.[122] The burden of proof may also be reversed in situations where there is a violation of a protective statute (*Schutzgesetz*) or the breach of a legally recognised duty of care (*Verkehrspflicht*).[123] In medical malpractice claims, plaintiffs face an uphill struggle due to the "notorious normative and factual complexity of medical malpractice claims".[124] As Giesen demonstrates, the rule that the patient bears the onus

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[118] RG 27 October 1914 JW 1915, 28; 3 June 1921 RGZ 102, 230; BGH 21 February 1961 VersR 1961, 465.

[119] Palandt O *Kommentar zum BGB* (1975) n 8 a cc, 8 c cc (before §249BGB); Giesen D (1976) (n11) 210 – 211; Brenner G (1983) (n11) 196 – 197; Murray PL & Stürner R *German Civil Justice* (2004) 310 – 311; Stauch MS (2011) (n12) 1153; BGH 17 February 1970, 53 BGHZ 245, 256; BGH 28 September 1970.

[120] Brenner G (1983) (n11) 196 – 197; Laufs A & Ulsenheimer K (1992) (n30) 651; Jansen N "The Idea of a Lost Chance" (1999) *Oxford Journal of Legal Studies* 271 276; Clermont KM & Sherwin E "Comparative Standards of Proof" (2002) *The American Journal of Comparative Law* 243 245; MS Stauch (2011) (n12) 1153; Wright RW "Proving Causation: Probability versus Belief" in Goldberg R *Perspectives on Causation* (2011) 195ff.

[121] *Zivilprozessordnung* §286. See also Wright RW in Goldberg R (2011) (n120) 198 – 199. Section 261 of theThe German Code of Criminal Procedure states: "The court shall decide on the result of the evidence taken according to its free conviction gained from the hearing as a whole."

[122] Jansen N (1999) (n120) 276; Khoury L *Uncertain Causation in Medical Liability* (2006) 86 86 fn 57: "Compare with German law where courts are ready to reverse the onus of proof against a doctor in case of serious treatment errors." See also Giesen D (1988) (n9) 419; Van Gerven W, Lever J & Larouche P (2000) (n7) 460. See generally also Martín-Casals M & Papayannis DM *Uncertain Causation in Tort Law* (2016).

[123] Oliphant K "Uncertain Factual Causation in the Third Restatement: Some Comparative Notes" (2011) *William Mitchell Law Review* 1599 1617.

[124] Jansen N (1999) (n120) 276. See also Stauch MS (2011) (n12) 1153: "In the first place, the civil courts in Germany, rather than simply arbitrating between the respective contentions of the parties,

of proof is well-established, particularly in respect of the elements of tort in German law[125]:

> Grundsätzlich gilt zwar auch im Arzthaftungsprozeß die allgemeine Regel des Beweisrechts, daß jede Partei die ihr günstigen Umstände hat darzulegen und notfalls auch zu beweisen hat. Das bedeutet, daß der Kläger (Patient) das Risiko der Unaufklärbarkeit klagebegründender Tatsachen, der Beklagte (Arzt, Krankenhausträger) dagegen das Risiko der Unaufklärbarkeit der einwendungs- oder einredebegründenden Tatsachen trägt. Deshalb muß der Patient, der seinen Schadenersatzanspruch auf einen Behandlungsfehler gründet, das Vorliegen eines Behandlungsfehlers, dessen Ursächlichkeit für den eingetretenen Schaden und das Verschulden des Schädigers beweisen.

As a result of the factual complexity of medical negligence claims and the informational inequality between the parties, German judges have taken special account of the difficulties faced by plaintiffs in medical negligence cases.[126] As Stauch points out, this has a Constitutional dimension insofar as a plaintiff has the right to a fair hearing under Article 103 (1) of the Grundgesetz.[127] In an important decision, the German Federal Constitutional Court (Bundesverfassungsgericht (BVerfG)) affirmed the need for courts to ensure an equal footing between litigants, as German courts consider a patient to be in a patently inferior bargaining position in respect of the medical practitioner.[128]

2 9 2 2 Criminal Standard of Proof

Patients may proceed in German criminal law on the basis of "negligent manslaughter" ("*fahrlässige Tötung*") under §222 of the Strafgesetzbuch (StGB) and the offences of "negligent bodily injury" ("*fahrlässige Körperverletzung*") which is governed by §229

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engage actively in seeking the truth as to what occurred. This 'inquisitorial' approach is reflected in the way that evidence is gathered and assessed. Thus in the context of a medical malpractice claim, the court will appoint one or more neutral experts to assist it. Such experts, who have access to the full written documentation in the case, such as medical records and the testimony of the patient and treating doctors, are required to prepare a report (*Gutachten*) detailing their conclusions on the relevant factual and normative issues. Though not binding on the judges, who will supplement their understanding by oral questioning of the various witnesses (including the experts), such reports will carry strong weight in the decision of the court."

[125] Giesen D (1983) (n21) 90 – 91. See also Giesen D (1983) (n21) 90 – 95 in respect of evidentiary problems in German medical law, and 99 – 118 in respect of various forms of medical negligence in German medical law.

[126] Stauch MS (2011) (n12) 1153.

[127] Stauch MS (2011) (n12) 1153.

[128] 52 BVerfGE 131 25 July 1979. See also Grossen JM & Guillod O (1983) (n104) 9.

of the StGB.[129] A medical practitioner's failure to obtain proper and informed consent may attract sanction under §223 of the StGB which governs assault ("*Körperverletzung*").[130] The onus of proof remains on the prosecution.[131] The role of causation in German criminal law is described by Jescheck as follows[132]:

> Das Problem der Kausalität betrifft also im Strafrecht die Frage, wie der Zusammenhang zwischen Handlung und Erfolg beschaffen sein muss, damit dieser dem Täter als seine Tat zugerechnet werden kann. Der Täter muss den Erfolg durch seine Handlung mit verursacht haben, weil in einem aug Güterschutz ausgerichteten Strafrecht die objektive Zurechnung vor Erfolgen, die ohne Zutun des Täters eingetreten sind, in der Regel nicht gerechtfertigt erscheint.

Various theories are utilised to determine causation in German criminal law, which theories include the *conditio sine qua non* theory,

Jescheck states that no distinction is required between "strafrechtlich relevanter und irrelevanter Kausalität auf der Stufe des Kausalbegriffs… gemacht werden kann."[133] In multiple-cause cases, such as the case where a number of persons, independently of one another, each poisons their victim's food, such actions are treated as exceptions to the *conditio sine qua non* test and the requirements of causation are deemed to have been satisfied. Welzel observes that "von mehreren Bedingungen, die zwar alterternativ, nicht aber kumulativ hinweggedacht werden können, ohne dass der Erfolg entfiele, ist jede für den Erfolg ursächlich."[134]

Unlike Common Law, Continental European Civil Law does not generally distinguish between standards of proof for civil and criminal matters. The standard of proof in criminal matters was described by the *Bundesgerichtshof* as a "personal conviction

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[129] Stauch MS (2011) (n12) 1141; Christopher RL "Tripartite Structures of Criminal Law in Germany and Other Civil Law Jurisdictions" (2007) *Cardozo Law Review* 2675 2682ff. See also Ulsenheimer K *Arztstrafrecht in der Praxis* (2008) 3ff. As previously stated, the present discussion of causation in German criminal law is not intended to constitute a comprehensive treatise on the topic.
[130] Stauch MS (2011) (n12) 1141.
[131] Stauch MS (2011) (n12) 1141. See also generally §211, §212, §222, §226, §251, §314 StGB.
[132] Jescheck HH & Weigend T (1996) (n33) 222.
[133] Jescheck HH & Weigend T (1996) (n33) 224.
[134] Welzel H *Das Deutsche Strafrecht* (1969) 45.

[…] in doubtful cases, the judge may and must be content with a degree of certainty useful for practical life that silences doubt without completely excluding it."[135]

2 9 2 3 Professional and Disclipinary Inquiries

Medical practitioners in Germany are subject to professional disciplinary censure. In Germany medical practitioners are required to subject themselves to the rules of the medical state within which they practice.[136] Professional tribunals (*"Berufsgerichte*") hear disciplinary proceedings against medical professionals and are authorised to issue a fan or a ban.[137]

2 9 3 Burden of Proof: Assistive Devices

German courts have also developed some specific doctrines in the treatment of medical negligence cases which allow for a shift in the burden of proof from the plaintiff to the defendant.[138] As Brenner notes[139]:

> Eine Beweislasterleichterung zugunsten des Patienten (Geschädigten) scheidet in folgenden Fällen aus. Jede Behandlung hat ein gewisses Risiko; darauf beruht die Möglichkeit des Eintritts von Zwischenfällen oder eines erfolglosen Eingriffs trotz Anwendung der erforderlichen ärtzlichen Sorgfalt. Der medizinische Fortschritt und die damit verbundene Erweiterung von Behandlungsmethoden und Behandlungsmitteln bringen außerdem schwer einschätzbare Behandlungsgefahren mit sich, die an den Arzt große Anforderungen stellen. Der Arzt ist in solchen Fällen verpflichtet, im Rahmen der Behandlung einen Heilerfolg anzustreben. Eine Beweislasterleichterung für den Patienten kommt somit nur in den Fällen in Frage, in denen bei bestimmten Geschehensabläfen unter Berücksichtigung

[135] BGH 17 BGHZ 53, 245, BGH NJW 1970, 946 cited in Schweizer M "The civil standard of proof – what is it, actually?" (2013) *Preprints of the Max Planck Institute for Research on Collective Goods*.
[136] Stauch MS (2011) (n12) 1142 – 1143. The Model Code for Medical Practitioners in Germany may be located at http://www.bundesaerztekammer.de/fileadmin/user_upload/downloads/pdf-Ordner/MBO/MBO_EN_Novellierung_2015.pdf (accessed on 4 May 2018).
[137] Stauch MS (2011) (n12) 1143.
[138] Brenner G (1983) (n11) 197 – 198; Laufs A & Ulsenheimer K (1992) (n30) 988: "Hat der Arzt es schuldhaft unterlassen, medizinisch zweifelsfrei gebotene Befunde zu erheben und zu sichern, können dem Patienten Beweiserleictherungen bis zur Bewieslastumkehr zu Lasten des Arztes zugute kommen, wenn dadurch die Aufklärung eines immerhin warcscheinlichen Ursachenzusamemenhangs zwischen ärztlichem Behandlungsfehler und Gesundheitsschaden erschwert oder vereitelt wird und die Befundsicherung gerade wegen des erhöten Risikos des in Frage stehenden Verlaufs geschuldet war." See also Deutsch E (1983) (n11) para 111ff; Stauch MS (2011) (n12) 1154; BGH 3 February 1987 – VI ZR56/86.
[139] Brenner G (1983) (n11) 197 – 198; BVerfG NJW 1979, S.1925, 1926; BGH NJW 1978, S.2337, 2339.

gesicherter medizinischer Erkenntnisse und Beachtung gültiger Vorschriften dem Patienten ein Schaden nicht zugefügt warden durfte. Für den Patienten sind solche fehlerhaften Behandlungen und ihre Ursachen ein fremder Bereich und erschweren seine Beweisführung. Das wirkt sich typischerweise zum Vorteil des Arztes oder des Krankenhausträgers aus. Diese besondere Situation des Arzthaftungsprozesses veranlaßte die Rechtsprechung im Bereich des haftungsbegründenen Kausalzusammenhangs in besonderen Ausnahmefällen dem Patienten Beweiserleichterungen einzuräumen, die bis zur Umkehr der Beweislast gehen können. Diese Beweislasterleichterungen sin dimmer dann soweit geboten, asl nach richterlichem Ermessen dem Patienten die Beweislast für einen ärztlichen oder pflegerischen Fehler billigerweise nicht mehr zugemutet warden kann. Die Beweislasterleichterungen ergeben sich aus dem verfassungsrechtlichen Erfordernis eines fairen Gerichtsverfahrens, insbesondere aus Gründen der "Waffengleichheit im Zivilprozeß" und der "Rechtsanwendungsgleichheit".

In some cases, the figure of "fully masterable risks" in some instances places the onus from the outset on the medical practitioner to explain and justify how a particular injury occurred.[140] Also, the German courts have applied a formal presumption in cases of inadequate documentation on the part of the medical practitioner.[141] Using the aforementioned presumption, the courts will assume, in the absence of a particular record such as a diagnostic test or record of a therapeutic procedure, that such records were omitted.[142] Where a plaintiff is exposed to several risks, such as those posed by his illness and by the treatment given, the current state of medical science renders identification of the respective contributions of the aforementioned factors impossible and, had it not been for faulty treatment the patient would have avoided injury, the German courts have been prepared to relax the high burden of proof of "judicial conviction".[143] Where an injury may be seen as "secondary" to some earlier infringement of the plaintiff's bodily integrity or health and which was caused by the particular defendant, the courts will assess the putative link between the initial and secondary harm according to the balance of probabilities.[144] German courts have also developed a doctrine allowing for a complete reversal of the onus of proof in respect

[140] Brenner G (1983) (n11) 197 – 198; Laufs A & Ulsenheimer K (1992) (n30) 988 – 989; Stauch MS (2011) (n12) 1154.
[141] Stauch MS (2011) (n12) 1154.
[142] Stauch MS (2011) (n12) 1154.
[143] Brenner G (1983) (n11) 197 – 198; Stauch MS (2011) (n12) 1154; BVerfG NJW 1979, S.1925, 1926; BGH NJW 1978, S.2337, 2339.
[144] Stauch MS (2011) (n12) 1154.

of causation in cases of gross negligence (*große Behandlungsfehler*).[145] Liability has been imposed in cases of misdiagnosis even though experts testified that there was only a ten percent chance that proper treatment would have prevented the plaintiff's ensuing disability.[146] Where this approach places the plaintiff in a better position than the defendant, the plaintiff will achieve full recovery even where the likelihood exists that the error played a small part in her injury.[147] German courts have also lowered the standard of proof and even reversed it in instances where the medical practitioner failed to keep comprehensive and proper medical records or made changes to existing records.[148] In many instances, a plaintiff can circumvent the difficult rules relating to proof and evidentiary standards by reformulating his or her claim as one of "disclosure malpractice".[149]

Many of the reverse-onus rules referred to above have received criticism as making judicial inroads into the rules of proof laid down by the German legislature and as lacking "a convincing theoretical basis".[150] The views of those who urge the abandonment of reverse-onus rules in favour of a proportionate approach to recovery in doubtful causation cases appear to be gaining support.[151] Overall, the German system for compensation in medical negligence cases "illustrates the imagination and freedom of the courts in developing the rules they deem necessary to do justice in this complex area."[152] The law in Germany in this regard is characterised by a tendency to assist plaintiffs.[153] The effect of such an approach is, as Stauch argues, over-compensation.[154]

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[145] Brenner G (1983) (n11) 199 – 200; Laufs A & Ulsenheimer K (1992) (n30) 988 – 989; Markesinis BS & Unberath H (2002) (n22) 645 – 649, 675; Stauch MS (2011) (n12) 1154; BGH 11 June 1968, NJW 2291, 1968; BGH 10 May 1983, NJW 2080, (2081) 1983.
[146] Oliphant K (2011) (n123) 1617.
[147] Stauch MS (2011) (n12) 1154.
[148] BGHZ 27 June 1978, 132.
[149] Stauch MS (2011) (n12) 1156 – 1157: "Claims for disclosure malpractice provide an alternative basis of argument in cases of iatrogenic injury. Instead of showing the injury stemmed from fault in the execution of treatment, the patient may argue that, insofar as the risk of such injury was indeed inherent in the treatment, the doctor failed in his anterior duty to warn of it. As a result, so the argument continues, the patient's agreement to treatment was defective and the doctor should be liable for the injuries arising from it… the German courts have evolved a high standard of required information disclosure."
[150] Stauch MS (2011) (n12) 1164.
[151] Stauch MS (2011) (n12) 1164, 1164 fn 135.
[152] Stauch MS (2011) (n12) 1167.
[153] Stauch MS (2011) (n12) 1167 – 1168.
[154] Stauch MS (2011) (n12) 1168: "This has been seen as an aspect of permissible loss re-distribution. At least in the past, in the context of the affluent conditions of German society, with costs shared

2 9 4 Multiple Causes

Giesen summarises the principles in respect of multiple causes and contribution to damage (seen against the context of the Adequacy theory) in German medical law as follows[155]:

> Ist der Schaden durch das Zusammenwirken mehrerer Ereignisse entstanden, sind alle für den Schaden im Rechtssinne ursächlich. Ein adäquater Kausalzusammenhang ist deshalb in der Regel zu bejahen, wenn die vom ersten Schädiger in Gang gesetzte Ursachenkette durch einen Dritten richtunggebend verändert wird: Wer eine Gefahrenlage schafft, bei der Fehlbehandlungen anderer erfahrungsgemaß vorkommen, hat den durch das Zweitereignis entstandenen Schaden zurechenbar mitverursacht. In Fällen, in denen verchiedene Ärzte nacheinander fahrlässig handeln, kann somit der erste Arzt auch für den vom zweiten Arzt gestifteten Schaden haftbar sein, wenn der Zweitschaden erfahrungsgemaß nicht so unwahrscheinlich ist, daß man bei gehöriger Sorgfalt nicht mit ihm zu rechnen braucht. Veranlaßt etwa Dr A fahrlässige Fehleintragungen in den Unterlagen des Patienten und übernimmt sie der nachbehandelnde Arzt Dr B im Vertrauen auf ihre Richtigkeit ungeprüft, so kann Dr A gleichwohl auch für den daraus entstandenen Schaden verantwortlich sein, selbst wenn der zweite Arzt seinerseits contra legem artis auf die Richtigkeit der Unterlagen vertraut und damit selbst fahrlässig gehandelt hat.

German law recognises the principle that, where two or more concurrent causes or factors which are each on their own sufficient to bring about a plaintiff's harm, operate simultaneously, the defendant who is liable for one of the causes or factors is not automatically relieved of liability on account of the other causes or factors.[156] A plaintiff may in such cases recover the full amount from one of the defendants who are to blame, or he may recover in full from either wrongdoer subject to the proviso that he may not claim more in aggregate than the total proven damages.[157] Where a plaintiff suffers an injury as a result of two parts of a wrongfully administered anaesthesia injection (either of which could have caused the harm) the defendant was held to be liable due to his negligence.[158] In cases of successive injuries where the plaintiff is

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between the social security system and liability insurers, this was a stable solution with broad support, which kept reform initiatives in this area largely off the political agenda."

[155] Giesen D (1983) (n21) 44 – 45; BGH 23 October 1951 BGHZ 3, 261 268; BGH 16 June 1959 BGHZ 30, 203; BGH VersR 1999, 862; BGH NJW 2000, 3423. See also generally in respect of "plurality of causes" Van Gerven W, Lever J & Larouche P (2000) (n7) 439 – 442; Markesinis BS & Unberath H (2002) (n22) 106, 637 – 638, 676 – 678.

[156] Giesen D (1988) (n9) 203; RG 16 May 1935 RGZ 148, 48; BGH 28 January 1986 VersR 1986, 601.

[157] Giesen D (1988) (n9) 203; BGH 6 May 1971 VersR 1971, 818; BGH 16 May 1983 VersR 1983, 731.

[158] BGH 7 October 1980 BGHZ 78, 209.

injured by A and later by B in such a way that the second injury (by B) would have sufficed to cause the first injury (by A).[159]

2 9 5 Increase in Danger of Risk

German courts have held that a particular condition, which was created by a defendant had "increased the danger of the materialisation of a risk"[160], and which condition was not "atypical" or "so extraordinary that a third-party observer could not have foreseen what then came about"[161] led to the defendants being held liable in such cases.[162]

2 9 6 Loss of a Chance

The application of the theory of loss of a chance in physical harm cases is rejected in Germany.[163] Jansen argues that the concept of a loss of a chance does not strictly fall within the scope of German law at all.[164] German law deals with the issue of a lost chance in both contractual and delictual claims, relying on procedural solutions and legal presumptions in respect of the burden of proof.[165] Cases which concern the loss of the chance to conclude a favourable contract[166] or the opportunity to develop a promising career[167] are governed by §252 of the BGB which provides that any gain or loss is to be included in the recoverable harm which is awarded in the ordinary

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[159] Giesen D (1988) (n9) 204: "[F]or example when his leg is injured by tortfeasor A, rendering it stiff, and is later additionally injured by tortfeasor B, necessitating its amputation. In such cases tortfeasor A remains causally liable for the original damage inflicted, while tortfeasor B will be held liable for the additional loss to the plaintiff caused by the second injury."; RG 3 June 1921 102, 230; RG 13 October 1922 RGZ 105, 264; BGH 28 January 1986 VersR 1986, 601.

[160] Giesen D (1988) (n9) 187; RG 3 June 1921 102, 230 (negligent medical treatment resulting in the consultation of a second medical practitioner who also acted negligently, with the first medical practitioner being held liable for the negligence of the second medical practitioner); RG 13 October 1922 RGZ 105, 264 (negligently injured plaintiff treated in hospital incurring an unrelated infection and dying, with the first defendant held liable for later consequences).

[161] BGH 1 July 1975 VersR 1975, 1026.

[162] Giesen D (1988) (n9) 187.

[163] Oliphant K (2011) (n123) 1623. See also Zimmermann R & Kleinschmidt J "Loss of a Chance: Germany" in Winiger B, Koziol H, Koch BA & Zimmermann R *Digest: Natural Causation* (2007) 548 – 549; BGH 11 June 1968, NJW 2291 1968.

[164] Jansen N (1999) (n120) 291.

[165] Jansen N (1999) (n120) 291; Wright RW in Goldberg R (2011) (n120) 195; BGH 6 October 1998, 1999 NJW 860.

[166] 68 RGZ 163, 2 BGHZ 310.

[167] Court of Appeal, Cologne (1972) NJW 59; 127 BGHZ 391.

course.[168] Jansen argues that the BGB is "technically indifferent to the question of whether a lost chance can be a harm giving rise to a claim for damages" and that the question of a loss of a chance constitutes mostly a policy issue.[169]

2 9 7 Alternative Defendants

Where alternative defendants are involved, the *Bundesgesetzbuch* deals with alternative defendants through a reversed burden of proof[170]:

§830 Joint tortfeasors, instigators and accessories

> Where several persons have caused a loss by acting jointly and unlawfully, each of them is responsible for the whole loss. The same applies where it cannot be ascertained which of several persons involved caused the loss by his conduct.

As Oliphant explains, the first sentence of the code deals with joint tortfeasors, whereas the second "allows for liability in an alternative-defendant case where each of a number of wrongdoers acted tortuously and there is no doubt that at least one of them caused the claimant's harm, but it cannot be established which of them, singly or jointly, actually caused the harm."[171] The provision effectively reverses the burden of proof so that once the plaintiff has proved that the defendant was one of a group of independent tortfeasors (any of whom may have caused the damage), it is then for the defendant to prove that she did not do so.[172] Where liability results, it is *in solidum.*[173] Where there exists a possibility that the harm in question may have been caused by the victim's act, or may have come from an innocent source, the section will be construed narrowly.[174]

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[168] Jansen N (1999) (n120) 291; §287 of the *Zivilprozessordnung* (ZPO) provides that judges have a discretion to estimate damages.
[169] Jansen N (1999) (n120) 292.
[170] Oliphant K "Causation in Cases of Evidential Uncertainty: Juridical Techniques and Fundamental Issues" (2016) *Chicago-Kent Law Review* 587 594. See also Van Dam C *European Tort Law* (2006) 286 – 288; Oliphant K & Steininger BC (2011) *European Tort Law: Basic Texts* 122; Oliphant K (2011) (n123) 1611.
[171] Oliphant K (2011) (n123)1611.
[172] Oliphant K (2011) (n123) 1612.
[173] Oliphant K (2011) (n123) 1612.
[174] Wagner G "Aggregation and Divisibility of Damage in Germany: Tort Law and Insurance" in Oliphant K *Aggregation and Divisibility of Damage* (2009) 195.

2 9 8 "Thin Skull" Cases

Predisposition or "thin skull" cases are referred to under the category of unforeseeable consequences of a forseaable type of injury.[175] The scope and extent of a foreseeable kind of damage may be unforeseeable.[176] Giesen suggests that the aggravated injury which occurs in "thin skull" cases is "always foreseeable on the basis that particularly susceptible plaintiffs are common enough to come within the range of the defendant's reasonable contemplation."[177] A defendant must take his victim as he finds her, with all of her pre-existing conditions, including a "thin skull"[178] or "eggshell personality"[179]. A victim might be a person with haemophilia[180] and the existence of such a condition in a victim is consistent with the adequacy test for causation in German law.[181] The German Imperial Court held that[182]:

> [H]e who negligently inflicts an injury on a person in a weak state of health has no right to be treated as one who caused this injury to a person of a stronger nature [who might have suffered less, or indeed not at all].

2 9 9 *Novus Actus Interveniens*

Intervening forces may sever the causal chain between a defendant's actions or omissions and a plaintiff's injuries. For example, where an abortionist fails to diagnose twins the negligence which is committed by a second abortionist will normally be imputed to the first abortionist.[183] A medical practitioner should reasonably foresee that once he or she negligently records incorrect medical information that such incorrect information may be utilised by medical practitioners who subsequently have

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[175] Giesen D (1988) (n9) 189 – 190, 197 – 202.
[176] RG 25 October 1907 RGZ 66, 407; RG 25 November 1941 RGZ 168, 86; BGH 17 October 1956 BGHZ 18, 286; BGH 8 January 1963 VersR 1963, 262; BGH 11 July 1972 VersR 1972, 1072; BGH 1 July 1975 VersR 1975, 1026.
[177] Giesen D (1988) (n9) 190.
[178] BGH 3 February 1976 NJW 1976, 1143; RG 9 December 1907 JW 1908, 41; BGH 3 February 1976 NJW 1976, 1143.
[179] 26 April 1937 RGZ 155, 37; 30 November 1938 RGZ 159, 257; RG 29 April 1942 RGZ 169, 117; BGH 29 February 1956 BGHZ 20, 137.
[180]BGH 9 January 1962 VersR 1962, 351.
[181] Giesen D (1988) (n9) 195; RG 12 October 1909 JW 1909, 724; RG 5 December 1927 RGZ 119, 204; BGH 3 February 1976 NJW 1976, 1143.
[182] Giesen D (1988) (n9) 196; RG 26 April 1937 RGZ 155, 37.
[183] Stuttgart 28 January 1987 NJW 1987, 2934; Giesen D (1988) (n9) 206 fn 36.

to treat the patient, even though relying on such information may constitute a negligent act.[184]

2 9 10 Court Appointed Experts

German judges seek the assistance and advice of medical experts when hearing and deciding medical law matters. The court itself determines if and what sort of expertise is required. Notwithstanding the contribution of court-appointed medical experts, the court retains the right and obligation *ex officio* to determine what evidence it accepts and uses in arriving at its decisions.[185] Physicians may render emergency treatment as part of a chain of events which have been set in motion by the act or omission of another and may, during such emergency treatment, cause damage to a plaintiff. This may occur where a patient has circulatory or other blood problems[186], spinal problems[187], a latent degenerative knee condition[188], kidney disease[189] or tuberculosis[190]. Under the adequacy theory that an original tortfeasor will be liable for injury which arises from subsequent medical treatment which was necessitated by the events which he originally caused.[191] This is the case whether the subsequent injury arose as a result of standard or substandard medical care[192] unless such treatment is

[184] BGH 22 December 1959 VersR 1960, 475; BGH 25 February 1960 VersR 1960, 369.
[185] Deutsch E "On Expert Testimony: The Supreme Court of the Federal Republic of Germany 2 September 1977" (1983) *Med & Law* 349; Griessbach L "Medical Malpractice Litigation in Germany (Private)" (2004) *Dermopathology: Practical & Conceptual* (https:///www.derm101.com/dpc-archive/july-september-2004-volume-10-no.3/) (accessed on 24 April 2018). See also Giesen D "Medical Malpractice and the Judicial Function in Comparative Perspective" (1993) *Medical Law International* 3 10 – 16. Schlesiger C *Der medizinische Behandlungsfehler* (2013); Singer I *Der medizinischer Behandlungsfehler* (2013). See further 2 June 1987 VI ZR 174/86 VersR 1987, 1238; 2 March 1993 VI ZR 104/92 VersR 1993, 749; 14 December 1993 VI ZR 67/93 VersR 1994, 480, 482; 10 May 1994 VI ZR 192/93 VersR 1994, 984; 22 February 2000 VI ZR 100/99 VersR 2000, 766; 27 March 2001 VI ZR 18/00 VersR 2001, 859 17 September1985 VI ZR 12/84 VersR 1985, 1187 1188; 9 June 1992 VI ZR 222/91 VersR 1992, 1015, 1016; 29 September 1992 VI ZR 234/91 VersR 1993, 245, 247; 27 September 1994 VI ZR 284/93 VersR 1995, 195, 196; BGHZ 40, 84, 86; 24 February 1987 -VI ZR 295/85 VersR 1988, 290, 291; 27 September 1994 VI ZR 284/93; 5 July 1972 VIII ZR 157/71 NJW 1972, 1673; 24 October 1990 XII ZR 101/89 -NJW 1991, 1547, 1548.
[186] RG 22 June 1911 JW 1911, 754.
[187] BGH 10 May 1966 VersR 1966, 737.
[188] BGH 23 October 1984 VersR 1985, 60.
[189] BGH 30 June 1987 VersR 1987, 1040; Frankfurt am Main 14 May 1970 MDR 1971, 44.
[190] BGH 2 April 1968 VersR 1968, 648.
[191] Giesen D (1988) (n9) 211; BGH 2 July 1957 BGHZ 25, 86; BGH 12 February 1963 VersR 486.
[192] RG 22 June 1911 JW 1911 754; RG 3 June 1921 RGZ 102, 230; BGH 23 October 1951 BGHZ 3, 261; BGH 25 September 1952 BGHZ 7, 198; BGH 9 January 1962 VersR 1962, 351; BGH 24 March 1964 NJW 1964, 1363; BGH 19 November 1971 BGHZ 57, 245; BGH 16 February 1972 BGHZ 58, 162; LG München 14 December 1983 VersR 1985, 350.

"inexcusably bad"[193] or of such a poor nature as to constitute a *novus actus interveniens* which commences a new series of events for which the intervening medical practitioner would be liable.[194]

2 9 11 *Patientenrechtegesetz* (2013)

The *Patientenrechtegesetz* was promulgated in Germany on 26 February 2013.[195] Its stated purpose is to codify the main principles of medical law in Germany which were mostly contained in the BGB and case-law.[196] The introduction of the *Patientenrechtegesetz* occurred through an amendment of the BGB which incorporated several new subsections to §630 of the BGB. Those sections deal *inter alia* with treatment in accordance with medical standards which are generally recognised at the time of the treatment ("treatment errors")[197], errors in the provision of information about treatment[198], informed consent[199], record-keeping[200] and the burden of proof[201]. As far as the burden of proof is concerned the codifications expressly creates certain presumptions, for instance §630h (1) provides that:

> Ein Fehler des Behandelnden wird vermutet, wenn sich ein allgemeines Behandlungsrisiko verwirklicht hat, das für den Behandelnden voll beherrschbar war und das zur Verletzung des Lebens, des Körpers oder der Gesundheit des Patienten geführt hat.

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[193] Giesen D (1988) (n9) 211; RG 22 June 1911 JW 1911, 754.
[194] Giesen D (1988) (n9) 212; RG 22 June 1911 JW 1911, 754; RG 3 June 1921 RGZ 102, 230; BGH 23 October 1951 BGHZ 3, 261, BGH 28 January 1986 VersR 1986, 601; Stuttgart 28 January 1987 NJW 1987, 2934.
[195] Federal Law Gazette I 2013, 277; http://www.bundesaerztekammer.de/recht/gesetze-und-verordnungen/patientenrechtegesetz/ (accessed 4 May 2018); Katzenmeier C "Der Behandlungsvertrag – Neuer Vertragsatypus im BGB (The Treatment Contract – New Type of Contract in the Civil Code)" (2013) *Neue Juristische Wochenschrift* 817; Stauch MS "The 2013 German Patients' Rights Act – Codifying Medical Malpractice Compensation" (2015) *Journal of European Tort Law* 85ff.
[196] http://www.loc.gov/law/foreign-news/article/germany-patients-rights/ (accessed 4 May 2018; file:///C:/Users/polit/Downloads/Patientenrechtegesetz_BGBl.pdf (accessed 4 May 2018).
[197] §630a "*Vertragstypische Pflichten beim Behandlungsvertrag*".
[198] §630c "*Mitwirkung der Vertragsparteien; Informationspflichten*".
[199] §630d "*Einwilligung*"; §630e "*Aufklärungspflichten*".
[200] § 630f "*Dokumentation der Behandlung*".
[201] § 630h "*Beweislast bei Haftung für Behandlungs- und Aufklärungsfehler*". The full text is available at file:///C:/Users/polit/Downloads/Patientenrechtegesetz_BGBl.pdf (accessed 4 May 2018). See also generally Schlesiger C (2013) (n185); Singer I (2013) (n185); Gerhlein C *Grundwissen Arzthaftungsrecht* (2013).

And §630h (5) provides as follows in respect of gross negligence[202]:

Liegt ein grober Behandlungsfehler vor und ist dieser grundsätzlich geeignet, eine Verletzung des Lebens, des Körpers oder der Gesundheit der tatsächlich eingetretenen Art herbeizuführen, wird vermutet, dass der Behandlungsfehler für diese Verletzung ursächlich war. Dies gilt auch dann, wenn es der Behandelnde unterlassen hat, einen medizinisch gebotenen Befund rechtzeitig zu erheben oder zu sichern, soweit der Befund mit hinreichender Wahrscheinlichkeit ein Ergebnis erbracht hätte, das Anlass zu weiteren Maßnahmen gegeben hätte, und wenn das Unterlassen solcher Maßnahmen grob fehlerhaft gewesen wäre.

3 ENGLAND & WALES

3 1 General

English law is regarded as the parent of all modern-day "Common Law"[203] systems and has historically been regarded as primarily judge-made law, without extensive codification (as is the case in Germany) of legal rules.[204] Case law was traditionally regarded as the most important source of English law.[205] According to David & Brierley English law (and English common law for that matter) is typically found in case law.[206] Legislation has traditionally occupied a secondary position in English law and was limited to correcting or complementing the work accomplished by judicial

[202] See also OLG Oldenburg 25 August 2004; Sommer SA "Medical Liability and Patient Law in Germany: Main Features with Particular Focus on Treatments in the Field of Interventional Radiology" (2016) *Fortsch Röntgenstr* 353 355 fn 16; Palmer E "Germany: Patients' Rights" (2013) at http://www.loc.gov/law/foreign-news/article/germany-patients-rights/: "An important issue that was already resolved by case law and has now been codified in section 630h of the Civil Code is the distribution of the burden of proof in medical malpractice cases. The provision is interpreted as continuing to adhere to the basic principle of compensation in breach of contract situations, according to which the claimant must prove the injury, the violation of a contractual duty, and the causal connection between the two (Civil Code, § 280). However, in egregious cases in a medical treatment context, this burden of proof is reversed through various presumptions. Thus a treatment error is presumed when an injury occurs that corresponds to a known risk inherent in the treatment that the physician should have been able to control. Also, the physician is presumed to be at fault for an error if he has not recorded the course of the treatment or not kept records. Causation is presumed if the physician carried out a procedure for which he had not been certified and also if the physician committed a serious treatment error that is capable of causing the injury at issue (Civil Code § 630h)."

[203] Indication the Anglophone systems descended from English law, as opposed to "common law" within any particular legal system.

[204] For a detailed discussion of English legal history and its influence in modern Common Law systems see Zweigert H & Kotz H (1998) (n1) 188ff. A comprehensive discussion of the English law of torts falls outside the scope of this work.

[205] See Weir T *Tort Law* (2002) 1 – 28 for an exposition of the historical development, classification, intricacies and similarities of, as well as the main differences between torts and principles of delict in European systems.

[206] David R & Brierley JEC *Major Legal Systems in the World Today* (1985) 366.

decisions. The position is today, however, changed to a large extent as statutory instruments and delegated or subordinate legislation can no longer be regarded as subordinate. At the date of writing of this dissertation, the United Kingdom has commenced negotiations to exit the European Union.[207] The impact of this decision on the relationship between decisions of the European courts and legislation emanating from the European Parliament is entirely uncertain.[208] It is not clear whether English law will retain certain rights and legal principles which have found indirect incorporation in English case law through the years, or whether (unlikely as it may be) the English legal clock will be turned back to 1990[209], or, absurdly, even to 1973.[210] In any event, whatever the results of "Brexit", legislation, together with custom and legal writing, can still today be regarded as important in English law as it is on the European continent.[211] English law is also developed by judicial decisions in the interpretation of legislation and follows, like South African law, a rule of precedent. Decisions of the House of Lords, for example, bind all other courts and itself. The decisions of the Court of Appeal bind all lower courts except in criminal matters, and so on.[212]

3 2 Tort Liability

Rogers defines a tort as follows[213]:

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[207] http://edition.cnn.com/2017/03/29/europe/article-50-brexit-theresa-may-eu/ "Brexit Begins: UK Triggers Article 50 to Begin EU Divorce" (Accessed 28 September 2017). Although it is highly unlikely that the United Kingdom will turn its back on human rights and civil liberties which have developed during its membership of the European Union, the precise effect of Brexit and a return to national parliamentary sovereignty on jurisprudence in the United Kingdom remains to be seen.

[208] Precisely how this decision and its implementation will neutralise such Continental legal principles as have been indirectly introduced into English law since 1973 is further entirely uncertain.

[209] The United Kingdom signed the Maastricht Treaty in 1990.

[210] The Human Rights Act 1998 opened the door for the introduction of comparative and indirect incorporation of principles contained in European Human Rights instruments. See in general Feldman D *Civil Liberties and Human Rights in England and Wales* (2002). See also McGoldrick D "The United Kingdom's Human Rights Act 1998 in Theory and Practice" (2001) *International and Comparative Law Quarterly* 906; Rogers WVH *Winfield and Jolowicz on Tort* (2002) 51 – 59, 91 – 92. Any radical departure from the spirit and tenets of the established European Human Rights instruments would, most probably, be highly unlikely.

[211] David R & Brierley JEC (1985) (n206) 366ff.

[212] David R & Brierley JEC (1985) (n206) 383.

[213] Rogers WVH (2002) (n210) 4 and generally 1 – 42. Winfield's definition has subsequently been subjected to much criticism – see Rogers WVH (2002) (n210) 19 – 20. See also Weir T (2002) (n205) 11: "Tort is more like criminal law, for just as there are different crimes, such as burglary or blackmail or driving without due care and attention, so there are several different torts; and just as one cannot say that a person is a criminal without specifying what particular offence he committed, so a person is not a tortfeasor unless he has committed a specific tort, that is, unless all the requirements for liability in that particular tort are met, all its ingredients, so to speak, are present." See also Ormerod D *Smith and*

Tortious liability arises from the breach of duty primarily fixed by law; this duty is towards persons generally and its breach is redressible by an action for unliquidated damages.

There are different ways in which liability in tort may arise[214]:

(a) Liability may be imposed as a legal consequence of a person's act, or of his omission if he is under a legal duty to act. Liability may also be imposed upon one person as the legal consequence of the act or omission of another person with whom he stands in some special relationship such as that of employer and servant.

(b) In most cases, liability is based upon fault: sometimes an intention to injure is required, but more often negligence is sufficient. In other cases, which are called cases of strict liability, liability is in varying degrees independent of fault.

(c) Whereas most torts require damage resulting to the claimant which is not too remote a consequence of the defendant's conduct, a few, such as trespass in some, or perhaps all, of its various forms and libel, do not require proof of actual damage.

The main form of liability in tort[215] relevant to the present discussion is the liability arising from torts dealing with the breach of a duty of care (negligence), torts in respect of personal injuries and death, and "fault"-based torts.[216] A plaintiff (or "claimant") in English law must show a causal link between the loss he has suffered and the

Hogan Criminal Law (2002) 43; Cross R & Jones PA *Criminal* Law (2006) 69ff; Herring J *Criminal Law Text, Cases and Materials* (2006) 102ff; Allen M *Textbook on Criminal Law* (2007) 34ff.

[214] Rogers WVH (2002) (n210) 60. See also Castle KF (2013) 1 "Battling Bolam: Doctors 1, Patients 0" (2013) *UK Law Students Review* 64 66 – 68; *Donoghue v Stephenson* [1932] AC 562.

[215] The present discussion is limited to civil liability. Whether a particular criminal act has caused harm, injury or death in respect of a complainant is an aspect which should be considered as a question of fact by a jury, but the jury may only reach such a conclusion in accordance with the legal principles explained to them by a judge. See; *Woolmington v DPP* [1936] AC 46; *R v Roberts* (1971) 56 Cr App R 95; *R v Smith* [1959] 2 QB 35; *R v Cheshire* [1991] 3 All ER 670 674; Midson B "Teaching Causation in Criminal Law: Learning to Think Like Policy Analysts" (2010) *Legal Education Review* 109; Green S *Causation in Negligence* (2015).

[216] Rogers WVH (2002) (n210) 5, 23 – 24, 27 – 36; Cooper R & Wood SE *Charlesworth & Percy on Negligence* (2006) 365ff; Jones M *Clerk & Lindsell on Torts* (2006) 43ff. A full and comprehensive treatise on the law of tort incorporating a comprehensive discussion of negligence falls beyond the scope of this work and the reader is referred to the standard works on English tort law in this regard. See also Mullany NJ & Handford PR *Tort Liability for Psychiatric Damage* (1993) 339ff; Merry A & McCall Smith RA *Errors, Medicine and the Law* (2003) 136 – 140; Jackson M *Medical Law: Texts, Cases and Materials* (2013); Boylan M *A Practical Guide to Medical Negligence Litigation* (2016); Merry A & Brookbanks W *Merry and McCall Smith's Errors, Medicine and the Law* (2017). For a general discourse on the basis of medical liability in England and Wales consult Kennedy I & Grubb A *Medical Law* (2000) 465ff; Mason JK, McCall Smith RA & Laurie GT *Law and Medical Ethics* (2002) 276 - 279; Grubb A, Laing J & McHale J *Principles of Medical Law* (2010).

defendant's wrong – if the claimant has contributed to the occurrence of his loss his damages may be reduced (or extinguished).[217]

3 3 Causation: Tort Law

3 3 1 General

For any defendant to be liable in negligence (or other crimes or torts), the plaintiff must prove that the defendant's breach of duty caused the plaintiff's damage and the damage must be such that the law regards it proper to hold the defendant responsible for it.[218] Under the legal test for causation, the court ascertains whether liability should, as a matter of law, attach for injuries which is another way of asking whether the plaintiff is permitted to recover damages from the defendant for any injury. In doing so, the court will usually ask whether damage was a reasonably foreseeable consequence of the defendant's conduct or whether the risk of injury was remote.[219] Alternatively, it may reason that the defendant's conduct was not the "real" or "proximate" cause. The complexity of factual situations and the complex nature of the law relating to causation make it a difficult subject in the sphere of medical law. Healy submits that much will depend on the court's instinctive sense of reasonableness in the context of the factual and legal issues arising from the case.[220]

As Hodgson demonstrates, the determination of factual causation as the first step in the determination of causation constitutes "scientific causation" in the sense that "physical laws or the laws of physics are relied on to determine whether there is an uninterrupted sequence of cause and effect stretching from the defendant's breach of duty to the sustaining of the plaintiff's injury".[221] Legal causation, on the other hand, does not involve the finding of the physical facts and their causal interrelation, but

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[217] Rogers WVH (2002) (n210) 209.
[218] Stapleton J "Duty of Care Factors: a Selection from the Judicial Menus" in Fleming J, Cane P & Stapleton J *The Law of Obligations: Essays in Celebration of John Fleming* (1998) 59ff; *Donoghue v Stephenson* [1932] AC 562. For a discussion on the role of causation in the law of contract, see Deakin S, Johnston A & Markesinis B *Markesinis and Deakins' Tort Law* (2013) 254 – 255.
[219] Healy J *Medical Negligence: Common Law Perspectives* (1999) 193. For causation in general consult Brazier M *The Law of Torts (Street on Torts)* (1993) 249ff; Heuston RFV & Buckley RA *Salmond and Heuston on the Law of Torts* (1996) 507 – 527; Jackson RM & Powell JL *Jackson & Powell on Professional Negligence* (1997) 717 – 737; Stauch MS "Causation, Risk, and Loss of Chance in Medical Negligence" (1997) *Oxford Journal of Legal Studies* 205 205ff; Weir T (2002) (n205) 67 – 84.
[220] Healy J (1999) (n219) 193.
[221] Hodgson D (2008) *The Law of Intervening Causation* 5.

rather "the separate and value-laden question of the extent to which the community should go in requiring the defendant to pay for damages for which his or her conduct has in fact been a significant factor in producing along with the intervening agency."[222] Predictability and uniformity in the decided case are, according to Hodges, unattainable as a result of the "intuitive and evaluative judgments based on the judicial application of concepts of fairness and justice and various policy considerations."[223] In the context of medical negligence cases, Mason, McCall Smith & Laurie state the following[224]:

> As if the problems of fault were not enough, it will do the plaintiff no good to establish negligence on the part of a defendant doctor unless he is able to prove that the damage he has suffered was caused by that negligence. This may be particularly difficult in the context of medicine, where there may be a variety of possible independent explanations for the occurrence of a condition. Thus, if a person brings an action for 'nervous shock', it may well be arguable that the symptoms complained of are those of a psychiatric state which existed before the claimed precipitating event.

3 3 2 Burden of Proof

3 3 2 1 Civil Standard of Proof

As in other instances of civil litigation, the plaintiff bears the onus of proving the causative link between the breach of duty and damage. Proof must be provided on the balance of probabilities.[225] The difficulty involved in proving causation in cases of medical law is that the plaintiff's condition may be the result of natural progression or other physiological processes as much as it may be from the defendant's breach.[226] The defendant's breach may be only one of several independent causal agents

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[222] Hodgson D (2008) (n221) 5. See also Deakin S, Johnston A & Markesinis B (2013) (n218) 241ff.
[223] Hodgson D (2008) (n221) 5.
[224] Mason JK, McCall Smith RA & Laurie GT (2002) (n216) 297. See also *Ashcroft v Mersey Regional Health Authority* [1983] 2 All ER 245 (removal of granulation tissue with paralysis of the facial nerve); *Loveday v Renton* [1990] Med LR 117 (pertussis vaccine causing brain damage); *Best v Wellcome Foundation Ltd* [1994] 5 Med LR 81 (brain damage after administration of vaccine); *Thompson v Blake-James* (1998) 41 BMLR 144 (development of post-measles encephalitis and negligent vaccination). See also *Howard v Wessex RHA* [1994] 5 Med LR 57 (injury caused by natural consequences not by health authority) and *Glass v Cambridge HA* [1995] 6 Med LR 91.
[225] Kennedy I & Grubb A (2000) (n216) 465; Jones M (2006) (n216) 47.
[226] Kennedy I & Grubb A (2000) (n216) 465.

responsible for the plaintiff's damage.[227] The state of medical science may also be such that experts may disagree as to the exact aetiology of the plaintiff's condition.[228]

3 3 2 2 Criminal Standard of Proof

In *Woolmington v Director of Public Prosecutions*[229] the burden and standard of proof in criminal cases[230] were set out by the House of Lords. Viscount Sankey stated[231]:

> Through-out the web of the English Criminal Law one golden thread is always to be seen that it is the duty of the prosecution to prove the prisoner's guilt subject to what I have already said as to the defence of insanity and subject also to any statutory exception. If, at the end of and on the whole of the case, there is a reasonable doubt, created by the evidence given by either the prosecution or the prisoner, as to whether the prisoner killed the deceased with a malicious intention, the prosecution has not made out the case and the prisoner is entitled to an acquittal. No matter what the charge or where the trial, the principle that the prosecution must prove the guilt of the prisoner is part of the common law of England and no attempt to whittle it down can be entertained.

Medical practitioners may be convicted *inter alia* of assault and battery[232], murder[233] or manslaughter[234]. In *R v Smith*[235] V was stabbed by D with a bayonet. This action pierced V's lung, an injury which went undiagnosed by the individuals who attended him. He was also dropped twice on the way to the medical station. The medical officer failed to properly diagnose the seriousness of V's condition and provided incorrect treatment, which likely increased the risk of V's death. V might not have died had it

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[227] *Wilsher v Essex Area Health Authority* [1986] 3 All ER 801 (CA); [1988] 1 All ER 871 (HL).
[228] *Loveday v Renton* [1992] 3 All ER 184 (QBD).
[229] [1935] AC 462.
[230] A comprehensive discussion of the general principles of criminal law in England falls outside the scope of the present work. See generally Smith J *Criminal Law* (1999); Card R *Cross & Jones on Criminal Law* (1998); Jefferson M *Criminal Law* (2001).
[231] *Woolmington v Director of Public Prosecutions* [1935] AC 462 464.
[232] Smith J (1999) (n230) 401 – 402; Card R (1998) (n230) 141 – 149; Jefferson M *Criminal Law* (2001) 533ff; Skegg PDG *Law Ethics and Medicine* (1988) 32 – 38. The crimes may be committed separately and distinctly from one another – see section 39 Criminal Justice Act 1988; *R v Rolfe* (1952) 36 Cr App Rep 4; *R v Ireland* p1997] 4 All ER 225 (HL).
[233] Smith J (1999) (n230) 326ff; Jefferson M (2001) (n230) 55 – 57. See also Card R (1998) (n230) 182 – 191; *R v Cunningham* [1957] 2 All ER 412 (CCA).
[234] Jefferson M (2001) (n230) 511ff; *R v Church* [1966] 1QB 59 (CCA); *R v Moloney* [1985] 1 All ER 1025 (HL); R *v Watson* [1989] 2 All ER 865 (CA); *R v Adomako* [1994] 3 All ER 79 (HL); *R v Gurphal Singh* [1999] Crim LR (July); *R v Hughes* [2013] UKSC 56, [2013] 1 WLR 2461 (SC); *R v Rose* [2017] EWCA Crim 1168. See also Arlidge A "Criminal Negligence in Medical Practice" (1998) *Medico-Legal Journal* 3; McCall Smith A "Criminal or Merely Human?: The Prosecution of Negligent Doctors" (1995) *Journal of Contemporary Health Law* 131; Storey T "Unlawful and Dangerous: A Comparative Analysis of Unlawful Act Manslaughter in English, Australian and Canadian Law" (2017) *J Crim L* 143 151 – 160.
[235] [1959] 2 QB 35, [1959] 2 All ER 193.

not been for the provision of incorrect treatment. D's conviction was affirmed and the court said that the original injury was still an "operating" cause of V's death. The stab wound and the subsequent loss of blood were immediate factors causing V's death.[236]

3 3 2 3 Coronial Inquiries

The Coroners and Justice Act 2009 contains the statutory framework within which coroners perform their functions. Section 5 of the 2009 Act provides, under the heading 'Purpose of Investigation'[237]:

5. Matters to be ascertained

(1) The purpose of an investigation under this part into a person's death is to ascertain -

(a) who the deceased was;

(b) how, when and where the deceased came by his or her death;

(c) the particulars (if any) required by the 1953 Act to be registered concerning the death.

(2) Where necessary in order to avoid a breach of any Convention rights (within the meaning of the Human Rights Act 1998 … the purpose mentioned in subsection (1)(b) is to be read as including the purpose of ascertaining in what circumstances the deceased came by his or her death.

(3) Neither the senior coroner conducting an investigation under this part into a person's death nor the jury (if there is one) may express any opinion on any matter other than:

(a) the questions mentioned in subsection (1)(a) and (b) (read with subsection (2) where applicable);

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[236] See also Williams G "Causation in Homicide" [1957] *Crim LR* 429; Simester AP "Causation in (Criminal) Law" (2017) *Law Quarterly Review* 416. *R v Jordan* (1956) 40 Cr App R 152; *R v Smith* [1959] 2 QB 35, [1959] 2 All ER 193; *R v Blaue* [1975] 1 WLR 1411, [1975] 3 All ER 446.

[237] The Coroners and Justice Act 2009. See also *R (On the application of Julie Hambleton and Others v Coroner for the Birmingham Inquests and Others* [2018] 4 WLR 37, [2018] EWHC 56 (Admin), [2018] WLR(D) 54.

(b) the particulars mentioned in subsection (1)(c).

Findings in respect of causation in coronial inquiries are made on the criminal standard of beyond reasonable doubt.[238] Freckelton describe the main problems plaging the issue of causation in the context of coronial enquiries as follows[239]:

A tension can be discerned between the vision harboured by many coroners as to what should constitute the scope of the inquest process and the perception articulated by both superior court reviews of coronial hearings and a series of government-sponsored reviews of the modern inquest. The issue goes beyond a hegemonic assertion of authority by contemporary coroners. It revolves around an attempt by one component of the legal/bureaucratic process to fill a void left by deficits in both the civil and criminal law – to address constructively scenarios in which members of the community meet their deaths unnecessarily and prematurely. In good part it is a public health issue.

In *R v HM Coroner for North Humberside and Scunthorpe; ex parte Jamieson*[240] Sir Thomas Bingham MR made the following important finding in respect of the duties of coroners[241]:

It is the duty of the coroner as the public official responsible for the conduct of inquests, whether he is sitting with a jury or without, to ensure that the relevant facts are fully, fairly and fearlessly investigated … He must ensure that the relevant facts are exposed to public scrutiny, particularly if there is evidence of foul play, abuse or inhumanity. He fails in his duty if his investigation is superficial, slipshod or perfunctory. But the responsibility is his. He must set the bounds of the inquiry. He must rule on the procedure to be followed. His decisions, like those of any other judicial officer, must be respected unless and until they are varied or overruled.

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[238] Freckelton IR "Causation in Coronial Law" in Freckelton IR & Mendelson D *Causation in Law and Medicine* (2002) 351.

[239] Freckelton IR (2002) (n238) 339. See also Freckelton IR "Expert Proof in the Coroner's Jurisdiction" in Selby H *The Aftermath of Death* (1992).

[240] [1995] QB 1.

[241] *R v HM Coroner for North Humberside and Scunthorpe ex parte Jamieson* [1995] 1 QB 1 26. See also *R v South London Coroner, ex parte Thompson* (1982) 126 SJ 625; *R v HM Coroner for Birmingham, ex parte Secretary for State for the Home Department* (1990) 155 JP 107; *McKerr v Armagh Coroner* [1990] 1 WLR 649, 656 – 657; *R v Inner West London Coroner, ex parte Dallaglio* [1994] 4 All ER 139 155; *R v Southwark Coroner, ex parte Fields* (1998) 162 JP 411; *R v HM Coroner for Western District of Somerset, ex parte Middleton* [2004] 2 AC 182 para [36]; *R (Lin) v Secretary of State for Transport* [2006] EWHC 2575 (Admin) para [56]; *My Care (UK) Ltd v HM Coroner for Coventry* [2009] EWHC 3630 para [4]; *R v Coroner for Lincolnshire, ex parte Hay* (1999) 163 JP 666; *R (Ahmed) v South and East Cumbria Coroner* [2009] EWHC 1653 (Admin) para [35]; *R v Secretary of State for Defence, ex parte Smith* [2010] UKSC 29 para [208]; *Mack v HM Coroner for Birmingham* [2011] EWCA Civ 712 (CA) para [8]; *The Court of Protection: Re X and others (Deprivation of Liberty) (Number 2)* [2014] EWCOP 37 para [10]; https://www.judiciary.gov.uk/wp-content/uploads/2016/02/law-sheets-no-5-the-discretion-of-the-coroner.pdf (accessed 2 May 2018); Coroners Act 1988 section 11(5)(b).

Sir Thomas Bingham further held that the coroner's duty is not to ascertain how the deceased died for the purposes of criminal or civil responsibility[242]:

> It is not the function of a coroner or his jury to determine or appear to determine, any question of criminal or civil liability, to apportion guilt or attribute blame. . . the prohibition on returning a verdict so as to appear to determine any question of civil liability is unqualified, applying whether anyone is named or not.

The coroner's verdict may not appear to determine any question of criminal liability on the part of a named person.[243] In *R (On the application of Julie Hambleton and Others v Coroner for the Birmingham Inquests and Others*)[244] Simon LJ stated[245]:

> Seventh, although there is reference in *Dallaglio* to the 'chain of causation', *we do not understand the Master of the Rolls to have been suggesting a test of causation as it is understood in the law of contract and tort*; but rather to be envisaging a point at which the investigation will become too remote from the circumstances of the death. An inquest must have practical limits which will be circumscribed by considerations of reasonableness and proportionality.

Causation (for purposes of tort and criminal law) therefore clearly remains the preserve of the English courts, and coroners cannot determine causation for the purposes of liability.

3 4 Factual Causation

English law recognises the need for the establishment of factual causation and recognises the application of the *conditio sine qua non* theory.[246] The "but for" test has received nearly universal acceptance as a tool for achieving the determination of

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[242] *R v HM Coroner for North Humberside and Scunthorpe ex parte Jamieson* [1995] 1 QB 1 8. See also Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 341 – 344. See also *R v Inner West London Coroner ex parte Dallaglio and another* [1994] 4 All ER 139 164: "It is for the coroner conducting an inquest to decide, on the facts of a given case, at what point the chain of causation becomes too remote to form a proper part of his investigation."
[243] *R v HM Coroner for North Humberside and Scunthorpe ex parte Jamieson* [1995] 1 QB 1 24.
[244] [2018] 4 WLR 37, [2018] EWHC 56 (Admin), [2018] WLR(D) 54.
[245] [2018] 4 WLR 37, [2018] EWHC 56 (Admin), [2018] WLR(D) 54 para 32 [emphasis added].
[246] Rogers WVH (2002) (n210) 213; Jones M (2006) (n216) 44 – 45. See also Giesen D (1988) (n9) 177 – 178.

factual causation in common-law jurisdictions.[247] If the result would not have happened "but for" a certain event then that event is a cause, and if it would have happened in any event, then it is not a cause.[248] Rogers is of the view that[249]:

> Of course, this test will produce a multitude of causes which are not legally effective from the point of view of allocating responsibility, but as has been emphasised above the "but for" test merely acts as a preliminary filter to eliminate the irrelevant.

The application of the "but for" test in English law is illustrated by *Barnett v Chelsea and Kensington Hospital Management Committee*[250] where the plaintiff's husband, a night watchman, attended at the defendant's hospital and complained of vomiting after drinking tea. He was told to go home and consult his doctor later, which amounted to a breach of the hospital's duty of care. Later that day the claimant's husband died of arsenic poisoning, and the coroner's verdict was of murder by persons unknown. The hospital's breach of duty was held not to be a cause of the death because it was probable that it was impossible, in any event, to have saved the deceased's life by the time he arrived at the hospital and the claimant's claim failed.[251]

Khoury[252] states the following about the decision in *Barnett v Chelsea and Kensington Hospital Management Committee*[253]:

> As illustrated by *Barnett*, the "but for" test necessarily involves questions about what would have happened if the past chain of events had been different. The answer to these questions may depend on

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[247] Khoury L (2006) (n122) 18; Kennedy I & Grubb A (2000) (n216) 469.
[248] Rogers WVH (2002) (n210) 209 - 213; Kennedy I & Grubb A (2000) (n216) 469; See also Khoury L (2006) (n122) 18: "According to this theory, every condition in the absence of which the harm would not have occurred in the way it did occur is a cause of it."
[249] Rogers WVH (2002) (n210) 213.
[250] [1968] 1 All ER 1068 QB; *Airedale National Health Trust v Bland* [1993] AC 789 (HL); Kennedy I & Grubb A (2000) (n216) 469 – 470; See also Kennedy I "Switching off Life Support Machines: The Legal Implications" (1977) *Crim LR* 443 452; Goold I & Maslen H "Obliging Surgeons to Enhance: Negligence Liability for Uncorrected Fatigue and Problems with Proving Causation" (2014) *Medical Law Review* 427 433 – 434; McGee A "Does Withdrawing Life-Sustaining Treatment Cause Death or Allow the Patient to Die?" (2014) *Medical Law Review* 26.
[251] Rogers WVH (2002) (n210) 214. See also Stauch MS "Missed Medical Diagnoses and the Case for Permitting Proportionate Recovery under English Law" (2005) *Journal of Academic Legal Studies* 17.
[252] Khoury L (2006) (n122) 19.
[253] [1968] 1 All ER 1068 QB; *Airedale National Health Trust v Bland* [1993] AC 789 (HL); Kennedy I & Grubb A (2000) (n216) 469 – 470; See also Kennedy I "Switching off Life Support Machines: The Legal Implications" (1977) *Crim LR* 443 452; Goold I & Maslen H (2014) (n250) 433 – 434; McGee A (2014) (n250) 26.

the assessment of a hypothetical state of facts, as well as on an inquiry into the hypothetical behaviour of the plaintiff, a third party, or the defendant.

As demonstrated above, this test, as it is applied in English law, therefore requires proof that the damage suffered by the plaintiff would not have been suffered "but for" the defendant's breach of duty. Result X (the plaintiff's injury or damage) would not have happened had it not been for cause Y (the defendant's actions or breach of duty).[254] If this cannot be demonstrated, causation is not proved and the defendant, regardless of any breach of duty, is not liable. If the defendant can prove that the damage would have occurred in any event, regardless of any breach of duty on his part, then the plaintiff's action will fail.[255]

The "but for" test becomes difficult to apply successfully in instances where several different factors contribute to the plaintiff's damage, or there are successive causes, each of which is sufficient. Here it was necessary for the courts to create mitigating devices to improve the application of the "but for "test. One of these mitigating devices results in the plaintiff being able to succeed if it can be shown that the defendant's breach was a principal or substantial cause of the damage suffered, if not the only cause.[256] Direct evidence about hypothetical situations rarely being available, the matter must be decided by generalisations about how things and people normally behave or ought to behave in given circumstances.[257] As Khoury opines, this may in many uncomplicated cases, simply be an evident inference, but in some cases, it may be entirely impossible to reconstruct historical events to prove that things would have been different absent the negligence. Though it is considered to be one of the most useful tools in determining factual causation without relying on solely the judiciary's discretion, the "but for" test is only one of many tools in the arsenal of a judge.[258]

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[254] Kennedy I & Grubb A (2000) (n216) 469 - 470; Rogers WVH (2002) (n210) 209ff.
[255] Kennedy I & Grubb A (2000) (n216) 469 – 470. *Barnett v Kensington and Chelsea HMC* [1968] 1 All ER 1068 (QBD); Jackson RM & Powell JL (1997) (n219) 717.
[256] Kennedy I & Grubb A (2000) (n216); *Bonnington Castings v Wardlaw* [1956] AC 613 (HL). See also Stauch MS (2011) (n12) 208 – 209; Jackson RM & Powell JL (1997) (n219) 717.
[257] Khoury L (2006) (n122) 19.
[258] Khoury L (2006) (n122) 19, 20, 20 fn 47.

3 4 1 *Conditio Sine Qua Non* ("But For") And Multiple Causation

3 4 1 1 Limitations: "But For" Test

In many instances the use of the "but for" test adequately meets the needs of the determination of causation, but many areas exist in which the test is not workable or it produces absurd results.[259] As Khoury states[260]:

> [The application of the "but for" test] may "in some cases *prevent the selection of any cause*, with the inevitable result that the plaintiff fails to meet his burden of proof. Such a hurdle is most frequently encountered where a plurality of causal factors is involved in the production of the injury. For instance, it occurs where damage is caused by two (or more) events, which combine to produce the total outcome, in instances in which each of them would have been sufficient to individually produce it. In such cases, the strict application of the *causa sine qua non* test leads to the absurd result that neither event would qualify as a cause since the defendant can invoke the existence of alternative explanations for the plaintiff's injury as proof that the damage would have happened without his negligence.

As in other jurisdictions, English law recognises that the application of the *conditio sine qua non* theory leads to results which appear to defy common sense where there is more than one cause which would, on its own, be sufficient to produce the result in question.[261] Rogers cites the "multiple shooters" example, which inevitably presents itself when considering the *conditio sine qua non* theory stating[262]:

> [In the case where A and B at the same time inflict fatal injuries on C] there is no doubt that, however we justify it, each wrongdoer is liable in full for the loss, subject to the right of contribution against the other (a matter which does not concern the claimant).

Where the injury is produced by a combination of the defendant's tort and some other innocent cause such as where the claimant contracted a lung condition from the combination of dust (which the defendants had created in breach of safety regulations)

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[259] Khoury L (2006) (n122) 19 – 20 and 19 fn 43. Rogers WVH (2002) (n210) 214 – 218.
[260] Khoury L (2006) (n122) 20.
[261] Rogers WVH (2002) (n210) 214.
[262] Rogers WVH (2002) (n210) 214.

and other dust which was the inevitable result of the activity in question, the position would be the same.[263]

3 4 1 2 Material Contribution To Damage

Alternatives to the "but for" test become important where uncertainty in scientific evidence prevents an accurate identification of a single cause out of several possible causes.[264] The strict ("all-or-nothing") approach to the application of the "but for" test in such circumstances has "clearly offended the judges' sense of justice, and they have responded by finding alternative ways of assessing the existence of the causal link to reach what they thought was the just result."[265] According to Khoury, the latter approach demonstrates that beyond the rigid theoretical notion of cause lies a certain sense of "fairness" which is exercised by judges.[266] Judges in common-law jurisdictions have found causation to exist in cases where it would not ordinarily be possible (taking into account the facts and expert evidence in a matter) to find that a certain defendant's act or omission caused the injury in terms of the traditional "but for" test.[267]

3 4 1 3 Bonnington Castings v Wardlaw

In making a decision when determining causation and the factors contributing to the damage are cumulative, the court, following *Bonnington Castings v Wardlaw*[268] has the option to find the defendant liable. This case involved a steel dresser whose employment exposed him to silica dust emanating from a pneumatic hammer at which he worked, as well as certain swing grinders. The swing grinders were not kept from obstruction, and in this respect, the owners of the factory and the defendants were in breach of a statutory duty. The plaintiff contracted pneumoconiosis, and medical

[263] *Bonnington Castings Ltd v Wardlaw* [1956] AC 613. See also Rogers WVH (2002) (n210) 214.
[264] Khoury L (2006) (n122) 21.
[265] Khoury L (2006) (n122) 21.
[266] Khoury L (2006) (n122) 21.
[267] Khoury L (2006) (n122) 21, 21 fn 51, 21 fn 52. See also Edmond G & Mercer D "Rebels Without a Cause? Judges, Medical and Scientific Evidence and the Uses of Causation" in Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 99; MacFarlane PJM *Health Law in Australia and New Zealand* (2002) 129.
[268] [1956] AC 613. See also Rogers WVH (2002) (n210) 214; Jones M (2006) (n216) 63 – 64; Buchan A *Clinical Negligence: A Practical Guide* (2012) 139 – 141; *Nicolson v Atlas Steel Foundry and Engineering Co Ltd* [1957] 1 WLR 613.

evidence demonstrated that pneumoconiosis is caused by a gradual accumulation of minute particles of silica. While both sources of dust contributed to the contraction of the disease, it was impossible to assess the proportion of dust inhaled by the plaintiff (referred to as "guilty dust") which came from the swing grinders. While this prevented the court from finding that, "but for" the "guilty dust", the steel dresser would have suffered the injury, the court nevertheless allowed his claim on the basis that the "guilty dust" had materially contributed to the injury.[269] It is important to note that this test is only relevant where courts are faced with a multiplicity of causes that operate cumulatively.[270] If the factors taken together led to the plaintiff's damage, then the defendant's breach, as a contributing factor, may be held to have made a contribution that can be described as "material", if it is not *de minimis*.[271] Materiality is a question of degree.[272] This test allows recovery in cases in which it was impossible to even approximately quantify the contribution of a particular defendant to the plaintiff's injury.[273] Where any one of a number of distinct factors could have caused the damage, the material contribution principle will not work in the plaintiff's favour. Where there has been a breach of duty, and there is uncertainty as to what may have caused what, the court has a choice of favouring the plaintiff or the defendant. If it chooses the defendant, it can merely decide that the "but for" test is not satisfied and the case is over.[274] On the other hand, if it is thought proper to assist the plaintiff, the court has the option to use the material contribution approach to draw appropriate inferences of fact.[275] The drawback for the plaintiff is to show that the contributing factors were cumulative rather than discrete. Goold & Maslen characterise this case as an example of a divisible harm case, and as a case where cumulative causes of the same type resulted in divisible harm.[276]

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[269] Facts as summarised in Khoury L (2006) (n122) 22. *Bonnington Castings v Wardlaw* supra 623 (Lord Reid) and 626 – 627 (Lord Keith).
[270] Khoury L (2006) (n122) 22 and 22 fn 54.
[271] Kennedy I & Grubb A (2000) (n216) 404; Khoury L (2006) (n122) 22.
[272] Khoury L (2006) (n122) 22.
[273] Khoury L (2006) (n122) 22; *Nicolson v Atlas Steel Foundry and Engineering Co Ltd* [1957] 1 WLR 613 (HL).
[274] Kennedy I & Grubb A (2000) (n216) 405.
[275] *Fitzgerald v Lane* [1987] QB 781.
[276] Goold I & Maslen H (2014) (n250) 443 – 444. See also *Holtby v Brigham & Cowan (Hull) Ltd* [2000] 3 All ER 421 (CA); *Allen v British Rail Engineering Ltd* [2001] EWCA Civ 242 (CA); Bailey SH "Causation in Negligence: What is a Material Contribution?" (2010) *Legal Studies* 167 181; Buchan A (2012) (n268) 149 – 153; Feldschreiber P, Mulcahy LA & Day S "Biostatistics and Causation in Medicinal Product Liability Suits" in Goldberg R (2011) (n120) 179ff, 193 – 194.

Although the material contribution test was developed primarily in relation to industrial injuries and diseases, it has been applied to medical negligence cases which were impossible to decide under the "but for" test.[277]

3 4 1 4 McGhee v National Coal Board

In *McGhee v National Coal Board*[278], the plaintiff was employed at brickworks and claimed that he contracted dermatitis because his employer failed to provide washing facilities at the brickworks, and which would permit him to clean up immediately after work. The plaintiff contracted dermatitis as a result of the prolonged and continued presence of dust on his skin. The defendant raised lack of causation as a defence. The defendant contended that failure to provide an opportunity to bathe immediately after work rather than after a short commute home did not cause the ailment.[279] The plaintiff's expert was unwilling to say that if the plaintiff had been able to wash off the dust immediately after work, he would not have contracted the disease. He would only opine that the failure to provide the showers materially increased the chance, or the risk, that dermatitis might occur. The Court of Sessions held that the plaintiff had to prove his additional exposure caused by bicycling home unwashed caused the disease, in other words, that it was more probable than not that this additional exposure to injury was the cause of the disease. The Court of Sessions held that the plaintiff was unable to prove the cause of his disease. The House of Lords disagreed with this approach.

The House of Lords held that it was unrealistic and contrary to ordinary common sense to hold that the negligence which materially increased the risk of injury did not materially contribute to causing it. This was a question of law, not just of fact. The

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[277] Khoury L (2006) (n122) 22; Jones M (2006) (n216) 68; Bailey SH (2010) (n276) 167; *Wilsher v Essex Area Health* Authority [1998] 1 AC 1074 (HL); *Stockdale v Nicholls* 4 Med LR 198 (QB).

[278] [1972] 3 All ER 1008 (HL). See also De Cruz P *Comparative Healthcare Law* (2001) 252 – 253; Green S "The Risk Pricing Principle: A Pragmatic Approach to Causation and Apportionment Of Damages" (2005) *Law, Probability and Risk* 159 162 – 163; Jones M (2006) (n216) 68 – 69; Sanders J "Risky Business: Causation in Asbestos Cancer Cases (and Beyond?)" in Goldberg R (2011) (n120) 23 – 24; Goldberg R "Medical Malpractice and Compensation in the UK" (2012) *Chicago-Kent Law Review* 131 149 – 150; Stapleton J "Uncertain causes: asbestos in UK courts" in Martin-Casals M & Papayannis DM (2016) (n122) 87ff.

[279] Sanders J in Goldberg R (2011) (n120) 23. See also Miller C "Coal Dust, Causation and Common Sense" (2000) *Modern Law Review* 763.

question of law was whether, on the facts of the case as found, a plaintiff who could not show that the defendant's breach had probably caused the damage of which he complained could nonetheless succeed. Lord Simon of Glaisdale stated his view as follows[280]:

> [A] failure to take steps which would bring about a material reduction of the risk involves, in this type of case, a substantial contribution to the injury.

Lord Salmon said that[281]:

> In the circumstances of the present case, it seems to me unrealistic and contrary to ordinary common sense to hold that the negligence which materially increased the risk of injury did not materially contribute to causing the injury… In the circumstances of the present case, the possibility of a distinction existing between (a) having materially increased the risk of contracting the disease, and (b) having materially contributed to causing the disease may no doubt be a fruitful source of interesting academic discussions between students of philosophy. Such a distinction is, however, far too unreal to be recognised by the common law.

Lord Wilberforce stated the following[282]:

> But I find in the cases quoted an analogy which suggests the conclusion that, in the absence of proof that the culpable addition had, in the result, no effect, the employers should be liable for an injury, squarely within the risk which they created and that they, not the pursuer, should suffer the consequence of the impossibility, foreseeably inherent in the nature of his injury, of segregating the precise consequence of their default.

Lord Reid held that[283]:

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[280] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1013; Miller C (2000) (n279) 767 – 768.
[281] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1015.
[282] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1012.
[283] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1009.

From a broad and practical viewpoint, I can see no substantial difference between saying that what the defender did materially increased the risk of injury to the pursuer and saying that what the defender did made a material contribution to his injury… the medical evidence is to the effect that the fact that the man had to cycle home caked with grime and sweat added materially to the risk that this disease might develop. It does not and could not explain just why that is so. But experience shows that it is so.

Importantly, Lord Reid espoused a broader view of causation in the following part of his speech[284]:

It may be that an accumulation of minor abrasions of the horny layer of the skin is a necessary precondition for the onset of the disease. Or it may be that the disease starts at one particular abrasion and then spreads so that multiplication of abrasions merely increase the number of places where the disease can start and in that way increases the risk of its occurrence. I am inclined to think that the evidence points to the former view. But in a field where so little appears to be known with certainty I could not say that is proved. If it were, then this case would be indistinguishable from Wardlaw's case. But I think that in cases like this we must take a broader view of causation… I cannot accept the distinction drawn by the Lord Ordinary between materially increasing the risk that the disease will occur and making a material contribution to its occurrence. There may be some logical ground for such a distinction where our knowledge of all the material factors is complete. But is has often been said that the legal concept of causation is not based on logic or philosophy. It is based on the practical way in which the ordinary man's mind works in the everyday affairs of life. From a broad and practical viewpoint, I can see no substantial difference between saying that what the defender did materially increased the risk of injury to the pursuer and saying that what the defender did made a material contribution to his injury.

3 4 1 5 Wilsher v Essex Area Health Authority

In *Wilsher v Essex Area Health Authority*[285] the defendant hospital, initially acting through an inexperienced junior doctor, negligently administered excessive oxygen during the post-natal care of a premature child who subsequently became blind. Excessive oxygen was, according to the medical evidence, one of five possible factors that could have led to blindness. On the "balance of probabilities" test, the hospital would not be liable, since it was more likely that one of the alternate risks had caused

[284] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1011. See also Sanders J in Goldberg R (2011) (n120) 24.
[285] [1998] 1 AC 1074 (HL); Kennedy I & Grubb A (2000) (n216) 470 – 478; De Cruz P (2001) (n278) 252 – 253; Khoury L (2006) (n122) 81, 152 – 155; Sanders J in Goldberg R (2011) (n120) 23.

the injury. The Court of Appeal applied the "material increase of risk" test, first espoused in *McGhee v National Coal Board*[286]. The Court found that since the hospital breached its duty and thus increased the risk of harm, and that the plaintiff's injury fell within the ambit of that risk, the hospital was liable despite the fact the plaintiff did not prove the hospital's negligence had caused his injury.

The House of Lords found that it was impossible to say that the defendant's negligence had caused, or materially contributed, to the injury and the claim was dismissed. It also stated that *McGhee v National Coal Board*[287] articulated no new rule of law, but was rather based upon a robust inference of fact.[288] In a minority view, Mustill LJ argued that if it is established that conduct of a certain kind materially adds to the risk of injury, if the defendant engages in such conduct in breach of a common law duty, and if the injury is the kind to which the conduct related, then the defendant is taken to have caused the injury even though the existence and extent of the contribution made by the breach cannot be ascertained. Mustill LJ said the following[289]:

> In the McGhee case, there was only one risk operating, namely that contact of a sweaty skin with brick dust would lead to dermatitis. The fact that such contact did cause the injury was not in dispute… the uncertainty was whether the fault principle had tipped the scale. In the present case, there is greater uncertainty. Instead of a single risk factor known to have caused the injury, there is a list of factors, which cannot be fully enumerated in the current state of medical science, any one of which might have caused the injury. What the defendants did was not to enhance the risk that the known factor would lead to injury, but to add to the list of factors which might do so… The question is whether this makes a crucial difference. The root of the problem lies in the fact that, for reasons of policy, their Lordships' House mitigated the rigour of the rule that the plaintiff must prove that the breach caused the loss, in the interests of achieving a result which was considered to be just. Given that this was a decision based on policy, rather than a chain of direct reasoning, the difficulty is to know whether a similar approach can properly be adopted in the different circumstances of the present case. After much hesitation, I have come to the conclusion that it can. *Reading all the speeches together, the principle applied by the House seems to me to amount to this. If it is an established fact that conduct of a particular kind creates a risk that injury will be caused to another or increases an existing risk that injury will ensue; and if the two*

[286] [1972] 3 All ER 1008 (HL). See also para 3 3 4 4 supra.
[287] [1972] 3 All ER 1008 (HL).
[288] This interpretation of *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) was rejected in *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL).
[289] [1987] QB 730 771 – 772 [emphasis added]. See also the discussion by Sanders J in Goldberg R (2011) (n120) 24 – 25.

parties stand in such a relationship that the one party owes a duty not to conduct himself in that way; and if the first party does conduct himself in that way; and if the other party does suffer injury of the kind to which the risk related; then the first party is taken to have caused the injury by his breach of duty, even though the existence and the extent of the contribution made by the breach cannot be ascertained. If this is the right analysis, it seems to me that the shape taken by the enhancement of the risk ought not to be of crucial significance. In the McGhee case [1973] 1 WLR 1, the conduct of the employers made it more likely that the pursuer would contract dermatitis, and he did contract dermatitis. Here, the conduct of those for whom the defendants are liable made it more likely that Martin would contract RLF, and he did contract RLF. If considerations of justice demanded that the pursuer succeed in the one case, I can see no reason why the plaintiff should not succeed in the other.

Sir Nicholas Browne-Wilkinson, VC dissented from this view. In his speech, he distinguished the matter from *McGhee v National Coal Board*[290] and stated the following[291]:

The position, to my mind, is wholly different from that in the McGhee case [1973] 1 WLR 1 where there was only one candidate (brick dust) which could have caused the dermatitis, and the failure to take a precaution against brick dust causing dermatitis was followed by dermatitis caused by brick dust. In such a case, I can see the common sense, if not the logic, of holding that, in the absence of any other evidence, the failure to take the precaution caused or contributed to the dermatitis. To the extent that certain members of the House of Lords decided the question on inferences or presumptions, I do not consider that the present case falls within their reasoning. *A failure to take preventative measures against one out of five possible causes is no evidence as to which of those five caused the injury*.

3 4 1 6 Fairchild v Glenhaven Funeral Services Ltd

In *Fairchild v Glenhaven Funeral Services Ltd*[292] the deceased had worked for a number of different employers, as a subcontractor for Leeds City Council. During his employment, all of his employers had negligently exposed him to asbestos. The

[290] [1972] 3 All ER 1008 (HL).
[291] *Wilsher v Essex Area Health Authority* [1987] UKHL 11 12 [emphasis added].
[292] [2003] 1 AC 32 (HL). See also Miller C "Judicial Approaches To Contested Causation: Fairchild v Glenhaven Funeral Services In Context" (2002) *Law, Probability and Risk* 119 128 – 136; Jones M (2006) (n216) 71 – 79; Buchan A (2012) (n268) 144 – 149. See also *Blackmore v Department for Communities and Local Government* [2017] EWCA Civ 1136, [2018] 2 WLR 139; *Hawkes v Wamrex Ltd* [2018] EWHC 205 (QB); *Heynike v 00222648 Ltd (formerly Birlec Ltd)* (Unreported Judgment) (Queen's Bench Division 14 March 2018); *Fudge v Hawkins and Holmes Ltd* [2018] EWHC 453 (QB).

deceased contracted pleural mesothelioma and, after his death, his wife sued his employers for negligence. Some other claimants were in similar situations and joined in on the appeal. The main difficulty facing the plaintiff was that a single asbestos fibre inhaled at any time might cause the development of mesothelioma. The risk of contracting an asbestos-related disease increases depending on the amount of exposure to the source thereof. However, because of long latency periods, it is impossible to know when the crucial exposure occurred. There is also a dose-response relationship between exposure and injury, but the disease is equally severe regardless of the level of exposure.[293] Also, no-one understands the mechanism by which asbestos exposure produces the disease. In *Fairchild v Glenhaven Funeral Services Ltd*[294] Lord Bingham stated the following[295]:

> The medical evidence does not permit a finding that mesothelioma is a divisible or cumulative injury and it is not open to a court to infer that it is such an injury or to find that the tortious element of the exposure contributed to the injury. Liability for mesothelioma, unlike other asbestos-related illnesses, cannot therefore be susceptible to apportionment.

Fairchild v Glenhaven Funeral Services Ltd[296] established the principle that a plaintiff may recover upon the proof of risk and not of causation.[297] At the outset of his speech, Lord Bingham set forth six essential criteria necessary for the application of the risk rule, but those criteria were expressly limited to asbestos-related cases[298]:

> If (1) C was employed at different times and for differing periods by both A and B, and (2) A and B were both subject to a duty to take reasonable care or to take all practicable measures to prevent C inhaling asbestos dust because of the unknown risk that asbestos dust (if inhaled) might cause a mesothelioma, and (3) both A and B were in breach of that duty in relation to C during the periods of

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[293] Sanders J in Goldberg (2011) (n120) 26. See also McIvor C "Debunking Some Judicial Myths about Epidemiology and its Relevance to UK Tort Law" (2013) *Medical Law Review* 553, 556. See also Haack S "Correlation and Causation: the "Bradford Hill Criteria" in Epidemiological, Legal and Epistemological Perspective" in Martin-Casals M & Papayannis DM (2016) (n122) 176ff.
[294] [2003] 1 AC 32 (HL).
[295] *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL) 38. See also also Goldberg R (2012) (n278) 150 – 152.
[296] [2003] 1 AC 32 (HL).
[297] Fairchild v Glenhaven Funeral Services [2003] 1 AC 32 (HL) 68; Sanders J in Goldberg (2011) (n120) 26; Miller C (2002) (n292) 119, 135 – 136.
[298] *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL) 40.

C's employment by each of them with the result that during both periods C inhaled excessive quantities of asbestos dust, and (4) C is found to be suffering from a mesothelioma, and (5) any cause of C's mesothelioma other than the inhalation of asbestos dust at work can be effectively discounted, but (6) C cannot (because of the current limits of human science) prove, on the balance of probabilities, that his mesothelioma was the result of his inhaling asbestos dust during his employment by A or during his employment by B or during his employment by A and B taken together, is C entitled to recover damages against either A or B or against both A and B?

The so-called "risk rule" in *Fairchild v Glenhaven Funeral Services Ltd*[299] applies to asbestos cases only.[300] As to whether the rule would apply to non-asbestos cases in the future, Lord Bingham said[301]:

I would, in conclusion, emphasise that my opinion is directed to cases in which each of the conditions specified in (1) – (6) of paragraph 2 above is satisfied and to no other case. It would be unrealistic to suppose that the principle here affirmed will not over time be the subject of incremental and analogical development. Cases seeking to develop the principle must be decided when and as they arise. For the present, I think it is unwise to decide more than is necessary to resolve these three appeals which, for all the foregoing reasons, I concluded should be allowed.

In an important speech, Lord Rodger, like Lord Bingham, provided a set of criteria for the application of the rule in *Fairchild v Glenhaven Funeral Services Ltd*[302]. Importantly, his criteria do not suggest that the risk rule in *Fairchild v Glenhaven Funeral Services Ltd*[303] is restricted to asbestos cases.[304] Lord Roger said the following about the application of the rule[305]:

First, the principle is designed to resolve the difficulty that arises where it is inherently impossible for the claimant to prove exactly how his injury was caused. It applies, therefore, where the claimant has proved all that he possibly can, but the causal link could only ever be established by scientific investigation and the current state of the relevant science leaves it uncertain exactly how the injury was

[299] [2003] 1 AC 32 (HL).
[300] Sanders J in Goldberg R (2011) (n120) 26.
[301] *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL) 68.
[302] [2003] 1 AC 32 (HL).
[303] [2003] 1 AC 32 (HL).
[304] Sanders J in Goldberg R (2011) (n120) 28; *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL) 118 – 119.
[305] *Fairchild v Glenhaven Funeral Services* [2003] 1 AC 32 (HL) 118 – 119.

caused and, so, who caused it. McGhee and the present cases are examples. Secondly, part of the underlying rationale of the principle is that the defendant's wrongdoing has materially increased the risk that the claimant will suffer injury. It is therefore essential not just that the defendant's conduct created a material risk of injury to a class of persons, but that it actually created a material risk of injury to the claimant himself. Thirdly, it follows that the defendant's conduct must have been capable of causing the claimant's injury. Fourthly, the claimant must prove that his injury was caused by the eventuation of the kind of risk created by the defendant's wrongdoing. In McGhee, for instance, the risk created by the defender's failure was that the pursuer would develop dermatitis due to brick dust on his skin and he proved that he had developed dermatitis due to brick dust on his skin. *By contrast, the principle does not apply where the claimant has merely proved his injury could have been caused by a number of different events, only one of which is the eventuation of the risk created by the defendant's act or omission. Wilsher is an example*. Fifthly, this will usually mean that the claimant must prove that his injury was caused, if not by exactly the same agency as was involved in the defendant's wrongdoing, at least by an agency that operated in substantially the same way. A possible example would be where a workman suffered injury from exposure to dusts coming from two sources, the dusts being particles of different substances each of which, however, could have caused his injury in the same way. Without having heard detailed argument on the point, I incline to the view that the principle was properly applied by the Court of Appeal in Fitzgerald v Lane [1987] QB 781. *Sixthly, the principle applies where the other possible source of the claimant's injury is a similar wrongful act or omission of another person, but it can also apply where, as in McGhee, the other possible source of the injury is a similar, but lawful, act or omission of the same defendant. I reserve my opinion as to whether the principle applies where the other possible source of injury is a similar but lawful act or omission of someone else or a natural occurrence*.

Sanders does not favour the expansion of the risk rule to non-asbestos cases as the reach of the risk rule is uncertain and finding principled reasons for limiting its scope is an unenviable task.[306] The expansion of the rule to non-asbestos cases is undesirable as, in terms of allocation of liability in single-hit or quasi single-hit cases, "it buys us very little at the cost of considerable uncertainty concerning the nature of the causal question in an array of toxic tort cases and perhaps beyond."[307]As Lord Hoffman succinctly states in respect of *Fairchild v Glenhaven Funeral Services Ltd*[308]:

[306] Sanders J in Goldberg R (2011) (n120) 39.
[307] Sanders J in Goldberg R (2011) (n120) 39.
[308] [2003] 1 AC 32 (HL). See also Lord Hoffman "Causation" in Goldberg R (2011) (n120) 8 [emphasis added].

The claimant was unable to discharge this burden in respect of any employer, even though it was clear that one of them must have been responsible. His action was therefore dismissed. *The House of Lords decided that this result was unfair and that in cases of mesothelioma and analogous situations, the substantive causal requirements of an action for negligence should be different*. It should be sufficient to prove that the *negligent exposure increased the risk of developing mesothelioma* and *may* have caused it in the sense that the fibre which was responsible for the development of the disease was inhaled during that particular exposure.

Lord Hoffman further opines that it would be easier, instead of speaking of causation as a "monolithic concept which can be defined as 'part of history'", to instead use causal concepts as creatures of the law and nothing more.[309] The House of Lords did make it clear that the principle enunciated in *Fairchild v Glenhaven Funeral Services Ltd*[310] would apply only so long as medical science cannot provide an answer to the causation problem.[311] In *Williams v University of Birmingham*[312], the Court of Appeal held that the principle in *Fairchild v Glenhaven Funeral Services Ltd*[313] is available to plaintiffs in mesothelioma cases in respect of proof of causation but that plaintiffs must establish the other elements of their claim in an orthodox way.[314]

3 4 1 7 Barker v Corus UK PLC; Bailey v Ministry of Defence & Other Cases

In *Barker v Corus UK PLC*[315] the House of Lords had the opportunity, in another asbestos case, to consider and re-examine the principles set out in, among other cases *McGhee v National Coal Board*[316] and *Fairchild v Glenhaven Funeral Services Ltd*[317] and introducing the concept of "proportionate liability". The facts in *Barker v Corus*

[309] Lord Hoffman in Goldberg R (2011) (n120) 9. Lord Hoffman mentions the different standards of causation required in, for instance, section 23 of the Offences Against the Person Act 1861 which differs from the standard in section 85(1) of the Water Resources Act 1991 even though both use the verb "cause".
[310] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[311] Lord Walker of Gestingthorpe "How Far Should Judges Develop the Common Law?" (2014) *Cambridge Journal of International and Comparative Law* 124 129.
[312] [2011] EWCA Civ 1242.
[313] [2003] 1 AC 32 (HL).
[314] Stapleton J "The Fairchild Doctrine: Arguments on Breach and Materiality" (2012) *Cambridge Law Journal* 32.
[315] [2006] UKHL 20. See also Morgan J "Causation, Politics and Law: The English – and Scottish – Asbestos Saga" in Goldberg R (2011) (n120) 77 – 78.
[316] [1972] 3 All ER 1008 (HL).
[317] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].

UK PLC[318] were like those in *Fairchild v Glenhaven Funeral Services Ltd*[319] except that the claimant's mesothelioma may have been caused by his contributorily negligent exposure, on another occasion and when he was self-employed, to another source of asbestos.[320]

Steel summarises the principles set out in *Barker v Corus UK PLC*[321] as follows[322]:

[I]f D wrongfully exposed C to a 20% risk of mesothelioma and the mesothelioma caused C £50,000 of loss, C should recover £10,000 from D. Parliament very soon after reversed the apportionment of liability made in *Barker*, but only in cases of mesothelioma caused by asbestos, with section 3 of the Compensation Act 2006.

Section 3 (1) of the Compensation Act 2006 states that:

This section applies where – (a) a person ('the responsible person') has negligently, or in breach of statutory duty caused or permitted another person ('the victim') to be exposed to asbestos, (b) the victim has contracted mesothelioma as a result of exposure to asbestos, (c) because of the nature of mesothelioma and the state of medical science, it is not possible to determine with certainty whether it was the exposure mentioned in paragraph (a) which caused the victim to become ill, and (d) the responsible person is liable in tort, by virtue of the exposure mentioned in paragraph (a), in connection with damage caused to the victim by the disease (whether by reason of having materially increased a risk or for any other reason).

Section 3 (2) then continues as follows[323]:

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[318] [2006] UKHL 20.
[319] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[320] Thompson J "The Law of Causation in the Law of Tort – Concurrent Issues" (2008) *Australian Construction Law Ne*wsletter 55 55 – 57; Steel S "Causation in English Tort Law: Still Wrong After All These Years" (2012) *University of Queensland Law Journal* 243 243 – 244.
[321] [2006] UKHL 20.
[322] Steel S (2012) (n320) 244.
[323] Green S "Fairchild and the Single Agent Criterion" (2017) *Law Quarterly Review* 25 26: "As a result of s3 of the Compensation Act 2006, the remedial effect of the *Fairchild* approach is that multiple defendants to whom it applies will be held jointly and severally liable in cases involving asbestos and mesothelioma. In cases to which the material contribution to risk (*Fairchild*) approach applies, but which do not involve asbestos and mesothelioma, *Barker v Corus* [2006] 2 AC 572 operates so as to apportion liability amongst defendants according to the relative risk exposure for which they are responsible. This remedidal effect is not an independent device, but a *consequence* of applying the exceptional form of the causal inquiry. This is evident not only from the *Fairchild* judgment itself, which focuses on the issue of causation rather than the nature of the resultant liability, but also from the wording of s3 of the Compensation Act 2006, a provision which dictates that joint and several liability will be imposed in the event that 'the responsible person is liable in tort'…"

The responsible person shall be liable – (a) in respect of the whole of the damage caused to the victim by the disease (irrespective of whether the victim was also exposed to asbestos – (i) other than by the responsible person, whether or not in circumstances in which another person has liability in tort, or (ii) by the responsible person in circumstances in which he has no liability in tort), and (b) jointly and severally with any other responsible person.

It would appear, therefore that in both *Fairchild v Glenhaven Funeral Services Ltd*[324]and *Barker v Corus UK PLC*[325] scenarios, the defendant's liability will be proportionate to the level of risk that it has wrongfully imposed upon the claimant.[326] Steel[327] raises the following criticism against the state of the law after *Fairchild v Glenhaven Funeral Services Ltd*[328]and *Barker v Corus UK PLC*[329]:

The current law is incoherent in two main respects. First, the reasons offered by judges to explain the law do not explain it. Secondly, the way in which the law conceptualises exceptions to proof of causation on the balance of probability does not accurately describe the legal nature of those exceptions. It is not necessary to think that 'coherence' in the law is intrinsically valuable to find each of these problematic. *Rather, the consequences of the incoherence are (also) regrettable. If the reasons offered for the scope of the law do not explain it, the consequences are that like cases may be treated differently; claims may be denied or refused without the reasons for success or failure withstanding scrutiny, and the law may become difficult to predict*. If the law is not accurately conceptualised, there is a danger of errors of analysis being made in future cases. The current law is unjust (beyond the injustice implicit in its incoherence) insofar as it conceives of the requirement of causation as a practical tool for assigning responsibility for an injury, rather than as fundamental to a person's entitlement to damages, and so, to a defendant's liability to pay damages.

In *Bailey v Ministry of Defence*[330] Lord Waller said the following in respect of the application of the *Fairchild v Glenhaven Funeral Services Ltd*[331] principle to medical negligence cases[332]:

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[324] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[325] [2006] UKHL 20.
[326] Steel S (2012) (n320) 245.
[327] Steel S (2012) (n320) 245.
[328] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[329] [2006] UKHL 20; Steel S (2012) (n320) 247 [emphasis added].
[330] [2008] EWCA Civ 883.
[331] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[332] *Bailey v Ministry of Defence* [2008] EWCA Civ 883 para 46 [emphasis added]. See also *Canning-Kishver v Sandwell & West Birmingham Hospital NHS Trust* [2008] EWHC 2384 (QB); *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10.

In my view *one cannot draw a distinction between medical negligence cases and others*. I would summarise the position in relation to cumulative cause cases as follows. If the evidence demonstrates on a balance of probabilities that the injury would have occurred as a result of the non-tortious cause or causes, in any event, the claimant will have failed to establish that the tortious cause contributed. *Hotson* exemplifies such a situation. If the evidence demonstrates that 'but for' the contribution of the tortious cause the injury would probably not have occurred, the claimant will (obviously) have discharged the burden. In a case where medical science cannot establish the probability that 'but for' an act of negligence the injury would not have happened but can establish that the contribution of the negligent cause was more than negligible, the 'but for' test is modified, and the claimant will succeed.

Goold & Maslen categorise this decision as a case involving indivisible harm caused by more than one agent.[333] In such cases "it is not possible to apportion liability according to causal contribution as the contribution does not alter the extent of the harm."[334] It is therefore not possible in such cases for a plaintiff to argue that the defendant's contribution made the harm worse than it otherwise would have been, but rather that the harm "would not have eventuated but for the defendant's tort contributing to the causal matrix that led to the harm."[335] In these situations there would be at least two causal agents that would not be sufficient, on their own, to cause the harm "but the tortious cause brings the total causal impact above the threshold necessary to result in the divisible harm."[336]

The decision in *Bailey v Ministry of Defence*[337] has been criticised by Stauch as there are "significant differences between industrial disease and medical negligence claims, justifying a more claimant-friendly approach in the former." [338] It would seem that Lord Waller's speech as quoted above will open the door for the use of the *Fairchild v Glenhaven Funeral Services Ltd*[339] principle in medical negligence cases, despite the differences illustrated by Stauch.[340] Turton also criticises Lord Waller's speech as the

[333] Goold I & Maslen H (2014) (n250) 444 – 445.
[334] Goold I & Maslen H (2014) (n250) 444.
[335] Goold I & Maslen H (2014) (n250) 444.
[336] Goold I & Maslen H (2014) (n250) 444.
[337] [2008] EWCA Civ 883.
[338] Stauch MS "'Material Contribution' as a Response to Causal Uncertainty: Time for a Rethink" (2009) *Cambridge Law Journal* 27. See also Turton G "A Case for Clarity In Causation? Bailey v Ministry of Defence and Another" (2009) *Medical Law Review* 140, 144 – 145.
[339] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[340] Stauch MS (2009) (n338) 27. In *Carl Heneghan (Son & Executor of James Leo Heneghan, Deceased) v Manchester Dry Docks Ltd & Ors* [2016] EWCA Civ 86 the application of the principle in

opinion "is too broad and fails to acknowledge that there are some cases of medical negligence, such as *Gregg v Scott*[341] and *Hotson v East Berkshire AHA*[342], that exceptionally require a distinct approach to causation."[343] McIvor argues that Lord Phillips' leading speech "misconceives what epidemiologists actually do and the type of evidence that they can bring to the legal table."[344] Discussing probabilistic causation in tort, McIvor argues as follows[345]:

> It will be argued that when faced with so-called evidential gap scenarios (where it is not yet scientifically possible to determine exactly how a particular harm has been brought about), the courts tend to lose sight of the nature and purpose of the factual causation stage of the negligence enquiry. In consequence, their reasoning on probabilistic causation is often at odds with basic legal principle.

In *Ministry of Defence v AB*[346] Lord Phillips held that causation could not be established by merely proving that exposure to fallout radiation might have increased the risk of contracting injuries.[347] This was in keeping with the Supreme Court's decision in *Sienkiewicz v Greif Ltd*[348] that causing an increase in risk could not be equated to causing the injury. According to Hodgson, there has been, until fairly recently, a "persistent refusal by the courts to concede that negligent medical treatment can be a recognisable risk for which an accident victim might hold the original wrongdoer responsible". Only medical treatment so grossly negligent as to be a completely inappropriate response to the injury by the treating medical practitioner would serve to sever the chain of causation.[349] Thus, if a plaintiff "acts reasonably in

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Fairchild v Glenhaven Funeral Services Ltd [2003] 1 AC 32 (HL) was extended to lung cancer cases. See also Turton G (2009) (n338) 145.

[341] [2005] UKHL 2.

[342] [1987] 1 AC 750.

[343] Turton G (2009) (n338) 145.

[344] McIvor C (2013) (n293) 553, 554. See also Lord Phillips' speech in *Sienkiewicz v Greif* [2011] UKSC 10, [2011] 2 WLR 523 para [80]: "Epidemiology is the study of the occurrence and distribution of events (such as disease) over human populations. It seeks to determine whether statistical associations between these events and supposed determinants can be demonstrated. Whether those associations if proved demonstrate an underlying biological causal relationship is a further and different question from the question of statistical association on which epidemiology is initially engaged."

[345] McIvor C (2013) (n293) 554.

[346] [2012] UKSC 9.

[347] *Ministry of Defence v AB* [2012] UKSC 9 para 157; Li L "Overview: Private Law" (2013) *Cambridge Journal of International and Comparative Law* 160 161 – 162.

[348] [2011] UKSC 10; para 3 3 4 7 *infra*. See also *BAI (Run Off) Ltd (In Scheme of Arrangement) v Durham* [2012] UKSC 14 where the majority held that while risk could not be equated to injury, the cause of action continued to exist because the employees were exposed to asbestos, which might have led to mesothelioma, and did in fact occur – see para [65] of the judgment. See also Steel S (2012) (n320) 243 – 244; Li L (2013) (n347) 161 – 162.

[349] *Webb v Barclays Bank plc and Portsmouth Hospitals NHS Trust* [2001] EWCA Civ 1141.

seeking or accepting treatment, negligence (falling short of gross negligence) in performing the treatment will not necessarily sever the causal chain, relieving the first tortfeasor from liability for the plaintiff's aggravated condition as the original injury can be regarded as carrying some foreseeable risk that medical treatment might be negligently given."[350]

In *Wright v Cambridge Medical Group (a partnership)*[351] the defendants conceded that they had been negligent in not speedily diagnosing a bacterial super-infection in an infant. The infant suffered osteomyelitis of the hip-bone. In the words of Lord Neuberger of Abbotsbury MR[352]:

> It was not such an egregious event, in terms of the degree or unusualness of the negligence, or the period of time during which it lasted, to defeat and destroy the causative link between the defendants' negligence and the claimant's injury.

3 4 1 8 Sienkiewicz v Greif

In *Sienkiewicz v Greif*[353] Enid Costello died of mesothelioma after having been exposed to asbestos while working for the defendants, in addition to suffering exposure to atmospheric asbestos. The statistical evidence demonstrated that background asbestos would lead to 24 cases of mesothelioma in every one million individuals and that the defendant's exposure of Costello increased such percentage by 18%. Put differently; there was an 85% chance that Costello died from a non-tortious cause. It was held, however, that Costello's estate should recover in full from the defendants as if they were the only cause of her death.[354]

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[350] Hodgson D (2008) (n221) 44.
[351] [2013] QB 312.
[352] [2013] QB 325 para 37. Lord Neuberger also stated that: "where there are successive tortfeasors, the contention that the causative potency of the negligence of the first is destroyed by the subsequent negligence of the second depends very much on the facts of the particular case."
[353] [2011] UKSC 10. See also Moynihan S & Mengersen K "Application and Synthesis of Statistical Evidence in Medical Negligence" (2010) *Medicine and Law* 317 317 – 318; McIvor C (2013) (n293) 560 – 562.
[354] Steel S & Ibbetson DJ "More Grief on Uncertain Causation in Torts*"* (2011) *Cambridge Law Journal* 451 451 – 452.

In discussing the decisions in *Fairchild v Glenhaven Funeral Services Ltd*[355], *Barker v Corus UK PLC*[356] and *Sienkiewicz v Greif Ltd*[357], Steel & Ibbetson opine as follows[358]:

> If the basis of the exceptional liability in *Fairchild*, as interpreted in *Barker*, is the wrongful creation of a *non de minimis* risk, it might seem readily to follow that the estate in *Sienkiewicz* had to succeed, if it could be shown on the balance of probabilities that the defendant had indeed wrongfully subjected Mrs Costello to such a risk. Call this the 'risk argument'. The argument is problematic. It is misleading to say that the 'basis' of the liability in *Fairchild* is wrongful creation of a material increase in risk. To speak of the basis of liability suggests that, beyond demonstrating the breach of a duty of care, material increase in risk is a *sufficient* condition of liability. This, of course, is incorrect: for the rule to apply, proof of causation on the balance of probabilities must be 'impossible'; the claimant must have actually suffered the damage; and there must, in some sense, be a 'single agent' at work. The root of the problem with the argument is simply that it does not come to terms with *Fairchild* as specifically a response to *evidential uncertainty* over causation. *Fairchild* allows, for reasons of justice, the evidential requirements of causation to be satisfied by proof of a material increase in risk. Analytically, it is important to be clear that this relaxation in the rules of evidence does not alter the nature of causation; nor does it eradicate the need for causation as a matter of substantive law. The former is true since conceptually it is impossible to equate a material increase in risk with actual causation. For *x* materially to *increase the risk of y* is not necessarily for *x to cause y*. Nor does *Fairchild* eradicate causation as a requirement of liability. If it did, then a court would have to hold a defendant liable where it was shown, on evidence accepted as probative, that the defendant did *not* cause the claimant's damage. In reality, then, *Fairchild* relaxed the evidential requirements of proof of causation in certain circumstances: where it applies, proof of a material increase in risk is enough.

Lord Brown cautioned against the subversion of the ordinary rules of causation by stating that "the law tampers with the 'but for' test of causation at its peril."[359] As Lord Phillips indicated in *Sienkiewicz v Greif Ltd*[360], relying on only statistical evidence as

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[355] [2003] 1 AC 32 (HL). See also Hoffman L in Goldberg R (2011) (n120) 8 [emphasis added].
[356] [2006] UKHL 20.
[357] [2011] UKSC 10; para 3 3 4 7 *infra*. See also *XYZ v Schering Health Care Ltd* [2002] EWHC 1420, (2002) 709 BMLR 88 (QB); Goldberg R (2011) (n120) 152 – 155.
[358] Steel S & Ibbetson DJ (2011) (n354) 459. See also Wright RW in Goldberg R (2011) (n120) 207: "However, as all the judges in *Sienkiewicz* also recognised, ex ante causal probabilities are insufficient for establishing what actually happened in a particular situation, that is, which of the possibly applicable causal generalisations actually applied in the particular situation."
[359] *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10 (SC) para [186].
[360] *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10 (SC) para [96]; Steel S & Ibbetson DJ (2011) (n354) at 461. See also Feldschreiber P, Mulcahy LA & Day S in Goldberg R (2011) (n120) 188 – 189, 189: "It was recognised that epidemiological and statistical evidence may form an important element in proof of causation (at least outside of the mesothelioma context). However, apart from stressing the need for additional non-statistical evidence in order to find a causal relationship, the Justices emphasised the need to ensure the adequacy and reliability of any statistical evidence relied on to show the statistical

a basis upon which to make a finding in respect of causation, is problematic.[361] The following example[362] demonstrates the reasons for Lord Phillips' conclusion[363]:

A person is knocked down by a taxi whose colour is not observed. The incident occurs in a town where there are only two taxi firms: one has three blue cabs, the other has one yellow cab. The example is supposed to show that it would be inappropriate to infer from those facts alone that it was more probable than not that the accident was caused by the negligence of the blue cab firm (though there is a 75% statistical probability of this).

It is clear that statistical evidence alone will not be conclusive of causation, but may be admitted in instances where such statistics, based on epidemiological studies "could be admitted as supporting proof that a particular medical intervention is capable of causing the harm suffered by the plaintiff patient."[364] Moynihan & Mengersen state the following in respect of the value of statistical evidence in medical negligence cases[365]:

From a statistical perspective, evidence can be considered as arising from clinical research, systematic reviews, meta-analyses and clinical guidelines. From a medical perspective, such evidence must be credible and, even then, plays only a secondary role in guiding, but not prescribing, clinical practice. *From a legal perspective, such statistical evidence will not amount to conclusive evidence of the standard of care, but if it is relevant and reliable, it can be admitted to corroborate a medical expert's opinion as to what constitutes widely accepted and competent practice*.

Green[366] is of the opinion that the language of causation is "generally misleading… it implies in its certainty that causal answers are completely discoverable, at least in

probability of the cause or causes of the diseases. Lord Kerr warned against the real danger that epidemiological evidence will carry a 'false air of authority."

[361] Moynihan S & Mengersen K (2010) (n353) 321. See also McIvor (2013) (n293) 561.

[362] Steel S & Ibbetson DJ (2011) (n354) at 461.

[363] *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10 (SC) para [95]; *Herskovitz v Group Health Cooperative of Puget Sound* (1983) 664 P (2d) 474. See also Miller C "Causation in Personal Injury: Legal or Epidemiological Common Sense" (2006) *Legal Studies* 544 553 – 555.

[364] Moynihan S & Mengersen K (2010) (n353) 321. See also Goldberg R "Using Scientific Evidence to Resolve Causation Problems in Product Liability: UK, US and French Experiences" in Goldberg R (2011) (n120) 150: "There is considerable difference between evidence of causation for purposes of science and for the law. For the law of negligence, it is sufficient to show that the balance of probabilities – meaning more than 50 per cent, or on a preponderance of the evidence – indicates a causal connection. For medical science, on the other hand, rules of epidemiology require evidential proof on a balance of probabilities of at least 95 per cent to establish causation."

[365] Moynihan S & Mengersen K (2010) (n353) 327 [emphasis added].

[366] Green S (2005) (n278) 164.

principle." Rather than being unusual and controversial, Green sees cases such as *McGhee v National Coal Board*[367], *Fairchild v Glenhaven Funeral Services Ltd*[368] and *Barker v Corus UK PLC*[369] "in substance no different from nominally orthodox decisions (where the courts claim to have been able to 'find' the cause in question), but they do buck the trend in using language which approximates far more closely to the true nature of the causal process… under the risk pricing principle, these decisions require no exceptional explanation, but are merely positioned towards the upper end of the spectrum of uncertainty on which all cases lie."[370]

3 4 1 9 Knowsley MBC v Willmore

In *Knowsley v Willmore*[371] the court held (in a mesothelioma case) unanimously that the exception to the rules on causation set out in *Fairchild v Glenhaven Funeral Services Ltd*[372] also applied in "single exposure" cases. The role of the Compensation Act 2006 was also clarified – its relevance is in respect of quantum, and not in respect of liability.[373]

3 5 Legal Causation

3 5 1 Remoteness of Damage and Reasonable Foreseeability

As in most legal systems, English law seeks to limit the liability of a defendant by application of tests devised to establish whether, apart from factual causation, such defendant should be held liable in law lest liability continue indefinitely.[374] Legal causation or "remoteness" operates as a further limiting device which may exclude liability even where the defendant's conduct played a necessary part in the claimant's

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[367] [1972] 3 All ER 1008.
[368] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[369] [2006] UKHL 20.
[370] Green S (2005) (n278) at 164.
[371] [2011] UKSC 7.
[372] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[373] Goodwin J "Overview: Private Law" (2012) *Cambridge Journal of International and Comparative Law* 135 136 – 137. See also Bell J "Comparative Law in the Supreme Court 2010 – 11" (2012) *Cambridge Journal of International and Comparative Law* 20 21 – 22.
[374] Giesen D (1988) (n9) 171; Stauch MS "Risk and Remoteness of Damage in Negligence" (2001) *Modern Law Review* 191; Kennedy I & Grubb A (2000) (n216) 495 – 502; Rogers WVH (2002) (n210) 223 – 224; Deakin S, Johnston A & Markesinis B (2013) (n218) 241ff.

injury (factual causation having been established).[375] The doctrine of reasonable foreseeability functions as a useful device in determining legal causation.[376] The doctrine was restored to English law in the case of *Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd*[377] after being rejected in *Re an Arbitration between Polemis and Furness, Withy and Co*[378] It was held that a tortfeasor is liable for any damage which he can reasonably foresee, however unlikely it may be unless it can be brushed aside as far-fetched.[379] In the course of delivering the opinion of the Board, Viscount Simonds lamented that the rule in *Re an Arbitration between Polemis and Furness, Withy and Co*[380] had the unfortunate side-effect of encouraging defendants to plead *novus actus interveniens* to exculpate themselves from liability. Viscount Simonds said[381]:

> But if it would be wrong that a man should be held liable for damage unpredictable by a reasonable man because it was 'direct' or 'natural', equally it would be wrong that he should escape liability, however 'indirect' the damage, if he foresaw or could reasonably foresee the intervening events which led to its being done… Thus foreseeability becomes the effective test.

In two important cases decided in 1970, Lord Reid rejected the foresight test. In *McKew v Holland & Hannen & Cubitts (Scotland) Ltd*[382], the plaintiff workman sustained an injury in a workplace accident admittedly due to his employer's fault. His left leg was consequently weakened, and on several occasions it became numb, and he lost control of it for a short period. Some three weeks after the incident, he went to inspect a house of which he had been offered tenancy, accompanied by his wife and another relative. On leaving the premises and in the course of descending a steep staircase which lacked a handrail, his left leg went numb. Fearing that he might fall,

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[375] Stauch MS, Wheat K & Tingle J *Text, Cases & Materials on Medical Law* (2011) 323; Deakin S, Johnston A & Markesinis B (2013) (n218) 241 – 242.
[376] *Hedley Byrne v Heller* [1963] 2 All ER 575 (HL); *McLoughlin v O'Brian* [1982] 2 All ER 298 (HL); *Peabody Fund v Sir L Parkinson* [1984] 3 All ER 529 (HL); *Leigh & Sillavan v Aliakmon Shipping* [1985] 2 All ER 44 (CA); *Yuen Kun-yeu v A-G of Hong Kong* [1987] 2 All ER 705 (PC).
[377] *(The Wagon Mound)* [1961] 1 All ER 404 (PC). See also Jackson RM & Powell JL (1997) (n219) 734 – 737; Jackson RM & Powell JL *Jackson & Powell on Professional Negligence (Second Supplement)* (1999) 95 – 96; Stauch MS (2001) (n374) 194 – 195; Rogers WVH (2002) (n210) 224 – 231.
[378] [1921] 3 KB 560.
[379] For noted exceptions to this principle, see Heuston RFV & Buckley RA (1996) (n219) 517 – 520. See also Brazier M (1993) (n219) 252 – 262; Rogers WVH (2002) (n210) 223 – 236.
[380] [1921] 3 KB 560.
[381] [1961] AC 388 (JCPC) 423.
[382] [1970] SC 20 (HL).

the plaintiff jumped to the bottom of the staircase, thus sustaining further injury. In an action brought by the plaintiff against the employer for damages in relation to both accidents, the House of Lords held that the defendant employer was not liable for the injury sustained in the second accident on the ground that the plaintiff had acted unreasonably in descending the staircase in the manner in which he did. The jump from the staircase constituted a *novus actus interveniens*, holding that foreseeability did not enter into consideration in such a case. The employer could certainly not be held responsible for an unreasonable risk, such as the risk taken by the plaintiff when jumping to the bottom of the staircase.[383] Thus, for Lord Reid, a reasonably foreseeable intervening event occasioned by the plaintiff could still constitute a *novus actus interveniens* unless it could be said to be the natural and probable result of the defendant's negligence.[384] In *Home Office v Dorset Yacht Co. Ltd*[385], where the plaintiff sued the Home Office for negligence for the damage done to its yacht by Borstal trainees who had been working on an island under the control and supervision of officers in the defendant's employ (and who were negligently unsupervised), Lord Reid stated[386]:

> Where human action forms one of the links between the original wrongdoing of the defendant and the loss suffered by the plaintiff, that action must at least have been something very likely to happen if it is not to be regarded as *novus actus interveniens* breaking the chain of causation. I do not think that a mere foreseeability possibility is or should be sufficient, for then the intervening human action can more properly be regarded as a new cause than as a consequence of the original wrongdoing.

3 5 1 1 Chester v Afshar

The House of Lords decided in *Chester v Afshar*[387] that a surgeon who fails to warn his patient of a remote risk is liable if such a risk materialises even though failure did not increase the risk and there is no evidence that the warning would have caused the operation to be cancelled.[388] Discussing the issue of legal causation in the context of

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[383] Case summarised in Hodgson D (2008) (n221) 34.
[384] Hodgson D (2008) (n221) 34.
[385] [1970] AC 1004 (HL).
[386] [1970] AC 1004 (HL) 1030.
[387] [2004] UKHL 41. See also Jones M (2006) (n216) 55.
[388] *Chester v Afshar* [2004] UKHL 41; *Paul Davidon Taylor (A Firm) v White* [2004] EWCA Civ 1511; *Moy v Pettman Smith (A Firm)* [2005] UKHL 7; *Beary v Pall Mall Investments* [2005] EWCA 415; *Correia v University Hospital of North Staffordshire NHS Trust* [2017] EWCA Civ 356, [2017] Med

non-disclosure cases, and specifically *Chester v Afshar*[389], Stauch states the following[390]:

> At a more general level, we should recall the reason for normally insisting, at the legal causation stage, that the defendant's conduct increased the risk of the claimant's injury. This is so as to rule out liability for coincidences of the sort canvassed by Lord Walker in his speech, such as where a passenger in a speeding taxi is injured by a falling tree. In such cases it is true that had the defendant behaved properly, the injury would have been avoided. Nonetheless, the rationale for the rule wrongfully breached by the defendant (namely, to reduce the risk of injury over a range of similar cases) is confounded by the particular circumstances at hand: the injury would here have been just as likely to occur if the rule had been respected.

3 5 2 Intervening Acts

In *Latham v Johnson & Nephew Ltd*[391] Hamilton LJ said[392]:

> No doubt each intervener is a *causa sine qua non*, but unless the intervention is a fresh, independent cause, the person guilty of the original negligence will still be the effective cause, if he ought reasonably to have anticipated such interventions and to have foreseen that if they occurred the result would be that his negligence would lead to mischief.

The question for any court considering whether or not any act (or omission) by a third party has broken the chain of causation is a mixed question of law and fact.[393] If the evidence demonstrates that there was an act by a third party which intervened in the causal chain of events leading to the plaintiff's damage, the court must decide what degree of responsibility lies with the defendant.[394]

LR 292 paras 13, 22, 24 – 28. See also Green S "*Chester v* Afshar [2004]" in Herring J & Wall J *Landmark Cases in Medical Law* (2015) 239 – 253.

[389] [2004] UKHL 41.

[390] Stauch MS "Causation and Confusion in Respect of Medical Non-Disclosure*: Chester v Afshar*" (2005) *Nott LJ* 66; Green S in Herring J & Wall J (2015) (n388) 239 – 253.

[391] [1913] 1 KB 398 (CA).

[392] *Latham v Johnson & Nephew Ltd* [1913] 1 KB 398 (CA) 419.

[393] Jackson RM & Powell JL (1997) (n219) 731 – 732; Kennedy I & Grubb A (2000) (n216) 413; Jones M (2006) (n216) 101 – 117; Deakin S, Johnston A & Markesinis B (2013) (n218) 242 – 247. For a comprehensive discussion of intervening acts and the determination of causation, consult Hodgson D (2008) (n221) 4ff.

[394] Hodgson D (2008) (n221) 3 – 4.

Another important question at issue is whether, in the case of third party intervention, the defendant's breach of duty is sufficiently blameworthy to attract condemnation through an award of damages.[395] In English law, a *novus actus interveniens* may take three different forms, i.e. it may take the form of conduct by the plaintiff[396], an act or omission of a third party, or some natural event or co-incidence independent of any human agency.[397] The *novus actus interveniens* theory is a judicially-developed liability limitation device.[398] The restrictive nature of the rule is inevitably based on policy considerations.[399] In *Lamb v Camden London Borough Council*[400] Lord Denning stated[401]:

> The truth is that all these three – duty, remoteness and causation – are all devices by which the courts limit the range of liability for negligence and nuisance. As I said recently '… it is not every consequence of a wrongful act which is the subject of compensation. The law has to draw a line somewhere." Sometimes it is done by limiting the range of the person to whom the duty is owed. Sometimes it is done by saying that there is a break in the chain of causation. At other times it is done by saying that the consequence is too remote to be a head of damage. All these devices are useful in their way. But ultimately it is a question of policy for the judges to decide.

In the case of *Knightley v Johns*[402], it was made clear that a subsequent breach of duty by a third party may not break the chain of causation, and thereby absolve the defendant of his breach of duty if the latter breach was reasonably foreseeable. An omission by a third party is in general tort law not regarded as an intervening act and is no *novus actus interveniens*.[403] Kennedy & Grubb are of the opinion that this approach is no longer acceptable in the field of medical law, as the concept of an intervening act should embrace both positive acts and failures to act. Given that doctors are liable for omissions once the doctor-patient relationship is established, a failure to

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[395] Jackson RM & Powell JL (1997) (n219) 731 – 732; Kennedy I & Grubb A (2000) (n216) 413; Jones M (2006) (n216) 107 – 108; Deakin S, Johnston A & Markesinis B (2013) (n218) 241 – 247.
[396] Such as refusal by the plaintiff to accept medical treatment. See Jones M (2006) (n216) 194, 107 – 108; Hodgson D (2008) (n221) 181 – 183.
[397] Jones M (2006) (n216) 106 – 108; Hodgson D (2008) (n221) 4.
[398] Hodgson D (2008) (n221) 4.
[399] Hodgson D (2008) (n221) 4.
[400] [1981] QB 625 (CA) as quoted in Hodgson D (2008) (n221) 4. See also Jones M (2006) (n216) 106 – 107; Deakin S, Johnston A & Markesinis B (2013) (n218) 247.
[401] *Lamb v Camden London Borough Council* [1981] QB 625 (CA) 636.
[402] [1982] 1 WLR 349.
[403] *Muirhead v Industrial Tank Specialities* [1985] 3 All ER 705 (CA).

act, in a breach of duty which causes damage, should be regarded as a cause, and in appropriate circumstances, as an intervening cause.[404]

In *Roberts v Bettany*[405] Buxton LJ re-affirmed that resolving *novus actus* issues involves a determination of mixed questions of law and fact.[406]

3 5 3 "Thin Skull" or "Eggshell Skull" Cases

A defendant who has caused damage to a plaintiff in English law, will only be held to have caused damage which was reasonably foreseeable. Where the "thin skull" or "eggshell skull" rule applies, a defendant cannot raise a plaintiff's (or victim's) personal idiosyncrasies or susceptibilities as a defence, but "must take his victim as he finds him".[407] If the victim or the plaintiff suffers more damage or injury as a result of his or her idiosyncrasies or susceptibilities, the defendant cannot raise such qualities as a defence to an action.[408] Stauch describes the relationship between the "eggshell skull" rule and causation as follows[409]:

> To put the eggshell skull rule into the terms of a causal set analysis, the defendant has contributed a risk factor, which is faulty relative to the possible appearance of certain other conditions completing a full set for harm. Those conditions have indeed appeared, but so too has a further causal condition going to some idiosyncrasy in the claimant's physical makeup, which has had the effect of worsening the harm. The rule, in effect, says that, once the set containing the anticipated conditions has materialised, resulting in actionable damage, the presence in the set *in addition* of the further, unforeseeable condition is beside the point.

3 5 4 Loss of a Chance

Classic instances of "loss of a chance" cases are where the defendant's negligent action or omission crystallises the plaintiff's situation, and the plaintiff is thereby altogether

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[404] Jackson RM & Powell JL (1999) (n377) 95; Kennedy I & Grubb A (2000) (n216) 414.
[405] [2001] EWCA Civ. 109 para [12].
[406] Hodgson D (2008) (n221) 5.
[407] Stauch MS (2001) (n374) 207 – 208; *Smith v Leech Brain* [1962] 2 QB 405.
[408] Brazier M (1993) (n219) 257 – 259; Heuston RFV & Buckley RA (1996) (n219) 221 – 222, 511ff; Robson M & Khan M *Medical Negligence* (1997) 191 – 193; Phillips AF *Medical Negligence Law: Seeking A Balance* (1997) 43; Rogers WVH (2002) (n210) 236 – 237.
[409] Stauch MS (2001) (n374) 208.

prevented from benefiting from such a chance, and consequently, any anticipated result remains forever hypothetical.[410] In all such cases, the language of chance allows one to assess the plaintiff's hypothetical damage by calculating not the value of the end result expected, but that of the plaintiff's chance of achieving such result, or of gaining an advantage, or of avoiding a loss.[411] It is sufficient to show that there was a reasonable chance that the anticipated result would have been achieved.[412] The chance is calculated on the basis of the probability of realisation of the expected result, and the plaintiff will receive compensation for only a portion of his injury.[413]

In *Wilsher v Essex Area Health Authority*[414], the plaintiff was unable to show, due to the over-complexity and lack of clarity of the available evidence, that the defendant's breach of duty had caused his injury.[415] In many instances, notably where a medical practitioner fails to make a proper or prompt diagnosis of a given condition or illness, the plaintiff will have evidence as to the effect that such failure has had on her.[416] Such evidence takes the form of class statistics, which record the chances of recovery for patients who are in fact diagnosed with the relevant condition at a similar stage of progression.[417]

In *Hotson v East Berkshire AHA*[418], the courts were required to decide whether a claim founded on statistical evidence was admissible. The claimant was a schoolboy who attended the defendant's casualty department after falling from a tree and injuring his hip. The defendant failed, in breach of its duty, to carry out an x-ray of the child's hip and by such time as the full extent of the injury was discovered (when the boy returned

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[410] Jones M (2006) (n216) 80 – 94; Khoury L (2006) (n122) 94 lists the following examples: a lawyer who allows a client's claim to prescribe; a woman who is prevented from taking part in a beauty contest; a horse is prevented from competing in a race. See also Jansen N (1999) (n120) 275 – 276, 281 – 284; Wright RW in Goldberg R (2011) (n120) 216 – 218; Buchan A (2012) (n268) 161 – 171; Liang Shi Wei J & Low Kee Y "Recognising Lost Chances in Tort Law" (2014) *Singapore Journal of Legal Studies* 98 – 103; *Chaplin v Hicks* [1911] 2 KB 786; *Kitchen v Royal Air Force Association* [1958] 1 WLR 563 (CA); *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL).
[411] Khoury L (2006) (n122) 95.
[412] Khoury L (2006) (n122) 95.
[413] Khoury L (2006) (n122) 95. See also also Goldberg R (2012) (n278) 152 – 156.
[414] [1998] 1 AC 1074 (HL).
[415] Stauch MS, Wheat K & Tingle J (2011) (n375) 316.
[416] Stauch MS, Wheat K & Tingle J (2011) (n375) 316.
[417] Stauch MS, Wheat K & Tingle J (2011) (n375) 316.
[418] [1987] 1 AC 750. See also Stauch MS (1997) (n219) 219 – 220; Kennedy I & Grubb A (2000) (n216) 486 – 492; Khoury L (2006) (n122) 98 – 99; Luntz H "Loss of Chance in Medical Negligence" (2010) *University of Melbourne Law School Research Series* 14; Buchan A (2012) (n268) 161 – 171.

to the hospital several days later) permanent disability was unavoidable. The medical evidence was, however, to the effect that, even with an immediate diagnosis, 75% of patients with such an injury went on to develop a similar disability in any event.[419] Instead of suing on the basis that the defendant had caused the disability itself (which was an impossible task) the plaintiff restricted his claim to the loss of the residual 25% chance that proper diagnosis would have resulted in successful treatment. The plaintiff succeeded in the High Court and the Court of Appeal, but on further appeal to the House of Lords, Lord Bridge, upholding the health authority's appeal, held as follows[420]:

> The plaintiff's claim was for damages for physical injury and consequential loss alleged to have been caused by the authority's breach of their duty of care. In some cases, perhaps particularly medical negligence cases, causation may be so shrouded in mystery that the court can only measure statistical chances. But that was not so here. On the evidence, there was a clear conflict as to what had caused the avascular necrosis. The authority's evidence was that the sole cause was the original traumatic injury to the hip. The plaintiff's evidence, at its highest, was that the delay in treatment was a material contributory cause. This was a conflict, like any other about some relevant past event, which the judge could not avoid resolving on a balance of probabilities. Unless the plaintiff proved on a balance of probabilities that the delayed treatment was at least a material contributory cause of the avascular necrosis he failed on the issue of causation and no question of quantification could arise. But the judge's findings of fact… are unmistakably to the effect that on a balance of probabilities the injury caused by the plaintiff's fall left insufficient blood vessels intact to keep the epiphysis alive. This amounts to a finding of fact that the fall was the sole cause of the avascular necrosis.

Wright provides the following comment in respect of the rejection of the doctrine in medical negligence cases[421]:

> Oddly, in the United Kingdom, the lost chance doctrine is applied with respect to financial losses in contractual relationships, including the attorney-client relationship, but not in medical malpractice cases. The English position is odder when one considers that the usual justification for employing the lost chance doctrine or some other second-best liability rule is the inherent impossibility of proving causation.

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[419] Facts summarised in Stauch MS, Wheat K & Tingle J (2011) (n375) 317.
[420] Stauch MS, Wheat K & Tingle J (2011) (n375) 317; Khoury L (2006) (n122) 99.
[421] Wright RW in Goldberg R (2011) (n120) 218.

3 5 4 1 Gregg v Scott

In *Gregg v Scott*[422], the claimant consulted Dr Scott in November 1994 about a lump under his arm. Dr Scott assumed that the lump was benign and did not refer the claimant for further tests. The claimant was subsequently admitted to hospital in January 1996 where it was determined that he was suffering from non-Hodgkin's lymphoma. The effect of the 14-month delay was that cancer had spread and, statistically, the claimant's chance of a "cure" (defined medically as a 10-year disease-free survival) had diminished from 42% to 25%. In his action in negligence against Scott, the claimant advanced two separate arguments. It was argued that the spread of a tumour was itself cognisable damage and, in quantifying its worth, account should be taken of the increased possibility that it would result in his premature death. Secondly, it was proposed that compensation should follow the lost statistical chance of a cure.[423] This latter basis would have been allowed by Lord Nicholls to cater for cases involving true medical uncertainty as such approach would fairly and rationally reflect the loss suffered by a patient[424], but Lord Hoffman, Lord Phillips and Baroness Hale dismissed the claimant's appeal. Their finding was as follows (per Lord Phillips)[425]:

> There are no doubt cases where it is possible to adopt the simple approach of asking to what extent the negligent treatment has reduced the prospects of curing the patient. There are other cases, and this is one, where that simple question is almost impossible to answer… The likelihood seems to be that Dr Scott's negligence has not prevented Mr Gregg's cure, but has made that cure more painful… The complications of this case have persuaded me that it is not a suitable vehicle for introducing into the law of clinical negligence the right to recover damages for the loss of a chance of a cure. Awarding damages for the reduction of a prospect of a cure, when the long-term result of treatment is still uncertain, is not a satisfactory exercise. *Where medical treatment has resulted in an adverse outcome and negligence has increased the chance of that outcome, there may be a case for permitting a recovery of damages that is proportionate to the increase in the chance of the adverse outcome. That is not a*

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[422] [2005] UKHL 2. See also Khoury L (2006) (n122) 98 – 104; Buchan A (2012) (n268) 163 – 171; Liang Shi Wei J & Low Kee Y (2014) (n410) 98 – 103; *Stockdale v Nicholls* [1993] 4 Med LR 198 (QB); *Mellor v Sheffield Teaching Hospitals NHS Trust* (2004) EWHC 780, (2004) All ER (D) 195 (QB).

[423] Stauch MS, Wheat K & Tingle J (2011) (n375) 319 – 320.

[424] *Gregg v Scott* [2005] UKHL 2 para 46.

[425] *Gregg v Scott* [2005] UKHL 2 para 189 [emphasis added]; Stauch MS, Wheat K & Tingle J (2011) (n375) 319 – 320; Buchan A (2012) (n268) 161 – 171.

case that has been made out on the present appeal. I would uphold the conventional approach to causation.

3 5 5 Statistical Evidence and Epidemiological Evidence

As Stauch[426] points out, issues of statistical analysis and projection seem at first to be very remote from the concerns of any lawyer. It is, however, precisely the incompleteness in our causal laws which is the basis of the evidentiary difficulties created by multiple causation cases.[427] In such cases, the inability to specify the relevant causal sets fully means that even where a given risk (X1) is followed by (Z), we cannot be sure whether (X1) featured in an operative set.[428] It may be that, on this particular occasion, the unknown further conditions required to complete the set were absent, and that (Z) instead came about through the working of a completely different set containing a rival risk, (X2).[429] In cases such as *Hotson v East Berkshire AHA*[430] where the scenario was somewhat simpler, and only a single causal set was present, it was impossible to say on the evidence whether the patient's non-treatment had featured in the result.[431] It might simply have contained the original fall, background conditions, plus further unknown conditions.[432] The use of statistics, however, minimises such uncertainty by providing information about how frequently the unknown conditions appear over a range of similar cases.[433] Using the facts in *Hotson v East Berkshire AHA*[434], the unknown conditions would have appeared 75% of the time, whereas conversely, on 25% of occasions, when the unknown conditions are absent, failure to treat does not feature in the set or, put differently, treatment would have been

[426] Stauch MS (1997) (n219) 205. See also Stapleton J "Cause in Fact and the Scope of Liability for Consequences" (2003) *Law Quarterly Review* 388 389; Miller C (2006) (n363) 544; Steel S & Ibbetson DJ (2011) (n354) 451 – 452; Steel S "Sienkiewicz v Greif and Exceptional Doctrines of Natural Causation" (2011) *JETL* 294 308 – 311. See also Browne MN & Harrison-Spoerl RR "Putting Expert Testimony in its Epidemiological Place: What Predictions of Dangerousness in Court Can Teach Us*"* (2008) *Marquette Law Review* 1119; Feldschreiber P, Mulcahy LA & Day S in Goldberg R (2011) (n120) 179ff.
[427] Stauch MS, Wheat K & Tingle J (2011) (n375) 321. See also Feldschreiber P, Mulcahy LA & Day S in Goldberg R (2011) (n120) 188 – 189.
[428] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[429] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[430] [1987] 1 AC 750.
[431] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[432] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[433] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[434] [1987] 1 AC 750.

beneficial.[435] The House of Lords held that the question of causation was to be determined, like any other issue, on a balance of probabilities and that care should be taken not to use a "class" or a "range" of statistics instead of examining a particular set of facts.[436] Stauch opines as follows in respect of the use of statistics versus the use of a balance of probabilities standard[437]:

> [However], the idea that in a case of 'past fact' the balance of probabilities standard of proof could provide a more satisfactory means of resolving the issue of causal uncertainty than the use of statistics, shows a general failure to understand the epistemological relationship between the two approaches. As already noted, in multiple causation cases, the inherent incompleteness of our causal laws means that we are often unable to allocate causal responsibility between rival [risks]. *However, whereas statistics, derived systematically from our previous experience of similar cases, provide us with a very accurate probability-weighing for each [risk], the balance of probabilities test attempts to perform the same operation by appealing crudely to what we feel the likely cause to have been. The relevant feeling must, once again, derive from our previous experience of similar cases, but this time in its rawest form*.

Gregg v Scott[438] thus confirms the House of Lords' reluctance to accept the loss of a chance, although this position is not firm.[439]

3 5 6 Expert Evidence and Expert Witnesses

The determination of causation is vital in medical negligence cases. The approach towards doctors in medical negligence cases in England was, traditionally, considered to be "overprotective and deferential."[440] If a doctor against whom allegations of negligence were made adduced expert evidence of the fact that he acted "in accordance with a practice accepted as proper by a reasonable body of medical men skilled in that particular art", he would not be found to be negligent.[441] In the case of *Bolitho v City*

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[435] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[436] Stauch MS, Wheat K & Tingle J (2011) (n375) 321.
[437] Stauch MS (1997) (n219) 205 [emphasis added].
[438] [2005] UKHL 2.
[439] Khoury L (2006) (n122) 104.
[440] Mulheron R "Trumping Bolam: A Critical Legal Analysis of Bolitho's 'Gloss'" (2010) *Cambridge Law Journal* 609, 612; Buchan A (2012) (n268) 132. See also Bernstein DE "Junk Science in the United States and the Commonwealth" (1996) *Yale Journal of International Law* 123 166ff.
[441] *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 583, 587. See also De Cruz P (2001) (n278) 257 – 259.

and Hackney Health Authority[442], the responsible doctor failed to attend to a child patient, despite two separate requests from the senior nurse. The child suffered a total respiratory collapse and a cardiac arrest and subsequently died. It was accepted during the trial that, had the child been intubated the respiratory failure would not have led to the cardiac arrest and that such intubation would have to be carried out before the cardiac arrest occurred. The doctor's failure to attend was conceded to be a breach of duty. It then had to be determined whether or not the breach caused the child's death.

The House of Lords decided that, after asking the question "*would* the doctor have attended the child?" and receiving a negative response (the doctor also testified that she would not have intubated the child had she attended) another question had to be asked – *should* the doctor have attended the child? If the evidence was that she should have, then the court held that causation was established. In *Bolitho v City and Hackney Health Authority*[443], the evidence was sufficiently equivocal to absolve the defendant.[444] Here, a normative question ("*should* the doctor have attended?") is introduced into the consideration of causation. It is unfortunate that the House of Lords introduced this normative question as it must rather be asked in determining the doctor's duty of care, and not in determining causation. By introducing a normative element in this way, *Bolitho v City and Hackney Health Authority* has added to the complexity of the law.[445] Kennedy & Grubb also note that had the alternative approach been followed (that is, had the case been brought to court as a result of the doctor's failure to intubate) the outcome would have been different, and the introduction of the

[442] [1997] 4 All ER 118 (QBD). See also *Montgomery v Lanarkshire Health Board* [2015] UKSC 11, [2015] AC 1430 (SC); *Tasmin v Barts Health NHS Trust* [2015] EWHC 3135 (QB); *Holdsworth v Luton & Dunstable University Hospital NHS Foundation Trust* [2016] EWHC 3346; *Clark (AP) v Greater Glasgow Health Board* [2016] Scots CSOH 24; *Surrey v Barnet and Chase Farm Hospitals NHS Trust* [2016] EWHC 1598 (QB); *EXP v Dr Charles Simon Barker* [2017] EWCA Civ 63 paras 68 – 70; *Mr Desmond Muller v King's College Hospital NHS Foundation Trust* [2017] EWHC 128 (QB); *Darnley v Croydon Health Services NHS Trust* [2017] EWCA Civ 151, [2017] Med LR 245; [2018] 2 WLR 54; *H v Southend Hospital NHS Trust* (Unreported Judgment – Queen's Bench Division) (10 April 2017); Laing JM 'Delivering Informed Consent Post-*Montgomery*: Implications for Medical Practice and Professionalism" (2017) *PN* 128 128 – 152; Heywood R & Miola J "The Changing Face of Pre-Operative Medical Disclosure: Placing the Patient at the Heart of the Matter" (2017) *Law Quarterly Review* 296 296 – 321.

[443] [1998] AC 232.

[444] Kennedy I & Grubb A (2000) (n216) 483 – 486.

[445] Kennedy I & Grubb A (2000) (n216) 408.

normative element would not have been necessary.[446] Mulheron[447] points out that *Bolitho v City and Hackney Health Authority* turned *Bolam v Friern Hospital Management Committee*[448] on its head, in that the court, and not the medical profession, became the final arbiter of the medical breach. In post-*Bolitho v City and Hackney Health Authority* cases[449] the Court of Appeal has weighed the risks and benefits to determine whether an expert's opinion was premised on a "logical basis".[450]

This approach was re-considered in the decision in *Bolitho v City and Hackney Health Authority*[451], and concerns were expressed in respect of the accepted test for negligence in medical cases. Lord Browne-Wilkinson, speaking for all of the members of the House, stated the following[452]:

> [I]n cases of diagnosis and treatment there are cases where, despite a body of professional opinion sanctioning the defendant's conduct, the defendant can properly be held liable for negligence… that is because, in some cases, it cannot be demonstrated to the judge's satisfaction that the body of opinion relied upon is reasonable or responsible. In the vast majority of cases, the fact that distinguished experts in the field are of a particular opinion will demonstrate the reasonableness of that opinion. In particular, where there are questions of assessment of the relative risks and benefits of adopting a particular medical practice, a reasonable view necessarily presupposes that the relative risks and benefits have been weighed by the experts in forming their opinions. But if in a rare case, it can be demonstrated that the professional opinion is not capable of withstanding logical analysis, the judge is entitled to hold that the body of opinion is not reasonable or responsible.

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[446] Kennedy I & Grubb A (2000) (n216) 408. In this regard, see also the discussion in respect of *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) in Chapter 3 para 3 2ff *supra* and more specifically in relation to the discussion of the introduction of a normative element in the determination of factual causation in the South African law of delict.

[447] Mulheron R (2010) (n440) 609. See also Castle KF (2013) (n214) 64.

[448] [1957] 1 WLR 582; Mulheron R (2010) (n440) 609. See also *Kingsberry v Greater Manchester Strategic H. A.* [2005] EWHC 2253.

[449] *Marriot v West Midlands HA* [1999] Lloyd's Rep. Med. 23 28; *Penney, Palmer and Cannon v East Kent HA* [2000] Lloyd's Rep. Med. 41 48 – 50.

[450] Amirthalingam K "The Shifting Sands of Negligence: Reasonable Reliance to Legitimate Expectations?" (2003) *Oxford University Commonwealth Law Journal* 81 86 – 90.

[451] [1998] AC 232.

[452] *Bolitho v City and Hackney Health Authority* [1998] AC 232, 243. Mulheron R (2010) (n440) 613: "The two-step procedure came to be recognised in English law as being required to determine the question of alleged medical negligence. It involves, firstly, whether the doctor acted in accordance with a practice accepted as proper for an ordinarily competent doctor by a responsible body of medical opinion; and secondly, if "yes", whether the practice survived *Bolitho* judicial scrutiny as being 'responsible' or 'logical.'" See also *French v Thames Valley Strategic Health Authority* [2005] EWHC 459 (QB) paras [9] – [10].

Buchan discusses the importance of expert evidence in medical negligence cases as seen from the perspective of medical defendants in the following terms[453]:

> Causation is tremendously important in medical cases and always needs careful consideration. This is because the aetiology of medical conditions is often unclear and because the situation will often be complicated by the presence of an underlying illness or other pre-existing vulnerabilities. In every case, the chain of causation, whether only one link long or more, must be carefully considered. For example, it is all very well to prove that a GP should have visited, but one is likely also to need to consider what he would have found, what action he would or should have taken, and what result that would have had. One probably needs to ask a specialist what the GP would have found if he had conducted such examination as the GP expert says he should. One then has to ask the GP whether finding what the specialist says would have been found at the time required immediate hospital referral or whether a review in a few hours or advice to the patient or parents to call if the situation deteriorated would do. One then asks the specialist whether, assuming the GP had taken the least urgent action which would have remained within the bounds of reasonable management, the outcome would probably have been different. This may involve further links in the chain of causation by way of analysing what the hospital or specialist to which the patient should have been referred would probably have done and when. In a cancer case, one may find the expert unable to say whether earlier diagnosis and treatment would have produced a better outcome. If that is so, one cannot establish causation. In an obstetric case, it is not infrequently possible without too much difficulty to establish a failure of care. But it is quite a different matter to prove that proper care, usually involving earlier delivery (often by Caesarean section), would have avoided the injury. The expert evidence on that issue may well be extremely technical and speculative. One may be able to show that the injury was not sustained considerably earlier in the pregnancy, or, at the other end of the spectrum, one may be unable to show that the period of perinatal hypoxia would have been sufficiently curtailed by earlier delivery to avoid damage. The possible scenarios on causation in medical negligence claims are legion, as the cases show. All one can do is make a careful analysis of what probably would have happened, step by step, if proper management, as certified by the appropriate experts, had taken place. Many and varied are the possible defences on causation. It is an unusual case that does not offer some opportunity for such a defence. Hence the fascination of the subject for defendants.

Seven different scenarios have, according to Mulheron, attracted judicial attention in English law in respect of whether peer opinion (and the opinion of medical experts) was illogical or indefensible.[454] The aforementioned scenarios include: (a) whether peer professional opinion has overlooked that a "clear precaution" to avoid the adverse

[453] Buchan A (2012) (n268) 132.
[454] Mulheron R (2010) (n440) 620.

outcome for a patient was available[455]; (b) a question of resources and duty[456]; (c) failure to weigh the comparative risks and benefits of the chosen course of conduct[457]; (d) where the accepted medical practice contravenes widespread public opinion[458]; (e) where the doctor's peer medical opinion cannot be correct when taken in the context of the whole factual evidence[459]; (f) where the doctor's expert medical opinion is not internally consistent[460]; (g) the peer professional opinion has adhered to the wrong legal test.[461]

English law recognises that causation is not determined by experts but by judges who assess the evidence in line with policy considerations, common sense and lay evidence.[462] Expert evidence enjoys no special status in court and must be considered in context and light of all of the other evidence presented.[463] Courts are therefore permitted to take into account considerations not of a purely scientific nature, and which considerations would include economic, social and moral concerns.[464] Ultimately the decision remains a juristic decision, and not a scientific one.

3 5 7 *Res Ipsa Loquitur*

Wright describes the doctrine in the following terms[465]:

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[455] *French v Thames Valley Strategic Health Authority* [2005] EWHC 459 (QB); *Lowe v Havering Hospitals NHS Trust* (2001) 62 BMLR 69.
[456] *Garcia v St Mary's NHS Trust* [2006] EWHC 2314 (QB).
[457] *Birch v University College London Hospital NHS Foundation Trust* [2008] EWHC 2237 (QB).
[458] *AB v Leeds Teaching Hospital NHS Trust* [2004] EWHC 644 (QB).
[459] *Lillywhite v University College London Hospitals' NHS Trust* [2005] EWCA Civ 1466.
[460] *Hunt v NHS Litigation Authority* [1998] Lloyd's Rep Med 425.
[461] *Hutchison v Leeds Health Authority* QB 6 November 2000.
[462] Khoury L (2006) (n122) 68; Buchan A (2012) (n268) 132 – 133.
[463] Khoury L (2006) (n122) 69; Buchan A (2012) (n268) 132: "For example, it is all very well to prove that a GP should have visited, but one is likely also to need to consider what he would have found, what action he would or should have taken, and what result that would probably have had. One probably needs to ask a specialist what the GP would have found if he had conducted such examination as the GP expert says he should. One then has to ask the GP expert whether finding what the specialist says would have been found at that time required immediate hospital referral or whether a review in a few hours or advice to the patient or parents to call if the situation deteriorated would do. One then asks the specialist whether, assuming the GP had taken the least urgent action which would have remained within the bounds of reasonable management, the outcome would probably have been different."
[464] Khoury L (2006) (n122) 69. See also Skowron P "Evidence and Causation in Mental Capacity Assessments *PC v City of York Council [2013] EWCA Civ 478*" (2014) *Medical Law Review* 631 635 – 637.
[465] Wright RW in Goldberg R (2011) (n120) 219. See also *Thomas v Curley* [2013] EWCA Civ 117.

The doctrine allows an inference of negligent conduct by the defendant and a further inference that the negligence caused the plaintiff's injury, based on a mere statistical probability.

The complex nature of medical negligence cases raises difficult issues about factual and expert opinion. It is doubtful whether the maxim can ever assist a plaintiff in a complex medical negligence matter where both sides have led evidence.[466] The application of the maxim is, however, "theoretically possible" in medical negligence cases.[467]

3 6 "NESS" Causal Model

The "but for" test has suffered much criticism in respect of its inability to deal with instances of multiple causation. Hamer describes the exceptional cases ("over-determination") where the "but for" test is not satisfied in the following terms[468]:

There are, however, recognised though exceptional cases where the 'but for' test is *not* satisfied, but causation *is* considered to be established in fact and in law. These are cases of over-determination, 'where there are two or more acts or events which would be each sufficient to bring about the plaintiff's injury.

In addition to the oft-cited "three hunters" scenario in cases of multiple causation, another example, that of two defendants negligently starting fires which reach a plaintiff's house at the same time, is used in order to examine whether a defendant's breach is a "necessary element of a set of conditions sufficient to bring about the

[466] Cooper R & Wood SE (2006) (n216) 406.
[467] Cooper R & Wood SE (2006) (n216) 406: "These doubts notwithstanding, its theoretical application is amply supported by authority, provided it is understood that it does not raise any presumption but is merely 'a guide to help to identify when a *prima facie* case is being made out."
[468] Hamer D "Chance Would Be a Fine Thing: Proof of Causation and Quantum in an Unpredictable World" (1999) *Melbourne Law Review* 24; Miller C "NESS for Beginners" in Goldberg R (2011) (n120) 323.

plaintiff's injury" or "NESS".[469] Hamer illustrates the foundation of the NESS test by sketching the following scenario[470]:

> Two defendants negligently start separate fires, fire X and fire Y, both reaching the plaintiff's house at the same time, and both of which are independently sufficient to burn it down. Did fire X cause the plaintiff's house to burn down? Applying the 'but for' test, fire X was not a cause, since the house would have burnt down anyway as a result of fire Y. And, by the same reasoning, nor was fire Y a cause. The 'but for' test suggests that neither fire caused the house to burn down. But if there were no cause, why did the house burn down? This result is contrary to common sense and unacceptable at law… *To suggest that neither fire caused the destruction of the plaintiff's house is clearly contrary to common sense, irrespective of considerations of responsibility and compensation… Commentators have proposed an alternative counterfactual test which appears to overcome the problem.*

The NESS Causal Model (or "NESS test") is discussed by Stauch, who provides the following commentary in respect of the NESS test while utilising the "two-fire" scenario[471]:

> In so far as each fire would have spread unchecked, then, taken individually, neither was necessary for such damage. We have in fact now uncovered a key assumption made by the 'but for' test; that of a neutral causal backdrop rather than one charged in such a way that the same outcome is independently in motion anyway. More specifically, the test is premised upon the presence, at any one time, of no more than a single causal set sufficient for a given outcome.

Describing the origins of the NESS test and its basis premise, Stauch provides the following exposition[472]:

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[469] Hamer D (1999) (n468) 24. See Wright RW "Causation in Tort Law" (1985) *California Law Review* 1735; Wright RW "Causation, Responsibility, Risk, Probability, Naked Statistics and Proof: Pruning the Bramble Bush by Clarifying the Concepts" (1988) *Iowa Law Review* 1001; Fischer DA "Causation in Fact in Omission Cases" (1992) *Utah Law Review* 1335; Wright RW "Once More into the Bramble Bush: Duty, Causal Contribution, and the Extent of Legal Responsibility" (2001) *Vanderbilt Law Review* 1071; Fischer DA (2005) (n486) 277; Miller C in Goldberg R (2011) (n120) 323. For a more comprehensive discourse on the issues and problems inherent in the consideration and application of the NESS test see Wright RW in Goldberg R (2011) (n120) 286 – 294, 295 – 322.

[470] Hamer D (1999) (n468) 29 – 30 [emphasis added]. See also Wright RW "Causation in Tort Law" (1985) *Cal LR* 1735; Stauch MS (1997) (n219) 209 – 210; Wright RW "The NESS Account of Natural Causation: A Response to Criticisms" in Goldberg R (2011) (n120) 285ff; Miller C in Goldberg R (2011) (n120) 323ff.

[471] Stauch MS (1997) (n219) 209 [emphasis added].

[472] Stauch MS (1997) (n219) 209 – 210, 212: "An analysis in terms of NESS terms cannot by itself resolve the problem of evidential uncertainty that confronted the House of Lords in *McGhee*. Nevertheless, it supplies a most useful analytical framework for examining the various possible causal permutations in that case."

The more accurate 'NESS test', developed by Richard Wright in North America following suggestions by JL Mackie, and Hart and Honoré, expressly allows for the contrary possibility. In such cases, it holds that our candidate condition may still be termed 'a cause' where it is shown to be a necessary element in just one of several co-present causal sets each independently sufficient for the effect. There are in fact two ways that such co-presence can manifest itself, and Wright terms these, respectively, 'duplicative' and 'pre-emptive' causation. *The first occurs when two (or more) such sets operate simultaneously to produce the effect; in other words, the effect is over-determined… It is apparent that in contrast to the 'but for' test (whose counter-intuitive result is that neither was a cause), the NESS test allows us to regard both the cigarette and short-circuit as causative of the damage. Pre-emptive causation, by contrast, occurs when, through coming about first in time, one causal set 'trumps' another, potential set lurking in the background. The causal potency of the latter is frustrated for, as Wright states, 'a necessary condition for the sufficiency of any set of actual antecedent conditions is that the injury not have occurred already as a result of other actual conditions outside the set'.*

Hogg explains the NESS test in relatively simple terms[473]:

Assemble a set of all the conditions which preceded an outcome (e.g. conditions A, B, C, D, E). If you want to see whether one condition – let's say it is A – was a cause of the outcome, remove any conditions from the set which were not required for the outcome to occur, e.g. if the outcome would still have occurred without D and E, they are removed. At this point a set of conditions (A, B, C) will be left which was minimally sufficient for the outcome to occur, i.e. all the conditions in the set were required on this occasion to produce the outcome. Removing the condition in question, A, will, therefore, produce a set of conditions which is no longer sufficient for the outcome to occur. A is thus held to have been a cause of the outcome.

Miller illustrates the main aim of the NESS test as follows[474]:

One important role played by NESS is to reveal a 'logical skeleton' which lies beneath the empirical flesh which comprises the 'facts' of the case heard in court. The role played by NESS can sometimes be illustrated by considering the components of a simple electrical circuit to show how the necessary elements combine to form a set which is sufficient to produce, for example, light. But the principal value of this heuristic device is that an electrical circuit is clearly devoid of any moral dimension – either the current flows, or it does not. Central to Wright's approach (and contrary to that of many legal scholars in this area) is the assertion that it is possible to construct a causal account of a set of events (leading to a harmful outcome) which is independent of those considerations by which an agent of these events might be deemed *legally* liable. It is the knot of *factual* history, not the normative considerations of policy and responsibility that NESS seeks to untie.

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[473] Hogg M "Developing Causal Doctrine" in Goldberg R (2011) (n120) 47.
[474] Miller C in Goldberg R (2011) (n120) 323.

In a single-cause scenario, a causal result is achieved, as Miller demonstrates, by closing a simple electrical circuit. A defendant's (single) negligent act (or omission) would serve to "close" the circuit, with the result being the illumination of a lightbulb (the harm suffered by the plaintiff).[475] In cases where two sufficient sets are present, the situation is akin to two, three or more batteries connected in parallel with one another (the "three hunters" scenario[476]). If any of the batteries should fail (the elimination of any one of the shots fired by the hunters), the circuit would still function, and the lightbulb would remain lit ("but for" would fail and it would remain impossible to pinpoint the factual cause).[477] The analogy may be taken to further extremes, particularly in the context of multiple possible causes in mesothelioma cases, as Miller illustrates by replacing the lightbulb with a device which kills rats once a circuit is closed ("rat exterminator")[478]:

> By further elaboration and by introducing the time dimension, we could create an analogue of the problem multiple asbestos employers. The battery again consists of *n* cells connected in parallel, and we retain the rat exterminator (RE). But now let the cell have its starting point (*T1*) at which it begins to function and becomes available to deliver the voltage needed to activate the rat exterminator. Since the RE operates randomly, there appears, to the observer, to be some hidden variable which determines when and if the RE is activated.
>
> T1 T2 T3 T*n* E
> _↑_____↑_____↑_____↑_____↑
>
> Only at time E can we examine the rat; if it is dead, we know that at least one cell has discharged at least once (we believe that one pulse of charge alone may be capable of triggering the device). We need this randomness and lack of information to replicate the uncertainty in current understanding of the aetiology of mesothelioma (a form of cancer associated with exposure to asbestos fibres). Each cell now represents an employer (whose control over asbestos is negligent); the charge represents the absorbed asbestos which is implicated, in some as yet unknown way, in the process which leads eventually to the tumour, or in our hypothetical laboratory, to the death of the rat. Note that a cell is not 'turned off' once another become operative: it could be that asbestos absorbed during an earlier period of employment

[475] Miller C in Goldberg R (2011) (n120) 324 – 325.
[476] Para 4 2 2 1 *infra*; Chapter 3 para 3 2 *supra*.
[477] Miller C in Goldberg R (2011) (n120) 325. There may be two "batteries in parallel with another" i.e. "two sufficient sets" or more than two "batteries in parallel" i.e. "multiple sufficient sets". Miller also refers to the circuit being ultimately wired to a device which kills a rat, in order to deal with the problem of indeterminism. See also Abele AA, Kodek GE & Schaefer GK "Proving Causation in Private Antitrust Cases" (2011) *Journal of Competition Law & Economics* 847 852.
[478] Miller C in Goldberg R (2011) (n120) 326 – 327.

plays its part in the tumour-producing process at some later point when the victim is employed elsewhere. We need multiple discharges because the 'single-fibre' theory is not more than a theory: two or more fibres may be required, or asbestos may be involved at more than one point in the long latency period before the tumour can be diagnosed. With no means of identifying the 'guilty' cell, none can pass the 'but for' test. Mesothelioma (or any other form of cancer associated with asbestos) does not carry a signature which shows the time(s) at which asbestos was implicated; it may be involved on more than one occasion and, regardless, these notional times are unlikely to be related to the point at which the fibres were absorbed. Before introducing the concepts of risk and indeterminacy, it seems apparent that each cell, along with the lethal device, is a necessary element in one of *n* sets sufficient to cause the death of the rat. By analogy, asbestos, absorbed in some period of exposure, appears to be a NE [necessary element] within a SS [sufficient set] for the eventuation of mesothelioma. If one employer were able to show that his asbestos control measures not negligent, or if there were a period (of asbestos exposure) when the victim was self-employed, this may affect the assessment of damages in any court case. But this does not affect factual causation: the 'guilty' fibre(s) could well have been absorbed in any period of exposure which happens to escape civil liability. In our circuit, no functioning cell can carry a comparable immunity. There is no way of identifying the cell whose discharge did indeed trigger the device. (A cell would be *excluded* as causal if an empirical test showed that it had lost no charge at all during the experiment – the analogous grounds for immunity in asbestos litigation would be if an employer could demonstrate that his control over asbestos exposure was not negligent.)

As Hamer explains, the difference between the "but for" test and the NESS test is one of "strong necessity while the NESS test is one of strong sufficiency."[479] In the example of the "two fires", neither "were *necessary* for the plaintiff's house to burn down, but both were *sufficient* for the plaintiff's house to burn down."[480] Hamer argues that in many scenarios the application of the NESS test and the "but for" test will produce entirely the same results.[481] Wright provides the following commentary in respect of the congruency between the "but for" test and NESS[482]:

The *sine qua non* account's strong-necessity analysis, properly applied, is a corollary of the NESS analysis that gives the correct answer when there was only one set of conditions that was actually or potentially sufficient for the consequence on the particular occasion. Contrary to what many assume, the *sine qua non* analysis relies on an embedded analysis of (lawful rather than causal) sufficiency. To determine if some condition was strongly necessary for the occurrence of some consequence that actually occurred, one must 'rope off' the condition at issue and then, using the relevant causal generalisations, determine whether the remaining existing conditions were lawfully sufficient for the

[479] Hamer D (1999) (n468) 30 – 31.
[480] Hamer D (1999) (n468) 30 – 31.
[481] Hamer D (1999) (n468) 31.
[482] Wright RW in Goldberg R (2011) (n120) 291 – 292.

occurrence of the consequence – that is, whether the relevant causal laws would have been fully instantiated in the absence of the condition at issue. If they would have been, the condition at issue was not strongly necessary for the occurrence of the consequence. In overdetermined causation situations in which there were two or more (usually overlapping) sets of conditions that were each actually or potentially sufficient – for example, two fires each sufficient to destroy a house if the fire reaches the house while it is still standing, which merge and destroy the house (*duplicative causation*), or one of which reaches the house and destroys it before the other arrives (*pre-emptive causation*) – the NESS analysis reaches the proper conclusions regarding causation, while the *sine qua non* ('but for', 'made a difference') analysis as usually described and applied does not.

The NESS test has become the subject of significant academic debate and scrutiny, but courts appear reluctant to adopt the test probably, as it "may be that they are unwilling to commit to a test which is more complex than the simple "but for" test while still failing to be comprehensive."[483] Miller opines that the House of Lords, although not explicitly employing the NESS test in *Fairchild v Glenhaven Funeral Services Ltd*[484], treated each of the defendants' negligence as one necessary element in a set which is independently sufficient for that head of damage.[485] The test has suffered extensive academic criticism, particularly at the hands of Fumerton & Kress.[486] The proponent of the NESS test, Richard Wright, concedes that his "initial elaborations of the NESS account were overly demanding."[487]

3 7 Discussion: Causation and Medical Negligence in England

The basic requirements in respect of professional accountability and medical negligence in English law are well-established, and it is trite that causation forms an essential element of liability in respect of medical negligence cases.[488] The focus of

[483] Hamer D (1999) (n468) 32.
[484] [2002] UKHL 22, [2003] 1 AC 32 (HL).
[485] Miller C in Goldberg R (2011) (n120) 337.
[486] Fumerton R & Kress K "Causation and the Law: Preemption, Lawful Sufficiency, and Causal Sufficiency*"* (2001) *Law and Contemporary Problems* 83 83 – 84, 95 – 97. See also Fischer DA "Insufficient Causes" (2005) *University of Kentucky Law Review* 277 281 – 284; Honoré T "Necessary and Sufficient Conditions in Tort Law" in Owen DG *Philosophical Foundations of Tort Law* (1990) 363 363 – 364, 366, 367, 374 – 374, 381 – 385; Kelman M "The Necessary Myth of Objective Causation Judgments in Liberal Political Theory" (1987) *Chicago-Kent Law Review* 579, 601 – 603; Stapleton J "Choosing What We Mean by 'Causation' in the Law" (2008) *Missouri Law Review* 433 443 – 444, 471 – 472, 474.
[487] Wright RW in Goldberg R (2011) (n120) 291.
[488] For a comprehensive exposition in respect of the principles governing medical negligence and professional accountability in England & Wales, consult Stauch MS "Causation Issues in Medical Malpractice: A United Kingdom Perspective" (1996) *Annals of Health Law* 247 248; De Cruz P (2001)

medical liability in England is found in the law of tort, more specifically negligence.[489] Goldberg states the following in respect of causation in the context of medical law[490]:

> It is fair to say that causation in the context of medical law is fraught with difficulty. Such difficulty is due both to the complexity of the factual circumstances themselves and to the perhaps (unnecessarily) complex nature of the law when the principles are applied to the facts. As the former, the complex and, to some extent, the indeterminate nature of medical science means that the causal nexus between A and B may be hard to demonstrate. Indeed, it could be said that the more medicine is portrayed as a scientific endeavour, rather than as an art or a combination of both art and science, the harder it becomes on occasion to demonstrate to the satisfaction of the law a causal link between breach and damage.

A patient must prove that the defendant's negligence caused or materially contributed to to the plaintiff's damage.[491] Causation has formed a crucial part of cases dealing *inter alia* with a failure to treat[492]; failure to administer a tetanus serum[493]; failing to monitor a patient on Gentamicin[494]; improper treatment of an infant[495]; failing to discover Down's syndrome[496]; failure to discover spina bifida[497]; infertility due to negligent surgery[498]; failure to inform of risk of cauda equina syndrome[499]; failure to

(n278) 236ff; Merry A & McCall-Smith A (2003) (n216) 127ff; Wheat K "Is there a Medical Malpractice Crisis in the UK?" (2005) *Journal of Law, Medicine & Ethics* 444; Goldberg R (2012) (n278) 145 – 146.

[489] De Cruz P (2001) (n278) 234: Tort is "a well-established cause of action and… plays a major part in the arena of healthcare laws. This is mainly due to the fact that as a general principle, there is no contractual relationship between doctor and patient except where the patient seeks treatment privately." See also *Pfizer Corp v Ministry of Health* [1965] AC 512 (HL). Medical negligence claims which arise from public healthcare providers such as the National Health Service are instituted against the appropriate National Health Service Trusts and Health Authorities, as opposed to individual medical practitioners – see UK Department of Health *NHS Indemnity Arrangements for Handling Clinical Negligence Claims Against NHS Staff* (1996) http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Healthserviceguidelines/DH_4018270; De Cruz P (2001) (n278) 234.

[490] Goldberg R (2012) (n278) 146. See also De Cruz P (2001) (n278) 236ff.

[491] *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1015ff; *Clark v MacLennan* [1983] 1 All ER 416; *Harrington v Essex AHA* (1984) The Times, 14 November 1984, [1984] CLY 2325; *Saunders v Leeds Western Health Authority* [1985] CLY 2320; *Hotson v Fitzgerald* [1985] 3 All ER 167, [1987] 1 All ER 210, [1987] 2 All ER 909 (HL).

[492] *Barnett v Chelsea and Kensington Hospital Management Committee* [1969] 1 QB 428.

[493] *Robinson v Post Office* [1974] 1 WLR 1176 (CA).

[494] *Vernon v Bloomsbury Health Authority* [1995] 6 Med LR 297.

[495] *Hotson v East Berkshire Area Health Authority* [1987] AC 750. See also Stauch MS (1997) (n219) 205; Stauch MS (2005) (n390) 18.

[496] *Gregory v Pembrokeshire Health Authority* [1989] 1 Med LR 81; *Deriche v Ealing Hospital NHS Trust* (2003) MLC 1083.

[497] *Rance v Mid-Downs Health Authority* [1991] 1 QB 587.

[498] *Briody v St Helens and Knowsley Area Health Authority* [2002] QB 856.

[499] *Chester v Afshar* [2004] UKHL 41. See further Buchan A (2012) (n268) 135 – 138.

diagnose skin cancer in a patient with a deformed fingernail[500]; brain damage in an infant[501]; botched plastic surgery[502]; failure to obtain informed consent[503]; failure to perform a blood test within two hours of a patient's admission to hospital[504]; amputation of a patient's arm after a delay[505], wrongful birth[506]; injury of a patient in hospital[507]; psychiatric injury[508] and spinal injury with paralysis[509]. The burden of proof in respect of clinical negligence was discussed in *Chappel v Hart*[510], where Kirkby J stated the following[511]:

> [T]he legal burden of proving causation is, and remains throughout the proceedings, upon the plaintiff. It is not an insubstantial burden. In some medical contexts, it has even been described as Herculean. In cases similar to the present, it has been characterised as 'the most formidable obstacle confronting health care consumers.

From what is outlined herein *supra* about the law of torts in England, it should be clear that English courts utilise the general principles of causation when deciding medical negligence cases[512], with attempts to apply the principles developed in asbestos cases facing resistance. Reversal of the burden of proof and loss of a chance have not found

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[500] *Cosgrove v Al-Doori* [2017] EWCA 1268 (QB).
[501] *Velarde v Guy's and St Thomas NHS Foundation Trust* [2017] EWCA 1250 (QB); *Palmer v Portsmouth Hospitals NHS Trust* [2017] EWHC 2460; *C (A Child) v North Bristol NHS Trust* (Unreported Judgment) (Queen's Bench Division 27 October 2017).
[502] *Giles v Chambers* [2017] EWHC 1661 (QB).
[503] *Shaw v Kovac* [2017] EWCA Civ 1028, [2017] 1 WLR 4773, [2018] 2 All ER 71 where it was held that the wrongful invasion of the plaintiff's father's personal autonomy respresented a free-standing cause of action, but that such cause of action had never been pleaded. In any event, it was clear from *Chester v Afshar* [2004] UKHL 41 and *Montgomery v Lanarkshire Health Board* [2015] UKSC 11 that failure to obtain informed consent should be formulated as an action in negligence/breach of duty. See also *FB v Rana* [2017] EWCA Civ 334; *Velarde v Guy's and St Thomas NHS Foundation Trust* [2017] EWCA 1250 (QB); *Diamond v Royal Devon and Exeter NHS Foundation Trust* [2017] EWHC 1495 (QBD); *Smith v Barking Havering and Redbridge NHS Trust* [2017] EWHC 943 (QB).
[504] *Macaulay v Karim* [2017] EWHC 1795 (QB).
[505] *Lane v Worcestershire Acute Hospitals NHS Trust* [2017] EWHC 1900 (QB).
[506] *Meadows v Khan* [2017] EWHC 2990 (QB), [2018] 4 WLR 8. See also *Groom v Selby* [2001] EWCA Civ 1522.
[507] *Spearman v Royal United Bath Hospitals NHS Foundation Trust* [2017] EWHC 3027 (QB), [2018] Med LR 244.
[508] Jones M "Causation and Psychiatric Damage" (2008) *PN* 255; *Dickins v O2 Plc* [2008] EWCA Civ 1144.
[509] *Hassell v Hillingdon Hospitals NHS Foundation Trust* [2018] EWHC 164 (QB); *Lesforis v Tolias* [2018] EWHC 1225 (QB).
[510] (1998) 195 CLR 232 para [93]. See also Neilson E "*Chappel v Hart*: The Problem with The Common Sense Test Of Causation*"* (1999) *University of Queensland Law Journal* 318 321 – 322; Khoury L (2006) (n122) 162 – 164. See also the discussion of Australian principles in para 5 *infra*.
[511] *Chappel v Hart* (1998) 195 CLR 232 para [93].
[512] With appropriate applications of the general rules where torts other than negligence are concerned – see 3 3 5 1 and 3 3 5 2 *supra.*

acceptance in medical negligence cases, with courts returning to a more traditional approach based on the balance of probabilities.[513] Loss of a chance opens a Pandora's box of overwhelming difficulties which can be avoided by application of the established alternatives.[514] Reversal of the burden of proof is an unrealistic option in light of the current state of English law.[515] A traditional application of the rules of evidence in English law leads to a systematic refusal of compensation for plaintiffs dealing with causal uncertainty in medical negligence cases.[516]

Khoury delineates the main problems in causation in medical law into abstract and personal causation[517]; abstract causation assesses "whether causation between the plaintiff's injury and its alleged cause is scientifically demonstrated from an abstract and objective point of view in the population as a whole".[518] This would include all cases "in which the uncertainty or controversy flows from limitations in the medical knowledge about the origin or mechanism of development of medical conditions (*aetiology*)".[519] Personal causation requires that "the court confront the abstract possibility of causation against the possibility that the damage was caused by other factors in the individual case being studied."[520] Importantly, according to Khoury[521]:

> While a causal relationship may exist between an agent and a particular condition in a certain percentage of cases, it may, in fact, be impossible to say whether it caused the condition in the case at hand. This evidential problem may emerge from difficulties in accurately reconstructing the sequence of past events because there exists a multiplicity of possible explanations of the patient's damage and, in the particular instance, facts with which to identify its exact cause are lacking.

[513] Khoury L (2006) (n122) 230. See also Goldberg R (2012) (n278) 142 – 146.
[514] Khoury L (2006) (n122) 230.
[515] Khoury L (2006) (n122) 230.
[516] Khoury L (2006) (n122) 230.
[517] Khoury L (2006) (n122) 48.
[518] Khoury L (2006) (n122) 49.
[519] Khoury L (2006) (n122) 49, 49 fn 228ff where the learned writer mentions the example of evidence that, on rare occasions, severe and permanent brain damage resulted from the administration of DPTP vaccine (against diphtheria, pertussis, tetanus and poliomyelitis) and that courts have found that it was unlikely that DPTP vaccine caused or contributed to irreversible brain damage in young infants, a central consideration being that encephalopathy is likely to occur in any event during the first six months of life, which is also the usual period of administration of the vaccine.
[520] Khoury L (2006) (n122) 51
[521] Khoury L (2006) (n122) 50 – 51.

Khoury advocates an evidential solution to the problems created by uncertain causation in medical negligence matters, arguing as follows[522]:

> In light of these critiques, we have defended the view that the solution to this evidential problem is… evidential. It lies in the two remaining solutions tackled by the judiciary: reliance on inferences and factual presumptions which takes into account the need for flexibility in cases involving uncertainty. While objecting to a rigid and orthodox approach to causal uncertainty, this text has rejected the French expansive tendencies evinced in the concept of proportional recovery, because of the conceptual difficulties they give rise to and their ultimate overreaching impact on the rules of civil liability. It has also opposed the rigidity of part of the current case law, which leads to almost systematic refusal to compensate the plaintiff in the presence of uncertain causation, arguing in favour of a flexible approach. The preferred solution lies between these two extreme positions, and the Supreme Court of Canada case law provides inspiration in this respect. Its advocacy of a more flexible approach to the assessment of evidence of causation is in harmony with the argument… *that the solution to this evidential problem does not lie in modifying the substantive rules of civil liability or evidence law, or creating new ones to address evidential difficulties, but rather in re-evaluating the way indirect evidence of causation is judicially assessed.*

The principles set out in *McGhee v National Coal Board*[523] and *Fairchild v Glenhaven Funeral Services Ltd*[524] seem attractive solutions to claimants in medical negligence cases.[525] However, as was held in *Wootton v J Doctor Ltd & Another*[526] where the appellant contended that because of the state of scientific knowledge precluded her from establishing that, "but for" the erroneous dispensing of Logynon ED she would not have become pregnant, she could invoke the alternative and exceptional principles of causation identified in *Fairchild v Glenhaven Funeral Services Ltd*[527], the Court of Appeal held that[528]:

> In my view, this is not a case in which to add to the teaching of the Court of Appeal on causation. The reason is obvious. The appellant has failed to establish that the erroneous intake of two Logynon pills materially increased the risk of contraceptive failure. She cannot invoke any principle to be derived from *Fairchild* or *Barker* to overcome the judge's finding, which I believe to be unassailable, that the

[522] Khoury L (2006) (n122) 230 [emphasis added].
[523] [1972] 3 All ER 1008.
[524] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[525] Khoury L (2006) (n122) 56.
[526] [2008] EWCA Civ 1361.
[527] [2003] 1 AC 32 (HL). See also Lord Hoffman in Goldberg R (2011) (n120) 8 [emphasis added].
[528] *Wootton v J Doctor Ltd & Another* [2008] EWCA Civ 1361 para [40].

reduction of 100mcg or 200mcg or progesterone did not increase, let alone materially increase, the risk of contraceptive failure.

As far as the distinctions between cumulative causes, competing causes, material contribution to the risk of injury and material contribution to injury is concerned, Buchan argues as follows in respect of the decision in *Boustead v North West Strategic Health Authority*[529]:

In that case, there were a number of potential causes of brain damage in a newborn infant. One was the delay in delivery by caesarean section. Others included his prematurity. Mr Justice Mackay held that the negligent delay was one of the current cumulative causes and since it had materially contributed to the hypoxia but to an unknown and unknowable extent, the claimant was entitled to recover… Where, on a balance of probability, therefore, the negligently caused hypoxia had materially contributed to the brain damage, but to an unknown or unknowable extent, liability is established. If, on the other hand, the hypoxia was one of a number of potential causes and it was impossible to say on the balance of probability whether it had caused or materially contributed to the injury, then liability would not be established.

As far as the steady progression towards a strict liability (plaintiff-favourable) regime in tort law (and by implication, medical law) is concerned, Lord Sumption's comments are apposite[530]:

My own experience, and perhaps yours too, is that even in areas where traditional notions of fault prevail in theory, the courts have in practice moved noticeably closer to strict liability, albeit very gradually and without acknowledging that they are doing it. This is because the whole forensic process of attributing fault is inherently biased in favour of the claimant. Once it is established that something has gone wrong that was caused, by the defendant's act, it can be very difficult to persuade a judge that it wasn't the defendant's fault. The law determines the standard of care which it imposes on individuals in advance, but the court finds fault in arrears with all the forensic advantages of hindsight. The evidence will commonly reconstruct the exact chain of causation by which the injury occurred, starting from the injury and working backwards to the act, but the judge finding fault, looks at the chain from the other end, starting with the defendant's act. The outcome seems obvious. What actually has happened was always going to happen, and what was always going to happen should have been obvious to the reasonable man, even if it wasn't at all obvious to the particular defendant. The whole forensic process lends a spurious clarity and inevitability to a chain of events that is actually a lot less straightforward.

[529] [2008] LS Law Med 471; Buchan A (2012) (n268) 141.
[530] Lord Sumption "Abolishing Personal Injuries Law: A Project" (2018) (Address to the Personal Injury Bar Association) *Journal of Personal Injury Law* 1.

The result may be very like strict liability, but it is strict liability with most of the uncertainty and all of the costs associated with a fault-based system.

4 CANADA

4 1 General

In Canadian law, a plaintiff is compelled not only to prove negligence but also negligence which causes injury.[531] Plaintiffs must prove causation on a balance of probabilities.[532] The Supreme Court of Canada has, in recent years, clarified the law of causation both as it applies to personal injury law in general, and in respect of medical negligence matters in particular.[533] As far as causation in tort in Canadian law is concerned, Canadian courts have been heavily influenced by English law.[534] Canadian courts have been influenced *inter alia* by the decisions in *McGhee v National Coal Board*[535] and *Wilsher v Essex Area Health Authority*[536]. According to Hughson[537]:

Numerous Canadian cases decided after *McGhee* adopted either the reversal of the onus or the inference interpretation principle, with no practical difference. When the latter approach was adopted, and the creation of the risk by the defendant's breach of duty was deemed to have established a clear case, the onus was effectively shifted to the defendant.

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[531] Solomon RM, Feldthusen BP & Mills SJ *Cases and Materials on the Law of* Torts (1986) 85ff; Fridman GHL *The Law of Torts in Canada* (2002) 417; Khoury L (2006) (n122) 229ff; Moore SR & Matrundola B "*The Supreme Court of Canada and the Law of Causation*" (2010) (Paper delivered at the 6th Annual "Update Personal Injury Law and Practice" Professional Development Program, September 6, 2010).

[532] Fridman GHL (2002) (n531) 418; Khoury L (2006) (n122) 30, 77 – 78, 81 – 83, 88, 165. *Snell v Farrell* (1990) 72 DLR (4th) 289 (SCC); *Athey v Leonati* (1996) 140 DLR (4th) 235 (QB).

[533] Hughson BF "Causation in Medical Malpractice Cases" (2000) *LawNow* 11. See also Willcock PM & Lepp JM "Causation in Medical Negligence Cases" (2008) (Paper presented at the Continuing Legal Education Society of British Columbia) at http://www.cba.org/cba/cle/pdf/Causation%20in%20Medical%20Negligence%20Cases_paper.pdf (accessed 29 September 2017) 1; Thomas MG "Causation in Medical Negligence Cases: A Perspective from British Columbia" (2011) *The Advocates' Quarterly* 67 – 74. A comprehensive discussion of the Canadian law of torts falls outside the scope of this work – see in general Sneiderman B, Irvine JC & Osborne PH *Canadian Medical Law* (1989) 69 – 187. See also generally Fridman GHL (2002) (n531) 415ff for a discussion of causation in the Canadian law of torts.

[534] Hughson BF (2000) (n533) 22 – 23. The principles pertaining to causation in tort in English law are discussed in paragraph 3 3ff *supra* and will not, for the sake of brevity, be repeated in full in the discussion of causation in Canadian law in this section.

[535] [1972] 3 All ER 1008 (HL). See also Sneiderman B, Irvine JC & Osborne PH (1989) (n533) 97 – 101.

[536] [1998] 1 AC 1074 (HL).

[537] Hughson BF (2000) (n533) 12.

4 2 Factual Causation

4 2 1 "But For" Test

The Canadian courts have emphasised the importance of the "but for" test and the critical role that it fulfils in balancing the general principles of factual causation in Canadian law.[538] In *Athey v Leonati*[539] Major J described the "but for" test as a "general but not conclusive test… which requires the plaintiff to show that the injury would not have occurred but for the negligence of the defendant." Frankel JA said the following in the matter of *Clements (Litigation Guardian Of) v Clements*[540]:

> Causation is a fundamental element of liability for negligence. A person who suffers harm is entitled to compensation from those who caused that harm. The 'but for' test is the method by which factual causation is established. The way the test works is described in Linden and Feldthausen *Canadian Tort Law* at 116: '[I]f the accident would not have occurred 'but for' the defendant's negligence, this conduct is a cause of the injury. Put another way, if the accident would have occurred just the same, whether or not the defendant acted, this conduct is not a cause of the loss. Thus the act of the defendant must have made a difference. If the conduct had nothing to do with the loss, the actor escapes liability.' In *Cork v Kirby MacLean Ltd* at 407 (CA) Lord Denning stated the test as follows:
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> 'Subject to the question of remoteness, causation is, I think, a question of fact. If you can say that the damage would not have happened 'but for' a particular fault, then that fault is, in fact, a cause of the damage; but if you can say that the damage would have happened just the same, fault or no fault, then the fault is not a cause of the damage. It often happens that each of the parties at fault can truly say to the other: 'but for' your fault, it would not have happened.' In such a case both faults are in fact causes of the damage.'

In *Resurfice Corp v Hanke*[541] the Supreme Court of Canada re-affirmed the "but for" test as the primary test for establishing factual causation. McLachlin CJ re-stated the relevant principles as follows[542]:

> First, the basic test for determining causation remains the 'but-for' test. This applies to multi-cause injuries. The plaintiff bears the burden of showing that, 'but-for' the negligent act or omission of each

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[538] Thomas MG (2011) (n533) 69; Willcock PM & Lepp JM (2008) (n533) 2.
[539] (1996) 140 DLR (4th) 235 (SCC) 238 – 239.
[540] (2010) BCCA 581 at paras 40 – 42; 327 DLR (4th)1, 12 BCLR (5th) 310.
[541] (2007) SCC 7, [2007] 1 SCR 333.
[542] *Resurfice Corp v Hanke* (2007) SCC 7, [2007] 1 SCR 333 para 21.

defendant, the injury would not have occurred. Having done this, contributory negligence may be apportioned, as permitted by statute. This fundamental rule has never been displaced and remains the primary test for causation in negligence actions. As stated in *Athey v Leonati*, at para 14 *per* Major J, '[t]he general, but not conclusive, test for causation is the 'but-for' test, which requires the plaintiff to show that the injury would not have occurred "but for" the negligence of the defendant'. Similarly, as I noted in *Blackwater v Plint* at para 78, '[t]he rules of causation consider generally whether 'but-for' the defendant's acts, the plaintiff's damages would have been incurred on a balance of probabilities.' The "but for" test recognises that compensation for negligence conduct should only be made 'where a substantial connection between the injury and the defendant's conduct' is present. It ensures that a defendant will not be held liable for the plaintiff's injuries where they may very well be due to factors unconnected to the defendant and not the fault of anyone.

Canadian courts have recognised the difficulties facing plaintiffs due to evidentiary shortcomings and who are unable to establish the concrete link between his or her injury and the defendant's breach of duty.[543] Canadian courts have further expressed concern that in the circumstances above, a rigid and strict application of the "but for" test and of the ordinary burden of proof on a balance of probabilities "rewards the careless defendant and denies relief to his probable victim."[544] The cases where the "but for" test is unworkable are those in which causation cannot be proved at a scientific level, although the law does not require such a level of proof.[545] According to David, McCague & Yaniszewski[546]:

The issue is not whether, in those circumstances, the 'but for' test is irrelevant or is not a necessary ingredient of causation. The issue in such situations rather involves the manner and standard of proof that will satisfy, for legal as opposed to scientific purposes, the necessary element of causation, including its core component as expressed by the 'but for' test.

4 2 1 1 Snell v Farrell

The issue of causation in medical negligence matters came before the Supreme Court of Canada in 1990 in the case of *Snell v Farrell*[547]. The appellant was an

[543] Thomas MG (2011) (n533) 70;
[544] Thomas MG (2011) (n533) 71.
[545] David H, McCague P & Yaniszewski PF "Proving Causation Where the "But For" Test is Unworkable*"* (2005) *The Advocates' Quarterly* 216, 220.
[546] David H, McCague P & Yaniszewski PF (2005) (n545) 220.
[547] [1990] 2 SCR 311; 72 DLR (4th) 289. See also Fridman GHL (2002) (n531) 422; Kennedy I & Grubb A (2000) (n216) 479 – 483; Khoury L (2006) (n122) 58 – 59, 165, 228; Willcock PM & Lepp JM (2008) (n533) 5; Thomas MG (2011) (n533) 67 – 74. See also Cheifetz D "The Snell Inference and Material

ophthalmologist who performed cataract surgery on the respondent's right eye. During the surgery, a small retrobulbar bleed was observed by the appellant. After satisfying himself that no other signs of haemorrhage were present, the appellant proceeded with the operation. It was later discovered that the respondent's optic nerve had atrophied and the respondent had lost sight in the right eye.[548] The respondent's expert found evidence that the respondent had suffered a stroke in the back of her eye, but could not identify the source, time or cause of the stroke. The appellant's expert could, similarly, not pinpoint the origin, time or cause of the stroke. The court *a quo* held that the facts of the case brought it within the emerging branch of the law of causation in terms of which the onus to disprove causation shifted to the defendant. The court adopted the "robust and pragmatic" approach set out in *McGhee v National Coal Board*[549] and *Wilsher v Essex Area Health Authority*[550] in *Snell v Farrell*[551]. The court in *Snell v Farrell*[552] was faced with the difficulty of making a finding of fact under circumstances where neither the plaintiff's expert nor the defendant's expert was able to conclusively establish the cause of the plaintiff's blindness on a balance of probabilities.[553]

Sopinka J set out the following principles to be considered in assessing causation under the circumstances above[554]:

(a) causation need not be determined with scientific precision;

(b) factfinders are to take a 'robust and pragmatic approach' to the facts that the injured person asserts support the conclusion that the misconduct of a defendant is a factual cause of his or her injury;

(c) where the relevant facts are particularly within the knowledge of the defendant 'very little affirmative evidence will be needed to justify an inference of causation, in the absence of evidence to the contrary; and

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Contribution: Defining the Indefinable and Hunting the Causative Shark" (2005) *The Advocates' Quarterly* 45; Brown R "Inferring Cause in Fact and the Search for Legal 'Truth' " in Goldberg R (2011) (n120) 93ff.

[548] Hughson BF (2000) (n533) 12; Willcock PM & Lepp JM (2008) (n533) 7.

[549] [1972] 3 All ER 1008 (HL).

[550] [1998] 1 AC 1074 (HL).

[551] [1990] 2 SCR 311; 72 DLR (4th) 289.

[552] [1990] 2 SCR 311; 72 DLR (4th) 289.

[553] Thomas MG (2011) (n533) 73; Kennedy I & Grubb A (2000) (n216) 481 – 482.

[554] *Snell v Farrell* [1990] 2 SCR 311; 72 DLR (4th) 289 329 – 330. See also Waddams SA "Judicial Discretion" (2001) *Oxford University Commonwealth Law Journal* 59 68 – 71.

(d) factual causation is a question to be answered by the application of 'ordinary common sense'.

Sopinka J's statement on causation is often used in support of arguments on behalf of plaintiffs. The argument is as follows[555]:

It is not strictly accurate to speak of the burden shifting to the defendant when what is meant is that evidence adduced by the plaintiff may result in an inference being drawn adverse to the defendant. Whether an inference is or is not drawn is a matter of weighing evidence. The defendant runs the risk of an adverse inference in the absence of evidence to the contrary. This is sometimes referred to as imposing on the defendant a provisional or tactical burden.

The decision in *Snell v Farrell*[556] attracted much academic criticism particularly in respect of the notion that "an inference of cause-in-fact can be drawn in the absence of scientifically demonstrated causal linkage."[557] Brown summarises the main thrust of the criticism against the judgment in the following terms[558]:

Put generally; their criticism is that allowing fact-finders to 'infer' cause-in-fact excuses them from offering clear reasoning for finding a causal link between a defendant's negligence and a plaintiff's harm without evidence proving such a link to a probable standard.

Klar's criticism of the principle enunciated in the judgment is significant[559]:

The effect of *Snell v Farrell* on proving causation in cases where scientific and expert evidence cannot establish a probable connection between a defendant's negligence and a plaintiff's injury has been significant. To allow an inference of cause to be drawn even where there is no scientific evidence of a probable connection between negligence and injury is in effect to accept the essential principle of

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[555] Thomas MG (2011) (n533) 73; *Snell v Farrell* [1990] 2 SCR 311; 72 DLR (4th) 289 329 – 330.
[556] [1990] 2 SCR 311; 72 DLR (4th) 289.
[557] Brown R in Goldberg R (2011) (n120) 95. See also Pincus SN "Progress on the Causal Chain Gang: Some Approaches to Causation in Tort Law and Steps Toward a Linguistic Analysis" (1986) *Osgoode Hall Law Journal* 961 983; Fleming JG "Probabilistic Causation in Tort Law" (1989) *Canadian Bar Review* 661 670; Archibald JB "Proof of Causation Revisited: Snell v Farrell" (1991) *Journal of Environmental Law and Practice* 227 231; Black V "The Transformation of Causation in the Supreme Court: Dilution and 'Policyiazation'*"* in Archibald T & Cochrane M *Annual Review of Civil Litigation 2002* (2003) 187, 195; Klar L *Tort Law* (2003) 402 – 403; Cheifetz D "Materially Increaing the Risk of Injury as Factual Cause of Injury: Fairchild v Glenhaven Funeral Sevices Ltd in Canada" (2004) *The Advocates Quarterly* 253 255; Khoury L (2006) (n122) 164 – 169.
[558] Brown R in Goldberg R (2011) (n120) 95.
[559] Klar L (2003) (n557) 402 – 403.

McGhee. While this approach may produce a pragmatic solution to a plaintiff's dilemma in difficult causation cases, it does depart from the traditional 'but for' test and the balance of probabilities standard.

4 2 1 2 Moore v Castlegar & District Hospital

In *Moore v Castlegar & District Hospital*[560] the plaintiff proved that the defendant breached the duty of care owed to him by failing to take appropriate spinal x-rays after being involved in a motor vehicle collision. The question to be decided was whether the plaintiff's spinal cord injury occurred in a hospital or whether the injury was sustained during the motor vehicle collision. Evidence was led on the issue of causation by both parties. The court *a quo* rejected the plaintiff's evidence on causation and accepted the defendant's version on causation, dismissing the plaintiff's action. On appeal, the plaintiff argued that the court *a quo* erred in failing to draw an inference, in the absence of positive x-ray evidence, that the plaintiff suffered the spinal cord injury after he arrived at the hospital. Hollinrake J held[561] that, as expert evidence had been led on the issue of causation, the court could not rely on the inference in *Snell v Farrell*[562]. Hollinrake J stated the following in respect of the inference and causation[563]:

> With respect, I think in a case such as this, where there is affirmative medical evidence leading to a medical conclusion it is not open to the court to apply the 'common sense reasoning urged in *Snell v Farrell*'. I take it this is what the trial judge was referring to when she said: 'All parties have led evidence on this issue [causation] and it would be inappropriate to resort to an inferential analysis as was argued on the plaintiff's behalf.' I share that view.

4 2 1 3 Bigcharles v Dawson Creek & District Health Care Society

Hollinrake J's conclusion as set out in *Moore v Castlegar & District Hospital*[564] was confirmed in the matter of *Bigcharles v Dawson Creek & District Health Care*

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[560] (1998) 49 BCLR (3d) 100, 169 WAC 187, 77 ACWS (3d) 677 (CA), [1998] SCCA 171.
[561] *Moore v Castlegar & District Hospital* (1998) 49 BCLR (3d) 100, 169 WAC 187, 77 ACWS (3d) 677 (CA), [1998] SCCA 171; Thomas MG (2011) (n533) 76; Willcock PM & Lepp JM (2008) (n533) 7 – 8.
[562] [1990] 2 SCR 311; 72 DLR (4th) 289.
[563] *Moore v Castlegar & District Hospital* (1998) 49 BCLR (3d) 100, 169 WAC 187, 77 ACWS (3d) 677 (CA), [1998] SCCA 171 105.
[564] (1998) 49 BCLR (3d) 100, 169 WAC 187, 77 ACWS (3d) 677 (CA), [1998] SCCA 171.

Society[565] the plaintiff suffered a spinal injury in a motor vehicle accident, attended at the defendant hospital. It was later discovered that the plaintiff suffered a neurological injury resulting in paraplegia. The plaintiff had not received an appropriate series of x-rays, and the court had to decide whether or not a failure to immobilise the plaintiff caused, or contributed, to his ultimate injury. The majority of the court held that, as the defendants had adduced positive evidence on the issue of causation, it was necessary to rule on the issue of factual causation.[566] The court *a quo* declined to draw an inference in favour of the plaintiff on causation. Hollinrake J stated the following[567]:

> I do not view the principle in *Snell* as being one to permit a trial judge to leap to a conclusion by way of inference without full consideration of the evidence during the weighing process. If that process leads to a conclusion that neither party has made out its case on a balance of probabilities where, as here, there is a substantial body evidence led by the defendants on the issue of causation, it is in my opinion open to the trial judge to decline to draw an inference on this issue. The inferential process set out in *Snell* does not, however, mean that a tie means that the plaintiff succeeds or, to put it another way, that 50% equals 51%.

It is clear that the initial acceptance of *McGhee v National Coal Board*[568] and *Wilsher v Essex Area Health Authority*[569] in Canadadid not lead to a shift in the onus of proof of causation.[570] *Snell v Farrell*[571] did, however, lead to the conclusion that little positive evidence could ultimately discharge the onus.[572] The inference would only be made where the defendant failed to adduce positive evidence, and even more readily where defendants are uniquely qualified to adduce evidence.[573]

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[565] (2001) 91 BCLR (3rd) 82, 251 WAC 134, 5 CCLT (3rd) 157 (CA), [2001] SCCA 390; Willcock PM & Lepp JM (2008) (n533) 8.
[566] See also *M (CP) (Guardian ad Litem Of) v Martin* (2006) BCCA 333, 55 BCLR (4th) 260, 40 CCLT (3d) 11 *sub nom M (CP) (Guardian ad Litem Of) v Quinn*; Willcock PM & Lepp JM (2008) (n533) 9.
[567] *M (CP) (Guardian ad Litem Of) v Martin* (2006) BCCA 333, 55 BCLR (4th) 260, 40 CCLT (3d) 11 *sub nom M (CP) (Guardian ad Litem Of) v Quinn.* See also Khoury L (2006) (n122) 79, 79 fn 17.
[568] [1972] 3 All ER 1008.
[569] [1998] 1 AC 1074 (HL).
[570] Thomas MG (2011) (n533) 80; Khoury L (2006) (n122) 60, 79; Willcock PM & Lepp JM (2008) (n533) 6 – 7.
[571] [1990] 2 SCR 311; 72 DLR (4th) 289.
[572] Thomas MG (2011) (n533) 80.
[573] Thomas MG (2011) (n533) 80: "Whether the inference is legal or factual has been the result of academic debate. The courts are reluctant to apply the *Snell* inference where the inference to be drawn is not a factual gap within the knowledge of the defendant but a true knowledge gap in the sense that no one knows whether or not there is a causal link between the tortious activity and the damage. In the case of the latter, one cannot rely on a common sense approach to arriving at an answer because the causal link consists of nothing more than a guess which is more likely to be wrong than to be right."

In British Columbia, it is clear that the circumstances in which a court may draw the *Snell v Farrell*[574] inference in respect of causation are mostly limited to medical negligence cases.[575] The first point of departure is that where affirmative evidence has been led on causation (by either the plaintiff or the defendant), the "but for" test must be applied.[576] If the plaintiff fails to lead affirmative evidence on causation where he or she was in a position to do so, the plaintiff has failed to prove his or her case, and the *Snell v Farrell*[577] inference should not find application.[578] The *Snell v Farrell*[579] inference is not appropriate in instances where the court cannot reliably make common sense inferences.[580]

4 2 2 Burden of Proof

4 2 2 1 Civil Burden and Standard of Proof

The onus rests on the plaintiff to prove that the defendant's negligence caused his or her loss.[581] In *Cook v Lewis*[582] the Supreme Court of Canada qualified the aforementioned principle. The case concerned two hunters who fired at the same time making it impossible to determine who caused the plaintiff's injury. The Supreme Court of Canada placed the onus on each of the defendants to prove that he was not negligent and did not cause the plaintiff's injury.[583] Pursuant to the decision in *Cook v Lewis*[584] the principles established in *McGhee v National Coal Board* were accepted

[574] [1990] 2 SCR 311; 72 DLR (4th) 289.
[575] Thomas MG (2011) (n533) 81; Willcock PM & Lepp JM (2008) (n533) 7 – 9.
[576] Thomas MG (2011) (n533) 81; Willcock PM & Lepp JM (2008) (n533) 7 – 9.
[577] [1990] 2 SCR 311; 72 DLR (4th) 289.
[578] Thomas MG (2011) (n533) 81; Willcock PM & Lepp JM (2008) (n533) 7 – 9.
[579] [1990] 2 SCR 311; 72 DLR (4th) 289.
[580] Thomas MG (2011) (n533) 82. "Exceptional circumstances" may exist when liability could be considered in terms of *Clements (Litigation Guardian Of) v Clements* (2010) BCCA 581, 327 DLR (4th) 1, 12 BCLR (5th) 310.
[581] Fridman GHL (2002) (n531) 439; *Jadhav v Kielly* (2018) NLSC 97; *Melançon v Depuy Orthopaedics Inc.* (2018) QCCS 1921 (CanLII) paras [92] – [93]; *Crump et al v Fiture et al* (2018) ONCA 439 (CanLII) paras [21] – [26]; *Fabian v Song* (2018) BCSC 762 (CanLII) paras [87] – [98]; *Lantin et al v Seven Oaks General Hospital* (2018) MBCA 57 (CanLII).
[582] [1951] SCR 830. See also *National Trust Co v Wong Aviation Ltd* [1969] SCR 481 (SCC); *Hollis v Birch* [1995] 4 SCR634 (SCC).
[583] Fridman GHL (2002) (n531) 439. See also *Lange v Bennett* [1964] OR 60 (HC); *Nowsco Well Service Ltd v Canadian Propane Gas & Oil Ltd* (1981) 122 DLR (3d) 228 (Sask CA) 247.
[584] [1951] SCR 830.

in a range of Canadian cases.[585] It is to be noted that *Cook v Lewis*[586] is still recognised although it is not applied to medical malpractice cases in Canada.[587]

4 2 2 2 Criminal Burden and Standard of Proof

In criminal cases the standard of proof required in respect of causation is that the "accused's conduct be at least a contributing cause of the [result], outside the *de minimis range.*"[588] A negligent medical practitioner may be held criminally liable for *inter alia* manslaughter.[589] A medical practitioner may also be held liable for assault and battery.[590]

4 2 2 3 Coronial Inquests

In Canada coroners are obliged to ascertain the identity of individuals who have died unnatural, violent or suspicious deaths.[591] The standard of proof in respect of causation

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[585] *Powell v Gutman (No 2)* (1978) 89 DLR (3d) 180 (Man CA); *Dalpe v City of Edmunston* (1978) 25 NBR (2d) 102 (CA); *Re Worker's Compensation Appeal Board & Penney* (1980) 112 DLR (3d) 95 (NSSC); *Nowsco Well Service Ltd v Canadian Propane Gas & Oil Ltd* (1981) 122 DLR (3d) 228 (Sask CA) 247; *Delaney v Cascade River Holidays Ltd* (1983) 44 BCLR 24 (CA); *Meyer v Gordon* (1981) 17 CCLT 1 (BCSC).

[586] [1951] SCR 830.

[587] Khoury L (2006) (n122) 79; *Joseph v Brant Memorial Hospital v Koziol* (1977) 77 DLR (3d) 161, [1978] 1 SCR 491 – 500; *Bigcharles v Dawson Creek and District Health Care Society* (1998) 49 BCLR (3d) 100, 169 WAC 187, 77 ACWS (3d) 677 (CA), [1998] SCCA 171; *Hollis v Dow Corning Corporation* (1995) 129 DLR (4th) 609, [1995] 4 SCR 634 682; *Walker Estate v York Finch General Hospital* (2001)198 DLR (4th) 193, [2001] 1 SCR 647.

[588] Colvin E "Causation in Criminal Law" (1989) *Bond Law Review* 257; *R v Smithers* (1977) CanLII 7 (SCC), [1978] 1 SCR. 506 519; *R v Nette* (2001) SCC 78, [2001] 3 SCR 488 para 44; *R v KL* (2009) ONCA 141 17; *R v Maybin* (2012) SCC 24 para 15; *R v Kippax* (2011) ONCA 766 [2011] OJ 5494 22 – 27. In respect of intervening acts see *R v Tower* 2008 NSCA 3 para 25. See also generally the Criminal Code (RSC 1985 c C-46); Storey T (2017) (n234) 143ff.

[589] Storey T (2017) (n234) 143; s222(5)(a) & 236(b) of the Criminal Code. See generally Ormerod D & Fortson "Drug Suppliers as Manslaughterers (Again)" [2005] Crim LR 819; Cherkassky L "Kennedy and Unlawful Act Manslaughter: A Reinstatement of Causation Principles" (2008) *JCL* 353; O'Doherty S "Unlawful Act Manslaughter and Causation" (2010) *CL & J* 549; Baker D "Omissions Laibility for Homicide Offences: Reconciling *R v Kennedy* with *R v Evans*" (2010) *JCL* 310; *R v LM* (2018) NWTTC 06; *R v Kennedy* [2007] UKHL 38; *R v Valiquette* [2017] NBJ 50 (QB).

[590] *R v Smithers* [1978] 1 SCR 506; *R v Creighton* [1993] 3 SCR 3, (1993) 105 DLR (4th) 632; *R v LaBerge* (1995) ABCA 196; *R v Shanks* (1996) 4 CR (5th) 79; *R v Gunning* [2005] 1 SCR 627; https://www.cmpa-acpm.ca/en/advice-publications/handbooks/consent-a-guide-for-canadian-physicians (Accessed 13 June 2018).

[591] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 331.

in inquests is on a balance of probabilities.[592] In *People First of Ontario v Niagara (Regional Coroner)*[593] it was held that a coronial inquest is "not a trial; an inquest is not a Royal Commission; and inquest is not a public platform; an inquest is not a crusade".[594] Freckelton mentions the problematic issue of multiple causes when the extent of causal links are to be determined in coronial inquests and provides the following example[595]:

> The debris flow occurred progressively, commencing on a steep section of a naturally unstable slope. … An investigation team was organized by the Ministry of Forests to determine the causative factors. Members of the team were experts in slope stability, forest hydrology, soil science, forest engineering and watershed management. The investigation reveals that the 42 days preceding 12 June 1990 were the wettest on record. This situation created wet soil moisture conditions that set the stage for a precipitation event. Along with this, the terrain in the vicinity of the initial debris flow is inherently unstable. This is evident by the presence of pistol butt trees and old stump scars on a hillslope of 34 degrees. There is a clearcut area above the debris flow. This absence of trees changed the timing and the amount of water delivered to the soil. The network of roads and ditches here increased the drainage source areas above the debris flow. All of these factors although not singly causative, when combined the effect was potentiated.

In *In Re: Brian Lloyd Sinclair Inquest*[596] it was argued that inquests are analogous to commissions or inquiries but, Preston PJ held that "an inquest is not an inquiry."[597] The court further held that inquiries are initiated by the delegation of an executive power to a commission, and that the commissioner may or may not be a judge, and that a commission of an inquiry is not a court.[598] Inquests are judicial proceedings (sittings of the Provincial Court) and the powers of judges who preside inquests are derived from legislation, the Provincial Court Act 1996[599]. The Fatality Act 2001[600]

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[592] *R v Beckon* (1992) 93 DLR (4th) 161 175; Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 352.
[593] (1991) 85 DLR (4th) 174.
[594] *People First of Ontario v Niagara (Regional Coroner)* (1991) 85 DLR (4th) 174; Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 335 – 336.
[595] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 349 taken from *Kozub v HMTQ* (2000) BCSC 194 para [5]; *Smith v Armstrong (The Attorney General of Canada) et al* (2018) ONSC 2435 paras [37] – [41]; *Cyril v George* (2018) BCSC 635 (CanLII) paras [40] – [45], [102] – [106].
[596] (2010) MBPC 18.
[597] *In Re: Brian Lloyd Sinclair Inquest* (2010) MBPC 18 paras [52] – [53].
[598] *In Re: Brian Lloyd Sinclair Inquest* (2010) MBPC 18 para [53].
[599] CCSM c C275.
[600] CCSM c F52.

expressly prohibits a provincial court judge from expressing an opinion or making a determination which blames any specific party.[601]

4 2 2 4 Disciplinary Proceedings

Medical practitioners in Canada are subject to professional censure by the provincial medical authorities of each province. The onus is on the relevant provincial College to prove that a medical practitioner is guilty of a professional infraction.[602] The standard of proof in disciplinary proceedings before medical authorities in Canada is on a balance of probabilities.[603]

4 3 Material Contribution to Injury

Canadian courts have held that "in some circumstances, it is sufficient to prove that it is more likely than not that a defendant 'materially contributed' to an injury to satisfy a causal link to damages."[604] Such a factor would be "material" if it falls outside of the *de minimis* range[605], or constitutes a "substantial" connection or contribution.[606] In Canadian cases guidance is provided in respect of the meaning of "*de minimis*" and

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[601] Section 33(2).
[602] *Law Society of Upper Canada v. Teller* (2010) ONLSHP 55 para 7.
[603] *Insurance Co. v. Dalton Cartage Co.* (1982) 1 SCR 164 (SCC). See also *FH v McDougall* (2008) SCC 53, 2008 CarswellBC 2041; *Heath v. College of Physicians and Surgeons (Ontario)* (1997), 6 Admin. L. R. (3d) 304 (Ont. Ct. (Gen.Div.)) para 53. See also Decision No. 1862/17 (2017) CarswellOnt 11314, (2017) ONWSIAT 2085 DECISION NO. 1862/17: "Tribunal jurisprudence applies the test of significant contribution to questions of causation. A significant contributing factor is one of considerable effect or importance. It need not be the sole contributing factor. The Tribunal has applied the common law that a robust and pragmatic approach to the undisputed primary facts of the case should be taken to determine causation, even though medical or scientific expertise cannot arrive at a definite conclusion. All of the evidence, including the medical and non-medical evidence, should be considered to determine whether causation is established. A decision-maker may draw reasonable inferences from underlying factors, although they may not speculate. A reasonable inference may be drawn where there is no alternative plausible theory. See *British Columbia (Workers' Compensation Appeal Tribunal) v. Fraser Health Authority* paras 31-39, 2016 SCC 25 (CanLII)".
[604] Fridman GHL (2002) (n531) 419 – 421; Thomas MG (2011) (n533) 91; Willcock PM & Lepp JM (2008) (n533) 24 – 27.
[605] *Athey v Leonati* [1996] 3 SCR 458, 140 DLR (4th) 235, [1997] 1 WWR 97 para 15; Fridman GHL (2002) (n531) 421.
[606] Fridman GHL (2002) (n531) 421 – 422; David H, McCague WP & Yaniszewksi PF (2005) (n545) 223.

"substantial", equating those terms with the terms "not trivial or insignificant" and that which is not "of no importance, trivial, trifling, contemptible".[607]

Moore & Nash emphasise the important distinction between "material contribution" and "material increase in risk" [608]:

The 'material contribution' test requires a plaintiff to demonstrate that a defendant's negligent conduct was 'material' to the loss complained of. In other words, on analysis of the facts, the defendant's negligent act or omission must fall outside of the *de minimis* range and amount to something more than a mere trivial contribution to the harm suffered by the plaintiff. On the other hand, the 'material increase in risk' test assesses whether the defendant's conduct materially increased the plaintiff's risk of injury. While a material increase in risk approach to causation has been accepted as applicable in very exceptional and fact-specific cases in England, there remains considerable debate about whether such an approach is valid as a standalone test for causation in Canada.

Klar notes the following in respect of the "material increase in risk" test[609]:

[It is] a radical departure from the way the law normally connects the defendant's negligence to the plaintiff's injury, since it focuses on the defendant's negligence contributing to a risk of injury rather than the injury itself.

A fundamental principle which is frequently overlooked in dealing with factual causation and the material contribution test, according to the learned authors, is that "a factor must first be shown to have been a cause before it can be said to have been a materially contributing cause".[610]

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[607] David H, McCague WP & Yaniszewksi PF (2005) (n545) 223; *R v Nette* [2001] 3 SCR 488 paras 1 – 14, 205 DLR (4th) 613, 158 CCC (3d) 48; *R v Malmo-Levine; R v Caine* [2003] 3 SCR 571 paras 113 – 134, 233 DLR (4th) 415, 179 CCC (3d) 417; *Blackwater v Plint* [2005] 3 SCR 3 (SCC); *Hutchings v Dow* [2007] BCJ 481 (CA).

[608] Nash K & Moore S "The Supreme Court of Canada and the Law of Causation Revisited Again" (Undated) available at https://www.blaney.com/files/SupremeCourtofCanadaandLawofCausationRevisitedAgain_KNash_SMoore_RWinsor.pdf.

[609] Klar L *Tort Law* (2008) 441.

[610] Fridman GHL (2002) (n531) 421; David H, McCague P & Yaniszewski PF (2005) (n545) 220.

4 3 1 *Athey v Leonati*

In *Athey v Leonati*[611] the plaintiff had a long history of back problems. The plaintiff was involved in two successive motor vehicle collisions, and the defendants who were involved in each of the collisions admitted liability. The plaintiff suffered a disc herniation while stretching in a health club. The plaintiff sued the two defendants who were involved in the collisions. The main issue between the parties was whether the herniation was due to the plaintiff's pre-existing back problems, or whether the collisions were to blame for the injury. The court *a quo* held that the collisions were not the sole cause of the plaintiff's injury, but that they played a role in the disc herniation. The percentage of contribution to the plaintiff's injury by the collisions was assessed at 25%, and an award for 25% of the plaintiff's damages was made. The Supreme Court of Canada held that the defendants were liable for all of the plaintiff's damages as their negligence was proven to have caused, or materially contributed to, the plaintiff's disc herniation. The court held that a contributing factor is "material" when it is not *de minimis*.[612] Once it has been established that the defendant's conduct is a "materially contributing cause" of the plaintiff's injury, the defendant will be held liable for all of the plaintiff's damages.[613] According to David, McCague & Yaniszewski, it is important to note that a factor can only be considered to be "materially contributing" once it is proven to be *a* material *cause*.[614] They submit that the correct approach in respect of material contribution should be as is outlined in the following comments[615]:

> Where a plaintiff proves that the defendant's breach of duty materially contributed to the injury, that is sufficient to prove that the breach caused the injury. If proof by a plaintiff that the defendant's breach of duty materially contributed to his injury relieves the plaintiff of his obligation to show that the defendant's breach caused the injury, then it must follow that a material contribution to an injury is one that "but for" such contribution the injury would not have occurred. By saying what a material contribution does, i.e. satisfies the plaintiff's ordinary proof of causation, *Wilsher* is confirming the "but

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[611] [1996] 3 SCR 458, 140 DLR (4th) 235, [1997] 1 WWR 97. See also David H, McCague P & Yaniszewski PF (2005) (n545) 218 – 222.
[612] Thomas MG (2011) (n533) 91; Willcock PM & Lepp JM (2008) (n533) 24 – 27.
[613] See also *Blackwater v Plint* 2005 SCC 58; *Walker Estate v York Finch General Hospital* [2001] 1 SCR 647, 258 DLR (4th) 275, [2005] 3 SCR 3.
[614] David H, McCague P & Yaniszewski PF (2005) (n545) 220.
[615] David H, McCague P & Yaniszewski PF (2005) (n545) 222, 221 fn 30; *Couillard v Wachulewski Estate* (1988) 59 Alta LR (2d) 62, 77; *Gallant v Fialkow* (1989) 69 OR (2d) 297, 316.

for" test for causation. It is because "but for" the contribution of the injury would not have occurred" that the contribution is designated "material".

Major J acknowledged in this case that circumstances might exist where the "but for" test is unworkable, and that in such circumstances causation is established where the defendant's negligence "materially contributed" to the occurrence of the plaintiff's injury.[616] Ultimately, the court did not resort to the "material contribution" test but inferred a causal connection from the fact that the defendant's negligence, which had caused serious back injuries, was followed "shortly after that" by the disc herniation.[617] The judgment was criticised, firstly, because the court did not elaborate on the particular circumstances within which the "but for" test could be said to be unworkable, and secondly, no guidance was provided by the court in respect of what makes a defendant's negligence factually causative under the "material contribution" test.[618] Brown comments as follows in respect of the uncertainties involved in the use of the "material contribution" test instead of the "but for" test[619]:

In a nutshell, the problem is that once tort law abandons the but-for test's requirement of a *necessary* link between the defendant's negligence and the plaintiff's loss, causation's inherent counterfactual dependence does not contemplate any obvious alternative threshold for liability. If the threshold is not to be a necessity, *then* what? Possibility? Conceivability? And, to what standard of proof? Between 25% and 50%? 1% or greater? The most we can say, drawing from little assistance the court provided, is that the link need not be probable since, in that case, the but-for test would be satisfied, and there would be no need for recourse to material contribution.

4 3 2 *St-Jean v Mercier*

The plaintiff was struck by a motor vehicle and was taken to hospital by ambulance. He suffered open fractures of both legs and a head injury. The plaintiff underwent emergency surgery in respect of his legs and subsequently underwent further surgery. After being discharged, it became evident that the plaintiff had suffered a fracture at

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[616] *Athey v Leonati* [1996] 3 SCR 458. 140 DLR (4th) 235. See also Brown R "Material Contribution's Expanding Hegemony: Factual Causation After Hanke v Resurfice Corp" (2007) *Canadian Business Law Journal* 432, 434 – 438. There appears to be a lack of distinction between "material contribution" and "material increase in risk".
[617] Brown R (2007) (n616) 434.
[618] Brown R (2007) (n616) 434, 437.
[619] Brown R (2007) (n616) 437.

the T7 level and developed paraparesis in both legs. The defendant failed to fully investigate and treat the injury to the plaintiff's spine. The court *a quo* determined that the care provided to the plaintiff was appropriate and that the failure to treat the plaintiff's spine was not causally linked to the plaintiff's paraparesis. The Court of Appeal determined that the defendant breached the required standard of care in not making further enquiries into the plaintiff's spinal fracture. Notwithstanding the physician's omissions, the collision was the legal cause of the plaintiff's paraparesis and that there was no causal link between the delayed diagnosis and the plaintiff's injuries. In the Supreme Court of Canada, the plaintiff argued that the court be enjoined to infer causation against the defendant, arguing that the defendant had created a risk and that the harm which befell the plaintiff was within the ambit of such risk. The plaintiff further argued that a reversal of the burden of proof should be applied as the defendant's negligence deprived the plaintiff of important means of proof. The Supreme Court of Appeal rejected the plaintiff's arguments and held as follows[620]:

> The Court of Appeal appropriately said that it is insufficient to show that the defendant created a risk of harm and that the harm subsequently occurred within the ambit of the risk created. To the extent that such a notion is a separate means of proof with a less stringent standard to satisfy, *Snell*, *supra*, and definitely *Laferriere, supra*, should have put an end to such attempts at circumventing the traditional rules of proof and the balance of probabilities. There may be misapprehension of what I said in *Laferriere, supra,* at page 609: 'In some cases, where a fault presents a clear danger and where such danger materialises, it may be reasonable to presume a causal link, unless there is a demonstration or indication to the contrary.' This is merely a reiteration of the traditional approach on assumptions, and does not create another means of proof in Quebec civil law in the establishment of the causal link. The Court of Appeal correctly interpreted this passage as pertaining to presumptions within the traditional rules of causation.

The Supreme Court of Canada, therefore, re-affirmed the importance of utilising the "but for" test when proving causation, and that the "material contribution" test cannot be used to circumvent proof of factual causation in terms of the "but for" test. The application of the "material contribution" test in Canada is limited to medical negligence matters, and that application of the "material contribution" test to situations

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[620] *St-Jean v Mercier* [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17.

involving multiple causative effects is "synonymous with allowing recovery for 'loss of chance'."[621]

4 3 3 *Cottrelle v Gerrard*

The plaintiff had diabetes and was at risk of developing vascular disease. The risk was further increased by the fact that she was a smoker. The plaintiff developed a sore between her toes and consulted a physician. The physician prescribed a topical cream. No arrangements for a follow-up visit were made, and the plaintiff's foot was not re-examined until a visit five weeks after the first consultation. Another five weeks after the last consultation, the plaintiff visited a hospital emergency department where the attending physician prescribed oral antibiotics. She made an appointment to see her physician a few days after the visit to the emergency department of the hospital. The physician did not examine the plaintiff's foot and referred her to a dermatologist. The appointment with the dermatologist was two months hence. Three months after the last appointment with her physician, the plaintiff contracted gangrene of the foot, and it required amputation.[622]

The plaintiff argued that her physician should have admitted her to hospital for a more aggressive course of treatment and, had he in fact done so, the infection could have been controlled through appropriate antibiotics or even the amputation of her toe. The defendant argued that, in light of the serious nature of the infection, a more aggressive course of treatment would have made no difference in the outcome. The court *a quo* held that the defendant's failure to provide more aggressive treatment to the plaintiff was the cause of her injuries. The trial judge held that the physician's omission materially contributed to the development of a deeper infection, which materially contributed to the development of gangrene.[623]

In the Ontario Court of Appeal, plaintiff conceded that no evidence existed proving that it was more likely than not that, had the defendant followed a more aggressive course of action, the plaintiff's leg would have been saved. The evidence of a

[621] Thomas MG (2011) (n533) 95; Willcock PM & Lepp JM (2008) (n533) 24, 37.
[622] Willcock PM & Lepp JM (2008) (n533) 22.
[623] Thomas MG (2011) (n533) 95 – 96; Willcock PM & Lepp JM (2008) (n533) 35.

possibility, and not a probability that the plaintiff's leg might have been saved satisfied the "material contribution" test in *Athey*. The Court of Appeal rejected the argument, stating that[624]:

> The 'but-for' test has been relaxed as 'unworkable' in cases where, practically speaking, it is impossible to determine the precise cause of the injury. In *Athey*, for example, the Supreme Court affirmed the 'material contribution' test as a qualification to the strict 'but-for' test only when used in cases similar to *Bonnington Castings v Wardlaw McGhee v National Coal Board*. The House of Lords decision in *Fairchild v Glenhaven Funeral Services Ltd* also reflects this same tendency to depart from the 'but-for' standard, but only where the precise cause of the injury is unknown. *Bonnington, McGhee* and *Fairchild* all involved situations where the plaintiff was exposed to a harmful substance from various sources, but could not prove precisely that the substance resulting from the defendant's tortious conduct caused the loss. In *Fairchild*, the plaintiffs had been exposed to asbestos while working for various employers for various periods. The plaintiffs developed a fatal disease caused by asbestos but could not establish which exposure or exposures to asbestos had actually caused the disease. The House of Lords allowed the plaintiffs' appeals from lower court decisions dismissing their claims and held that they were entitled to recover. The salient feature of *Fairchild* was that the plaintiffs were definitely injured by the negligence of one of the defendants, and there was no other operative cause or explanation for the injury. As pointed out in Lewis N Klar *Tort Law* at 400: 'courts will strive to fashion a just solution in this type of case to allow a wronged plaintiff to recover. Courts will not allow wronged plaintiffs to fall between the cracks due to the formal requirements of proving cause.' In my view, the principle followed in this line of cases does not assist the respondent. In the case at bar, there is no uncertainty as to the impact of the appellant's wrongful conduct upon the plight of the respondent. It was clearly established that the respondent lost her leg because of an infection. The question was whether the appellant could have prevented an outcome that was unquestionably caused by the infection and the respondent's pre-existing vascular condition. The evidence demonstrated that it is more likely than not even if the appellant had lived up to the standard of care, the respondent would have lost her leg. Nor, in my view, is the respondent assisted by the principle established in *Snell v Farrell, supra*… The robust and pragmatic approach to proof of causation utilised in *Snell v Farrell* does not assist the respondent.

The "material contribution" test is applied in Canada only where the "but for" test is unworkable.[625] In *Chambers v Goertz*[626] Smith J summarised the position as follows[627]:

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[624] *Cottrell v Gerrard* [2003] OJ 4194, 233 DLR (4th) 45, 67 OR (3d) 737 (CA).
[625] Thomas MG (2011) (n533) 109.
[626] (2009) BCCA 358, [2009] 12 WWR 10, 96 BCLR (4th) 236.
[627] *Chambers v Goertz* (2009) BCCA 358, [2009] 12 WWR 10, 96 BCLR (4th) 236 para [17]

For purposes of determining whether a breach of duty was a "but for" cause of particular harm, there are no degrees of causation – specific conduct was either necessary for the harm to occur or it was not. However, not every cause necessary for the harm to occur can reasonably be considered a candidate for liability. For example, in this case, the accident would not have occurred "but for" the taxi company dispatcher's sending Mr Ahmad to respond to Ms McDonald's call, but no one would suggest that the dispatcher should be found liable for what happened. Therefore the law takes cognizance only of those causes that play a significant role in bringing about the outcome.

Where the "but for" test is unworkable as a result of multiple concurrent or cumulative causes, but normal types of evidence may potentially prove causation, David, McCague & Yaniszewksi provide the following summation of the position[628]:

The causation test is not to be applied too rigidly. In cases where it is difficult to prove causation, a 'robust and pragmatic approach' should be taken. While the purpose of this approach is to avoid plaintiffs being left uncompensated for technical reasons, it does not mean that the law is 'subject to judicial caprice' but rather that 'the cases are very fact-driven'. The conclusion must be rooted in the evidence and not the product of mere speculation. Where the parties have adduced expert evidence on the issue of causation, or where the evidence affirmatively demonstrates an absence of causation, it is not open to the court to apply the 'robust and pragmatic' approach.

In situations where it is a practical impossibility to prove causation by normal types of evidence, the most common alternative means of proof is by way of inference.[629] The inference above can be drawn by "common sense", as was done in the medical

[628] David H, McCague WP & Yaniszewksi PF (2005) (n545) 231.
[629] David H, McCague WP & Yaniszewksi PF (2005) (n545) 231; *Snell v Farrell* [1990] 2 SCR 311; 72 DLR (4th) 289; *Ediger v Johnston* (2013) SCC 18, 356 DLR (4th) 575, 100 CCLT (3d) 1 (SCC). See also Brewer RE "The End of Material Contribution to Injury: Clements v Clements" (2013) *The Advocates' Quarterly* 217 (2013) 234: "Moreover, the Court's more recent comments in *Ediger* mean that *Snell* inferences are not restricted to cases in which probable cause is not scientifically proved or disproved. Until *Clements*, it was arguable that the robust and pragmatic approach was only to be used in breaking a causation 'draw'."; Knutsen E "Clarifying Causation in Tort" (2010) *Dalhousie LJ* 153 175: "The causal inference and robust and pragmatic approach… are merely evidentiary tools to assist in causal draws in litigation [with each party having some evidence of causation but not enough to prove or disprove causation on a more likely than not sufficiency]. Nothing more." See also Khoury L (2006) (n122) 60, 64, 66, 69; *Robinson v Sydenham District Hospital Corp* (2000) 130 OAC 109 (OntCA); *Lurtz v Duquesne* [2003] OJ No 1540 (QL) para 164, 122 ACWS (3d) 384 (SC), 136 ACWS (3d) 1055 (Ont CA).

negligence cases of *Robinson v Sydenham District Hospital Corp*[630] and *Lurtz v Duchesne*[631] or it may be drawn by reason or logic.[632]

David, McCague and Yaniszewski propose the use of the following tests in circumstances where the "but for" test fails[633]:

(a) The *McGhee* test: did the injury occur within the area of a risk created or materially increased by the defendant's wrongdoing? While this test has been criticised as effectively eliminating the need to prove causation and was apparently, but not expressly, rejected in *Snell* (although it was more clearly rejected in a subsequent decision of the Supreme Court of Canada)… and there is little to distinguish it from the 'materialisation of a clear danger' approach taken in the Supreme Court of Canada.

(b) The second part of the *Amos* test: is there some nexus or causal relationship between the wrongdoing and the injury, or is the connection merely incidental or fortuitous? This test was established to deal with statutory language involving injuries which 'arise out of the use or operation of a vehicle'.

(c) The 'rational connection' test: was the injury rationally connected to the wrongdoing? This is a test employed in certain constitutional law cases.

(d) The 'proximity analysis' tests: a case-by-case analysis employed in other constitutional cases that measures the entire relationship between the breach and the injury.

(e) The 'substantial connection to the injury' test referred to in *Snell* itself.

4 3 4 *Resurfice Corp v Hanke*

In *Resurfice Corp v Hanke*[634] the plaintiff was badly burned when a mixture of water and gasoline was, due to the incorrect placement of a water pipe into a gasoline tank, ignited. Hanke claimed compensation in terms of workers' compensation legislation,

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[630] [2003] OJ No 703 (QL), 130 OAC 109 (CA).
[631] [2003] OJ No 1540 (QL) para 164, 122 ACWS (3d) 384 (SC), 136 ACWS (3d) 1055 (Ont CA).
[632] *RJR-MacDonald Inc. v Canada (Attorney General)* (1995) 127 DLR (4th) 1 para 137; [1995] 3 SCR 199, 100 CCC (3d) 449.
[633] David H, McCague WP & Yaniszewksi PF (2005) (n545) 236 – 237.
[634] *Hanke v Resurfice Corp* (2003) 333 AR 371, [2003] AJ No 946 (QL) (QB).

and the court *a quo* did not consider the need to deal with causation. On appeal, the Alberta Court of Appeal[635] considered the issue of causation and concluded that the trial judge was mistaken in applying the "but for" test to the issue of causation.[636] The court explained that "[w]here there is more than one potential cause, the 'material contribution' test should be used."[637] The Supreme Court of Canada confirmed the findings of the trial judge and more specifically confirming that, as the trial judge had found that the alleged design defects involved in the explosion were not responsible for his injuries, resorting to the "material contribution" test was unnecessary.[638] The Supreme Court of Canada further held that the Appeal Court erred in suggesting that "where there is more than one potential cause of injury, the 'material contribution' test must be used… [as] there is more than one potential cause in virtually all litigated cases of negligence."[639] McLachlin CJC confirmed the following principles[640] :

> First, the basic test for determining causation remains the 'but for' test. This applies to multi-cause injuries... This fundamental rule has never been displaced and remains the primary test for causation in negligence actions… However, in special circumstances, the law has recognised exceptions to the basic "but for" test, and applied a 'material contribution' test. Broadly speaking, the cases in which the 'material contribution' test is properly applied involves two requirements. First, it must be impossible for the plaintiff to prove that the defendant's negligence caused the plaintiff's injury using the 'but for' test. The impossibility must be due to factors that are outside of the plaintiff's control; for example, current limits of scientific knowledge. Second, it must be clear that the defendant breached a duty of care owed to the plaintiff, thereby exposing the plaintiff to an unreasonable risk of injury, and the plaintiff must have suffered that form of injury. In other words, the plaintiff's injury must fall within the ambit of the risk created by the defendant's breach. In those exceptional cases where these two requirements are satisfied, liability may be imposed, even though the 'but for' test is not satisfied, because it would offend basic notions of fairness and justice to deny liability by applying a 'but for' approach.

The court provided the following two examples to illustrate the situations in which the abovementioned principles would find application[641]:

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[635] *Hanke v Resurfice Corp* (2005) 363 WAC 216, [2005] AJ No 1480 (QL) (CA).
[636] Brown R (2007) (n616) 439.
[637] *Hanke v Resurfice Corp* (2005) 363 WAC 216, [2005] AJ No 1480 (QL) (CA) para 12. See also Brewer RE (2013) (n629) 217; Collins LM & McLeod-Kilmurray "Material Contribution to Justice? Toxic Causation after Resurfice Cortp v Hanke" (2010) *Osgoode Hall Law Journal* 411.
[638] *Hanke v Resurfice Corp* (2007) 278 DLR (4th) 643, [2007] 1 SCR 333 para 20.
[639] *Hanke v Resurfice Corp* (2007) 278 DLR (4th) 643, [2007] 1 SCR 333 para 20.
[640] *Hanke v Resurfice Corp* (2007) 278 DLR (4th) 643, [2007] 1 SCR 333 paras 21 – 22, 24 – 25.
[641] *Hanke v Resurfice Corp* (2007) 278 DLR (4th) 643, [2007] 1 SCR 333 paras 27 – 28.

One situation requiring an exception to the 'but for' test is the situation where it is impossible to say which of two tortious sources caused the injury, as where two shots are carelessly fired at the victim, but it is impossible to say which shot injured him… provided that it is established that each of the defendants carelessly or negligently created an unreasonable risk of that type of injury that the plaintiff in fact suffered… a material contribution test may be appropriately applied. A second situation requiring an exception to the 'but for' test may be where it is impossible to prove what a particular person in the causal chain would have done had the defendant not committed a negligent act or omission, thus breaking the 'but for' chain of causation. For example, although there was no need to rely on the 'material contribution' test in *Walker Estate v York Finch Hospital*, this Court indicated that it could be used where it was impossible to prove that the donor whose tainted blood infected the plaintiff would not have given blood if the defendant had properly warned him against donating blood. Once again, the impossibility of establishing causation and the element of injury-related risk created by the defendant are central.

Resurfice Corporation v Hanke[642] effectively resulted in the existence of two species of material contribution test in Common Law jurisdictions, as Collins & McLeod-Kilmurray demonstrate[643]:

The material contribution test articulated in *Athey* concerned material contribution to injury (MCI), while the test of material contribution formulated by Lord Wilberforce in *McGhee* was on of material contribution to risk (MCR). The distinction is salient. The MCI test addressed how far liability will extend in a group of two or more causal contributors. It does not address the scenario of intransigent scientific uncertainty obscuring the causal mechanism itself. Indeed, to say that factor X contributed to injury Y implies that the aetiology of injury Y is reasonably well understood. Thus, we can say that – barring any intervening event – each of three assailants who struck an otherwise healthy plaintiff on the head materially contributed to that person's brain injury, because we know that brain injury can be caused by blunt trauma to the head…. Where the claim involves a poorly understood chemical, however, the MCI test is of little utility.

In *Nattrass v Weber*[644] the court held that:

The term 'material contribution' here is used here to describe different legal rules. *Athey* is the multiple caused precedent, and it confirms that the tort cause need not be the sole cause, so long as it 'materially

[642] 2007 SCC 7. See also *Cartner v Burlington (City)* (2008) OJ 2986 (SCJ), 2010 CarswellOnt 3803; *Seatle (Guardian ad litem of) v Purvis* (2007) BCJ 1401 (CA); *Barker v Montfort Hospital* (2007) OJ 1417 (CA); *Jackson v Kelowna General Hospital* (2007) BCJ 372 (CA); *Nattrass v Weber (2010)* 23 Alta LR (5th) 51; *MacDonald v Goertz* (20090 BCJ 1631 (CA).
[643] Collins LM & McLeod-Kilmurray H (2010) (n637) 435 – 436.
[644] (2010) ABCA 64, 47 ARR 292 paras 43 – 59; *Ball v Imperial Oil Resources Ltd* (2010) ABCA 111, 477 AR 251 para 69.

contributes'. In *Athey*, the Supreme Court of Canada confirmed that in multiple cause cases the law does not apportion among causes. The Supreme Court of Canada placed a *de minimis* limit on the implication of the tort cause by saying it must at least 'materially contribute' to the loss to be part of the legal equation. In *Resurfice* the Supreme Court of Canada confirmed that the 'but for' test is the presumptive legal test, and confirmed an exception where it is impossible for the plaintiff to prove causation to the 'but for' standard. Unfortunately that exceptional rule is also called 'materially contributes', leading to potential confusion. In *Athey*, *de minimis* or 'non-material contribution' is an exception to liability where several causes contribute to the damage. It could be described as a type of *de minimis* defence or limit on liability. In *Resurface*, 'material contribution' is an exceptional alternative standard of proof that can sometimes be used to prove causation.

4 3 5 *Clements v Clements*

In *Clements v Clements*[645] Mrs Clements sued her husband for injuries suffered after being thrown from his motorcycle. She claimed that the accident occurred as a result of a failure on her husband's part to take sufficient care. Mr Clements argued that the accident was caused by a tyre puncture and was unpreventable. The trial court found that Mr Clement's speeding and the overloading of the motorcycle materially contributed to her injury and loss.[646] The Court of Appeal allowed Mr Clement's appeal on the basis that the requirements set out in *Resurfice Corporation v Hanke*[647] were not satisfied. The Supreme Court of Appeal held that the "material contribution" test is not a test at all, but "a means of achieving justice when the 'but for' test is clearly not adequate to the task by substituting proof of 'material contribution to risk' that the injury complained of would occur for proof of a causal connection to that injury."[648] The alternate approach is only to be used in exceptional cases, namely where[649]:

(a) The plaintiff has established that her loss would not have occurred 'but for' the negligence of two or more tortfeasors, each possibly in fact responsible for the loss; and

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[645] (2010) BCCA 581, 327 DLR (4th) 1, 79 CCLT (3d) 6 (BCCA); 2012 SCC 32, [2012] 2 SCR 181 346 DLR (4th) 577 (SCC). See also Morasiewicz RW "The Supreme Court of Canada Narrows the 'Material Contribution' Causation Test" (2013) *The Advocate* 213; Black V "The Rise and Fall of Plaintiff-Friendly Causation" (2016) *Alta L Rev* 1013.
[646] (2009) BCSC 112, 175 ACWS (3d) 592, 2009 CarswellBC 202 (BCSC).
[647] (2007) SCC 7, [2007] 1 SCR 333, 278 DLR (4th) 643 (SCC).
[648] Brewer RE (2013) (n629) 222 – 223; *Clements v Clements* (2012) SCC 32, [2012] 2 SCR 181 346 DLR (4th) 577 (SCC) para 14.
[649] *Clements v Clements* (2012) SCC 32, [2012] 2 SCR 181 346 DLR (4th) 577 (SCC) para 26.

(b) The Plaintiff, through no fault of her own, is unable to show that any one of the possible tortfeasors in fact was the necessary or 'but for' cause of her injury, because each can point to one another as the possible 'but for' cause of the injury, defeating a finding of causation on a balance of probabilities.

The effect of the judgment above is that the Supreme Court of Canada has confirmed that the "but for" test remains the presumptive test for causation and that the "material contribution" test constitutes no independent material contribution to injury test in Canadian law.[650] The judgment established that a plaintiff has the burden of proving on a balance of probability there exists 1) a duty of care and a breach of the standard of care by at least two tortfeasors, at least one of whom is a defendant; 2) the mechanism of her injury; and 3) that the negligence of one of two or more tortfeasors, at least one of whom is a defendant, was responsible for the injury.[651]

4 3 6 *McKerr v CML Healthcare Inc*

In *McKerr v CML Healthcare Inc*[652], the plaintiff alleged that the actions of a mammogram technician caused a breast haematoma which was claimed to have accelerated the evolution of a tumour discovered in her breast some months later. The technician was held to have breached the standard of care in not stopping the examination when the plaintiff complained of pain. The first issue was whether compression during a mammogram could cause a haematoma and if so, whether it caused a haematoma in the plaintiff's case. The second question was whether an injury of the kind suffered by the plaintiff could exacerbate breast cancer and if so, whether the trauma to the plaintiff's breast accelerated the disease. The court held that the plaintiff did, in fact, develop haematoma and accepted the opinion of the plaintiff's expert that a haematoma existed and that the compression performed during the mammogram examination was extreme to cause pain, bruising and swelling as "some

[650] Brewer RE (2013) (n629) 228.
[651] *Clements v Clements* (2012) SCC 32, [2012] 2 SCR 181 346 DLR (4th) 577 (SCC) paras 40 – 43 - the exception would not apply in single-tortfeasor cases. See also Morasiewicz RW (2013) (n645) 217; Cheifetz D "Causation in Negligence: Material Contribution and but-for after *Clements*" (2012) *The Advocates' Quarterly* 275; Mangan D "Confusion in Material Contribution" (2012) *Canadian Bar Review* 701.
[652] (2012) BCSC 1712, 97 CCLT (3d) 227, (2012) CarswellBC 3584 (BCSC).

evidence of causation".[653] After considering expert evidence from both parties, the court held that the plaintiff had not proven on a balance of probabilities that trauma can accelerate cancer.[654] As Brewer argues, the conclusion is a finding "essentially based on *post hoc ergo propter hoc* which, even acknowledging the distinction between medical certainty and the civil standard of proof, would seem to fall somewhat short of establishing a 'substantial connection between the injury and the defendant's conduct.'"[655] The lesson for defendants, as Brewer argues, is that it is "unsafe in the post-*Clements* era not to lead evidence on causation even when the plaintiff's case is exceedingly weak."[656]

4 3 7 *Res Ipsa Loquitur*

Thomas[657] is of the view that Sopinka J's views as set out in *Snell v Farrell*[658] "strongly suggest an overlap between what was the '*res ipsa loquitur*' doctrine and the circumstances in which one may apply the *Snell v Farrell*[659] inference of a causal link*."* It is clear from *Snell v Farrell*[660] that the overall onus or burden of proof remains with the plaintiff, but in the absence of evidence adduced by the defendant, an inference of causation may be drawn even in the absence of positive, empirical, or scientific evidence of causation.[661] In such circumstances, it would appear that Lord Mansfield's "famous precept" would find application.[662] Lord Mansfield's "famous precept" entails that evidence is "to be weighed according to the proof that is in the power of one side to have produced and in the power of the other side to have contradicted."[663] According to Thomas[664], this maxim permits probable cause to be

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[653] *McKerr v CML Healthcare Inc* (2012) BCSC 1712, 97 CCLT (3d) 227, 2012 CarswellBC 3584 (BCSC) para 143, 153, 157 – 161, 162 – 163. See also Cheifetz D "Five Easy Enough Pieces: The Nuts and Bolts of Factual Causation in Negligence after *Clements*" (2013) (paper prepared for the Continuing Legal Education Society of British Columbia) 18ff.
[654] *McKerr v CML Healthcare Inc* (2012) BCSC 1712, 97 CCLT (3d) 227, 2012 CarswellBC 3584 (BCSC) para 169.
[655] Brewer RE (2013) (n629) 239 – 240.
[656] Brewer RE (2013) (n629) 240. See also *Goodman v Viljoen* (2011) ONSC 821, 81 CCLT (3d) 281, 2011 CarswellOnt 754 (Ont SCJ); (2012) ONCA 896, 99 CCLT (3d) 85, 299 OAC 257 (Ont CA).
[657] Thomas MG (2011) (n533) 74.
[658] [1990] 2 SCR 311; 72 DLR (4th) 289.
[659] [1990] 2 SCR 311; 72 DLR (4th) 289.
[660] [1990] 2 SCR 311; 72 DLR (4th) 289.
[661] *Snell v Farrell* [1990] 2 SCR 311; 72 DLR (4th) 289 330.
[662] *Snell v Farrell* [1990] 2 SCR 311; 72 DLR (4th) 289 330.
[663] Thomas MG (2011) (n533) 74; *Blatch v Archer* (1774) 98 ER 970.
[664] Thomas MG (2011) (n533) 74.

inferred, notwithstanding the paucity or absence of positive scientific evidence in medical negligence cases.

The "*res ipsa loquitur*" doctrine was formally abolished in Canada in *Fontaine v British Columbia*[665], but its abolition did not result in its absolute disappearance – it was simply "re-characterised" as an evidentiary rule which governs the use of circumstantial evidence.[666] It is evident from *Fontaine v British Columbia*[667] that, in circumstances where the defendant can lead positive evidence on causation, the inference in *Snell v Farrell*[668] cannot be applied.

4 3 8 Loss of a Chance

Difficulties arise when a plaintiff must establish a loss on a balance of probabilities if tortious conduct deprives the plaintiff of a chance of avoiding an injury of less than 50%.[669] In the English case of *Chaplin v Hicks*[670], the plaintiff competed in a beauty contest in which 12 prizes would be awarded to the winners. The plaintiff was selected as a finalist for one of the 12 prizes, but the defendant failed to notify her properly, and she lost her chance at winning the prize. The court concluded that the plaintiff's chance of winning the prize was 12 out of 50, or 24%. The plaintiff could only prove a possible loss and not a loss on a balance of probabilities. The court held that the defendant was guilty of breach of contract by failing to use reasonable efforts to notify the plaintiff. The plaintiff was awarded nominal damages of £100. This case established the principle that damages could be awarded for lost chances even where the chances were well under 50% on a balance of probabilities.

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665 [1998] 1 SCR 424, 156 DLR (4th) 577, [1998] 7 WWR 25.
666 Thomas MG (2011) (n533) 74. A comprehensive discussion of circumstantial evidence in Canadian law falls outside of the scope of the present work. For a discussion of circumstantial evidence see Thomas MG (2011) (n533) 74 – 75.
667 [1998] 1 SCR 424, 156 DLR (4th) 577, [1998] 7 WWR 25.
668 [1990] 2 SCR 311; 72 DLR (4th) 289.
669 Khoury L (2006) (n122) 97, 109, 127; Willcock PM & Lepp JM (2008) (n533) 12 – 13; Luntz H (2010) (n418) 14; Thomas MG (2011) (n533) 82.
670 [1911] 2 KB 786. Canadian courts have referred to this English case - see *Seyfert v Burnaby Hospital Society* (1986) 27 DLR (4th) 96, 11 CCLT 224, 38 ACWS (2d) 447 (BCSC); *Hotson v East Berkshire Area Health Authority* [1987] 2 All ER 909 (HL); *Laferriere v Lawson* (1991) 78 DLR (4th) 609, [1991] 1 SCR 541, 38 QAC 161; *De la Giroday v Brough* [1997] BCJ 1146, [1997] 6 WWR 585, 150 WAC 81 (CA); *Oliver (Public Trustee Of) v Ellison* (2001) BCCA 359, [2001] 7 WWR 677, 251 WAC 239 *sub nom Oliver v Ellison (CA)* 279 WAC 320; Willcock PM & Lepp JM (2008) (n533) 13. See also Weigand TA "Lost Chances, Felt Necessities, and the Tale of Two Cities" (2010) *Suffolk University Law Review* 327 349ff.

4 3 8 1 Laferriere v Lawson

The Supreme Court of Canada (referring and considering the civil law of France) set out a useful and lucid description of the principles of causation in *Laferriere v Lawson*[671] as follows[672]:

1. The rules of civil responsibility require proof of fault, causation and damage.

2. Both acts and omissions may amount to fault, and both may be analysed similarly with regard to causation.

3. Causation in law is not identical to scientific causation.

4. Causation in law must be established on the balance of probabilities, taking into account all the evidence: factual, statistical and that which the judge is entitled to presume.

5. In some cases, where a fault presents a clear danger and where such a danger materialises, it may be reasonable to presume a causal link, unless there is a demonstration or indication to the contrary.

6. Statistical evidence may be helpful as indicative but is not determinative. In particular, where statistical evidence does not indicate causation on the balance of probabilities, causation in law may nonetheless exist, where evidence in the case supports such a finding.

7. Even where statistical and factual evidence does not support a finding of causation on the balance of probabilities concerning particular damage… such evidence may still justify a finding of causation with respect to lesser damage.

8. The evidence must be carefully analysed to determine the exact nature of the fault or breach of duty and its consequences, as well as the particular character of the damage that has been suffered, as experienced by the victim.

9. If, after consideration of these factors, a judge is not satisfied that the fault has, on his or her assessment of the balance of probabilities, caused any real damage, then recovery should be denied.

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[671] [1991] 1 SCR 541 608 – 609; Willcock PM & Lepp JM (2008) (n533) 16 – 18; Kennedy I & Grubb A (2000) (n216) 492 – 495.
[672] *Laferriere v Lawson* [1991] 1 SCR 541 608 – 609.

Gonthier J stated the following[673]:

Even though our understanding of medical matters is often limited, I am not prepared to conclude that particular medical conditions should be treated for purposes of causation as the equivalent of diffuse elements of pure chance, analogous to the non-specific factors of fate or fortune which influence the outcome of a lottery.

4 3 8 2 Arndt v Smith

The Supreme Court of Canada in *Arndt v Smith*[674] stated the following in respect of the doctrine of a loss of a chance:

This approach accords with the decision of this court in *Laferriere v Lawson* [1991] 1 SCR 541 which held (at p 609) that causation 'must be established on a balance of probabilities, taking into account all the evidence: factual, statistical and that which the judge is entitled to presume.' It is consistent with the view there expressed that 'statistical evidence may be helpful as indicative but is not determinative', and that 'where statistical evidence does not indicate causation on the balance of probabilities, causation in law may nonetheless exist where the evidence in the case supports such a finding.' While *Laferriere* arose in the context of the civil law of Quebec, Gonthier J, speaking for a majority of the court, made extensive reference to common law jurisdictions, suggesting that the principles discussed may be equally applicable in other provinces.

The Court of Appeal affirmed the rejection of the doctrine of a loss of a chance in *Fraser Park South Estates Ltd v Lang Michener Lawrence & Shaw*[675] and in a medical negligence case by the Ontario Court of Appeal in *Cottrelle v Gerrard*[676], simultaneously affirming that the doctrine is not available to plaintiffs in medical negligence cases.[677]

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[673] (1991) 78 DLR (4th) 609 654.
[674] [1997] 2 SCR 539, 148 DLR (4th) 48, [1997] 8 WWR 303; Willcock PM & Lepp JM (2008) (n533) 21.
[675] (2001) 146 BCAC 86, 239 WAC 86, 84 BCLR (3d) 65 (CA), 263 WAC 320. See also *Gburek v Cohen* [1988] RJQ 2424 (CA) 2445; *Lapointe v Hôpital Le Gardeur* [1989] RJQ 2619 (CA); *Laferriere v Lawson* [1991] 1 SCR 541 608 – 609.
[676] (2004) 233 DLR (4th) 45, 67 OR (3rd) 737, 178 OAC 142 (CA), [2004] 1 SCR vii; Willcock PM & Lepp JM (2008) (n533) 28.
[677] See also Khoury L (2006) (n122) 108.

4 3 9 Intervening Acts

Two approaches to intervening acts in medical negligence cases in Canada exist.[678] The first line of authority stems from the decision in *Mercer v Grey.*[679] The plaintiff was struck by a motor vehicle and suffered fractures of both legs. Her condition became worse when doctors mistakenly failed to cut her cast soon after a cyanotic condition became evident. The defendant successfully contended at trial that the aggravation of the leg injury due to the lack of skill in the medical treatment could not be attributed to the defendant. The Court of Appeal remitted the case to the court *a quo* on the basis that if reasonable care is used to employ a competent physician or surgeon to treat personal injuries wrongfully inflicted, the results of the treatment, even though unsuccessful as a result of an error in treatment, will constitute a proper head of damages.[680]Subsequent cases applied the distinction in *Mercer v Gray*[681] holding that the original injury carries only the risk of *bona fide* medical error and that "ordinary actionable medical negligence is sufficient to sever the causal chain."[682]

A second line of cases emerged with Canadian courts moving closer to the American and Australian approaches in imposing liability on the original wrongdoer for actionable medical negligence.[683] In *Kolesar v Jeffries*[684] Haines J indicated that an original defendant might be held liable for the subsequent negligence of a doctor or hospital which aggravates a plaintiff's injuries "unless it is completely outside the range of normal experience".[685] This test implies "that certain instances of actionable medical negligence might well be compensable from the initial tortfeasor's standpoint as falling within the realm of reasonable foreseeability but that more serious and egregious instances would fall beyond the range of foreseeability and thus amount to a *novus actus interveniens*".[686]

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[678] Fridman GHL (2002) (n531) 427 – 430.
[679] [1941] 3 DLR 564.
[680] *Mercer v Gray* [1941] 3 DLR 564 567.
[681] [1941] 3 DLR 564.
[682] *Block v Martin* (1951) 4 DLR 121 (Alta SC).
[683] Hodgson D "Intervening Causation Law in a Medical Context" (2013) *University of Notre Dame Australia Law Review* 22 35 – 36.
[684] (1976) 9 OR (2d) 41 43 (Ont HCJ).
[685] Hodson D (2013) (n683) 36; *Kolesar v Jeffries* (1976) 9 OR (2d) 41 43.
[686] Hodgson D (2013) (n683) 36. See also *Ippolito v Janiak* (1981) 18 CCLT 39; *Brain v Mador* (1985) 32 CCLT 157 where damages were reduced due to the plaintiff's failure to mitigate loss.

4 3 10 "Thin Skull" Cases

The "thin skull" or "crumbling skull" rule requires that "even if a person of normal fortitude would withstand a blow to the head without serious injury, the defendant is fully liable for the unexpectedly serious consequences of her actions if her victim happens to experience catastrophic loss because he has an unusually thin skull."[687] Defendants must take their victims "as they find them" and apportionment between tortious and non-tortious causes is considered contrary to the principles of tort law because the defendant would escape full liability even though he caused or contributed to the whole injury.[688]

4 3 11 Expert Witnesses and Expert Evidence

Experts should arrive at opinions "on the basis of forms of enquiry and practice that are accepted means of decision within that expertise."[689] Where expert evidence is concerned, Canadian courts[690] prefer a test which considers relevance and "helpfulness".[691] Langdon J set out the following factors when assessing whether novel scientific evidence is helpful[692]:

1. The potential rate of error.

2. The existence and maintenance of standards.

3. The care with which the scientific technique has been employed and whether it is susceptible to abuse.

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[687] McInnes M "Causation in Tort Law: Back to Basics at the Supreme Court of Canada" (1997) *Alta L Rev* 1013; Fridman GHL (2002) (n531) 426 – 427.
[688] Klar LN & Linden AM *Remedies in Tort Law* (2006) §45.1; *Graham v Rourke* (1990) 75 OR (2d) 622 (CA).
[689] *R v Lavallee* (1990) 55 CCC (3d) 97. See also Bernstein DE (1996) (n440) 142. It may become necessary to establish whether a medical defendant will be a factual witness, expert witness, or both – see *Leonard v Kline* (2011) ONSC 2730 (CanLII); *Andersen v St Jude Medical Inc* (2007) CanLII 64140 (ONSC).
[690] *R v Beland* (1987) 36 CCC (3d) 481; *R v Johnston* (1992) 69 CCC (3d) 395.
[691] Odgers SJ & Richardson JT "Keeping Bad Science out of the Courtroom – Changes in American and Australian Expert Evidence Law" (1995) *UNSWLJ* 125; Rosenberg D "The Causal Connection in Mass Exposure Cases: A 'Public Law' Vision of the Tort System" (1984) *Harv L Review* 851 858; Cranor CF *Toxic Torts: Science, Law and the Possibility of Justice* (2006) 12.
[692] *R v Johnston* (1992) 69 CCC (3d) 395 415; *St-Jean v Mercier* [2002] 1 SCR 491, (2002) 209 DLR (4th) 513.

4. Whether there are analogous relationships with other types of scientific techniques that are routinely admitted into evidence.

5. The presence of failsafe characteristics.

6. The expert's qualifications and stature.

7. The existence of specified literature.

8. The novelty of the technique in its relationship to more established areas of scientific analysis.

9. Whether the technique has been generally accepted by experts in the field.

10. The nature and breadth of the inference adduced.

11. The clarity with which the technique may be explained.

12. The extent to which basic data may be verified by the court and the jury.

13. The availability of other experts to evaluate the technique.

14. The probative significance of the evidence.

In *R v Mohan*[693] the Canadian Supreme Court was tasked to decide a case of a paediatrician charged with sexually assaulting his female patients. The accused relied on the expert evidence of a psychiatrist to testify that the accused did not fall within a limited group of "sexual psychopaths" who had definable characteristics. Sopinka J held that the following criteria had to be considered in assessing the evidence of an expert[694]:

1. Relevance;

2. Necessity in assisting the trier of fact;

3. The absence of any exclusionary rule; and

[693] (1994) 89 CCC (3d) 402.
[694] *R v Mohan* (1994) 89 CCC (3d) 402 411.

4. The qualifications of the expert.

The court, therefore, established legal relevance and assistance to the finder of fact as the primary criterion for admissibility of expert evidence in Canada in the abovementioned case.[695] Canadian courts are of the view that a choice must be made between contradictory expert opinions provided that such a choice is made on the basis of acceptable evidence.[696] In *St-Jean v Mercier*[697] the Supreme Court of Canada confirmed the position in the following terms[698]:

> A trial judge must reach a legal conclusion based on the scientific evidence and other evidence presented. Not to come to a definitive conclusion on a balance of probabilities amounts to an undue advantage granted to the defendant, who might simply need to come up with a plausible but contrary scientific theory in order to negative the plaintiff's claim. Such an approach is tantamount to an alteration of the standard of proof since the trial judge is no longer looking at which scientific theory is most probable. It is an error of law in the analysis of causation for a trial judge to conclude that he or she does not have the authority to make a final legal determination in the face of competing theories. *There is room for the principle of judicial neutrality in the analysis of fault. It is appropriate for the courts not to take a position when there are competing but recognised medical theories on what is competent professional practice or appropriate diagnosis… However, it is not appropriate to be similarly neutral on matters of causation and thereby refrain from determining whether causation has been established on the legal standard of balance of probabilities.*

According to Khoury, controversies in respect of causation are solved "in some cases by putting the emphasis on the *whole* of the evidence rather than on a strict attachment to the scientific evidence."[699] The learned writer argues that '[m]ore frequently, they are resolved by assessing the relative value of the experts' testimony and weighing the experts' credibility, independence, experience and authority, objectivity, and reliance on scientific literature and the case's facts."[700]

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[695] Bernstein DE (1996) (n440) 145. See also *R v Dieffenbaugh* (1993) 80 CCC (3d) 97; *R v Baptiste* (1994) 88 CCC (3d) 211; *R v Singh* (1993) 23 WCB (2d) 558.
[696] Khoury L (2006) (n122) 74.
[697] [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17.
[698] *St-Jean v Mercier* [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17 paras 56 – 57; Khoury L (2006) (n122) 74 – 75 [emphasis added].
[699] Khoury L (2006) (n122) 75; *Briffett v Gander and District Hospital Board* (1996) 137 Nfld & PEIR 271 (CA) 302.
[700] Khoury L (2006) (n122) 75.

4 4 Discussion: Causation and Medical Negligence in Canada

In order to succeed against a medical practitioner in medical negligence litigation in Canada, a plaintiff must show that[701]:

(a) The defendant owed him or her a duty of care, that the defendant did not deliver the standard of care owed;

(b) That the defendant did not deliver the standard of care required;

(c) That the plaintiff's injuries were reasonably foreseeable; and

(d) That the defendant's breach of duty of care was the proximate cause of the plaintiff's injuries.

The Supreme Court of Canada has in recent years clarified and developed the principles of causation insofar as it applies to personal injury law and medical negligence cases and English law has heavily influenced it.[702] The decisions in *McGhee v National Coal Board*[703] and *Wilsher v Essex Area Health Authority*[704] had a profound influence on medical law in Canada, culminating in the decision in *Snell v Farrell*[705], and as revisited in *Athey v Leonati*[706]. The decisions of the Canadian courts in medical negligence cases illustrate the following principles, as summarised by Willcock & Lepp[707] [708]:

1. That the Court should not turn to the material contribution test until the plaintiff has established that it is impossible to meet the "but for" test.

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[701] Canadian Health Facilities Law Guide (CCHCan) par 3815 (2009). An error of judgment does not necessarily constitute negligence even if it causes an injury – see *Lapointe v Chevrette* (1992) 90 DLR (4th) 7 (SCC).
[702] Hughson BF (2000) (n533)11. See also generally Marshall TD *The Physician and Canadian Law* (1979); Robertson GB & Picard IE *Legal Liability of Doctors and Hospitals in Canada* (1996).
[703] [1972] 3 All ER 1008 (HL).
[704] [1998] 1 AC 1074 (HL).
[705] [1990] 2 SCR 311; 72 DLR (4th) 289.
[706] (1996) 140 DLR (4th) 235 (SCC).
[707] Willcock PM & Lepp JM (2008) (n533) 45 – 46.
[708] *Barker v Montfort Hospital* (2007) ONCA 282; *Tonizzo v Moysa* (2007) ABQB 245; *Aristorenas v Comcare Health Services* (2006) OJ 4039; *Resurfice Corporation v Hanke* (2007) SCC 7.

2. That the plaintiff must prove not only that it is difficult or impossible on the evidence to address causation, but that it is impossible in principle to do so.

3. That impossibility must be a result of logical or structural difficulties, not because of practical difficulties.

4. That resort should not be had to the "material contribution" test unless the application of the "but for" test to the facts of the case would offend basic notions of fairness and justice. The "material contribution" test should only be employed in the "hard cases" and then as a policy decision.

It is clear from the abovementioned cases that Canadian courts have been reluctant to hold a defendant liable in medical negligence cases where the plaintiff has not established causation on a balance of probabilities. In *Resurfice Corporation v Hanke*[709] the Supreme Court of Canada reaffirmed the general applicability of the "but for" test for causation in negligence cases and the need, in some cases, for a "robust and pragmatic approach" to the evidence required to meet the relevant standard.[710] It is clear, however, that the "material contribution" test is not simply the application of the "but for" test to cases where multiple causes could have materially contributed to harm.[711] The application of the "material contribution" test appears to have very narrow application, and Willcock & Lepp[712] argue that on the basis of *St-Jean v Mercier*[713] and *Laferriere v Lawson*[714] "there is room to argue that the 'material contribution test' should rarely, if ever, be applied in medical malpractice cases."

In British Columbia, the Court of Appeal considered the judgment in *Resurfice Corporation v Hanke*[715] in *Jackson v Kelowna General Hospital*[716], a case in which Jackson suffered a broken jaw in a bar fight and underwent surgery to repair the fracture on the following day. An anaesthesiologist ordered that a patient-controlled analgesic be provided to the plaintiff to allow the plaintiff to self-administer morphine.

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[709] (2007) 278 DLR (4th) 643, [2007] 1 SCR 333, (2007) SCC 7. See also *Jackson v Kelowna General Hospital* (2007) BCCA 129; *Frazer v Haukioja* (2008) WDFL 2259, 58 CCLT (3d) 259 (OntSCJ); *Mustapha v Culligan of Canada Ltd* (2008) 2 SCR 114; *Bohun v Segal* (2008) BCJ 97 (CA) para 52.
[710] Willcock PM & Lepp JM (2008) (n533) 36.
[711] Willcock PM & Lepp JM (2008) (n533) 36.
[712] Willcock PM & Lepp JM (2008) (n533) 37.
[713] [2002] 1 SCR 491, 209 DLR (4th) 513, [2002] SCJ 17.
[714] [1991] 1 SCR 541.
[715] (2007) SCC 7.
[716] (2007) BCCA 129.

The plaintiff was to be monitored closely after that. The plaintiff instituted an action in respect of a brain injury based on an alleged breach of the standard of care for post-operative monitoring. The court *a quo* held that the relevant nursing staff had breached the appropriate standard, but that the plaintiff had failed to prove that the nurses' breach caused his injuries. The plaintiff led no evidence as to what the nurses would have discovered had they properly monitored him during the critical period.[717] On appeal, it was argued that the ordinary principles pertaining to causation should be relaxed on policy grounds as the relevant facts were particularly within the exclusive knowledge of the defendants, and factors outside of the plaintiff's control made proving causation extremely difficult. The British Columbia Court of Appeal held that the so-called "special circumstances" in terms of which the "material contribution" test may be applied were set out in *Resurfice Corporation v Hanke*[718] and that there was no reason for relaxing the standard of proof on appeal. The court stated that the "material contribution" test should only be applied[719]:

[T]o cases where it is truly impossible to say what caused the injury, such as where two tortious sources caused the injury, as in *Cook v Lewis*, or it is impossible to prove what a particular person in the chain of causation would have done in the absence of the negligence, such as blood donor cases (*Walker Estate v York Finch General Hospital*).

5 AUSTRALIA

5 1 General

Although Australian tort law is influenced by English law, the High Court of Australia has, in recent years, set out to develop an indigenous common law of negligence.[720]

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[717] *Jackson v Kelowna General Hospital* (2007) BCCA 129 para 11 – 12.

[718] (2007) SCC 7. See also Hansen R "Fullowka v Pinkerton's of Canada Ltd and the Material-Contribution Test" (2011) *Alta L Rev* 771; *Bohun v Sennewald* (2007) BCSC 269; *BSA Investors Ltd v DSB* (2007) BCCA 94; *Barker v Montfort Hospital* (2007) ONCA 282; *Fullowka v Royal Oak Ventures Inc* (2008) NWTCA 04; Willcock PM & Lepp JM (2008) (n533) 37 – 39.

[719] *Resurfice Corp v Hanke* 2007 SCC 7 para 22.

[720] Keeler JF "The Proximity of Past and Future: Australian and British Approaches to Analysing the Duty of Care*"* (1989) *Adelaide Law Review* 93; Trindade FA "Towards an Australian Law of Torts" (1993) *Western Australia Law Review* 74; Amirthalingam K (2003) (n450) 81 – 83. In considering the law of torts in Australia, it is necessary to take into account the influence of English tort law. Reference

The High Court of Australia's approach to the law of torts[721] has, in turn, also influenced English decisions.[722] Causation can only be considered once it is established that a defendant has acted negligently.[723] An action is considered to be negligent if it constitutes some form of breach of duty which, in the context of medical negligence claims, would be such that a medical practitioner is found to have deviated from the requisite standard of care expected by the law.[724] Dwyer describes the legal standard in respect of medical treatment in the following terms[725]:

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should be made to relevant decisions in English law under para 3 *supra*. See Fleming J *The Law of Torts* (1998) 117 – 118; Stapleton J "Duty of Care Factors: a Selection from the Judicial Menus" in Fleming J, Cane P & Stapleton J *The Law of Obligations: Essays in Celebration of John Fleming* (1998) 59ff; Luntz H "Torts Turnaround Down Under" (2001) *Oxford University Commonwealth Law Journal* 95 105 – 106; Khoury L (2006) (n122) 163; Gummow W "The Selection of the Major Premise" (2013) *Cambridge Journal of International and Comparative Law* 47; *San Sebastian Pty Ltd v The Minister* (1986) CLR 341 374; *Sutherland Shire Council v Heyman* (1985) 157 CLR 424 463 – 464, 470; *Pyrenees Shire Council v Day* [1998] HCA 3. See further Carver T & Smith MK "Medical Negligence, Causation and Liability For Non-Disclosure Of Risk: A Post-Wallace Framework and Critique" (2014) *University of New South Wales Law Journal* 972 993 – 1000 in respect of failures to warn and factual causation and scope of liability in instances of failure to warn. For a discussion of causation in the context of contracts, see Hamer D (1999) (n468) 557.

[721] The present discussion of Australian law is limited to civil liability. For a discussion of the principles of causation in criminal law see *Royall v R* [1991] HCA 27, (1991) 172 CLR 378; Findley L & Kirchengast *Criminal Law in Australia* (2014); Porter J "The Implications of Uncertainty in the Law of Criminal Causation for the One-Punch Homicide Offence in Western Australia" (2015) *Bond Law Review* 5: "Shortly after the civil decision in *March v E & MH Stramere Pty Ltd* the case of *Royall v R* ('*Royall* ') considered the current law of criminal causation in Australia. This case is generally accepted as authority for the 'substantial cause' test and the 'common sense approach' in criminal causation. Adopting the approach of Burt CJ in *Campbell v The Queen* a majority of the High Court in Royall agreed that the question of causation is not a philosophical or a scientific question, but a question to be determined by the jury applying their common sense to the facts as they find them. A majority of the judges also accepted that an accused person will not be held criminally responsible unless his or her act is a 'substantial' cause of the death.8 In this context, 'substantial cause' means a cause that is 'something more than *de minimis*'. Thus, on the basis of the authority in *Royall*, it is generally accepted that an accused person is criminally responsible for the consequences of his or her act if the act is a substantial (not *de minimis*) cause of the death. In determining whether or not the accused's act was a substantial or significant cause of the death, the jury must apply their common sense to the facts as they find them.". See also Arenson KJ "Causation in the Criminal Law: A Search for Doctrinal Consistency" (1996) *Criminal Law Journal* 189 211; *R v Evans and Gardener (No 2)* [1976] VicRp53, [1976] VR 523.

[722] Fleming JG *The Law of Torts* (1998) 123ff; *Caparo v Industries PLC v Dickman* [1990] 2 AC 605 (HL); *Modbury Triangle Shopping Centre Pty Ltd v Anzil* [2000] HCA 61, (2000) 176 ALR 411; *Chester v Afshar* [2002] EWCA Civ 724, [2002] 3 WLR 1195. For a comprehensive comparative discussion of the similarities and relationship between Australian and English law see Keeler JF (1989) (n720); Luntz H (2001) (n720) 95; Amirthalingam K (2003) (n450) 88; Sappideen C *"*Bolam in Australia – More Bark Than Bite?" (2010) *University of New South Wales Law Journal* 386.

[723] Fleming JG (1998) (n722) 123ff; Davies M *The Law of Torts* (1999) 54ff; Yannoulides S "Causation in the Law of Negligence" (2001) *Monash University Law Review* 319 320 - 321; Peterson K "Where is the Line to be Drawn? Medical Negligence and Insanity in Hunter Area Health Service v Presland" (2006) *Sydney Law Review* 182ff; Khoury L (2006) (n122) 229 – 230; Moynihan S & Mengersen K (2010) (n353) 317 – 318.

[724] Moynihan S & Mengersen K (2010) (n353) 318.

[725] Dwyer P "Legal Implications of Clinical Practice Guidelines" (1998) *The Medical Journal of Australia* 292.

[I]n ascertaining what, in a particular case, constitutes reasonable care and ordinary skill in the relevant medical discipline, a court will usually receive evidence of the practice of medical practitioners and the state of medical knowledge at the relevant time.

5 2 Causation: Tort Law

5 2 1 General

Causation is an essential requirement for the establishment of liability in Australian tort law.[726] In Australian tort law, causation is assessed in the context of assigning legal responsibility for a particular act or omission.[727] It requires a determination of whether a defendant's conduct played a part in bringing about the harm that is the subject of the plaintiff's action.[728] It is not resolved in terms of the relationship between conditions or occurrences which are prescribed by scientific or philosophical theory.[729] It is, instead, based on a consideration of the facts of a particular case when viewed in light of "the practical way in which the ordinary man's mind works in the everyday affairs of life."[730] There are two fundamental questions involved in the determination of causation in tort in Australian law[731]:

The first relates to the factual aspect of causation, namely, the aspect that is concerned with whether the negligent conduct in question played a part in bringing about the harm, the subject of the claim… The second aspect concerns 'the appropriate scope of liability for the consequences of tortious conduct'. In other words, the ultimate question to be answered when addressing the second aspect is a normative one, namely, whether the defendant ought to be held liable to pay damages for that harm.

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[726] Fleming JG (1998) (n722) 123ff; Davies M (1999) (n723) 54; Adeney E "The Challenge of Medical Uncertainty: Factual Causation in Anglo-Australian Toxic Tort Law" (1993) *Monash University Law Review* 23 25; Devereux J *Medical Law* (2002) 1 – 3, 245 – 253; Amirthalingam K (2003) (n450) 81 – 83; Stapleton J "Factual Causation*"* (2010) *Federal Law Review* 467. In respect of the doctor-patient relationship and contractual relationships, see Wallace M *Health Care and Law* (2001) para 10.1; Khoury L (2006) (n122) 16.

[727] *Sutherland Shire Council v Heyman* (1985) 157 CLR 424 464; *March v E & MH Stramere (Pty) Ltd* (1991) 171 CLR 506; *Chappel v Hart* (1998) 195 CLR 232 238; *Wallace v Kam* (2013) 250 CLR 375 381; Devereux J (2002) (n726) 245 – 253.

[728] Carver T & Smith MK (2014) (n720) 975; *Bradshaw v McEwans Pty Ltd* (Unreported Judgment High Court of Australia 27 April 1951).

[729] *March v E & MH Stramere (Pty) Ltd* (1991) 171 CLR 506 509; *Chappel v Hart* (1998) 195 CLR 232 238; *Amaca (Pty) Ltd v Ellis* (2010) 240 CLR 111 121 – 122.

[730] *Fairchild v Glenhaven Funeral Services Ltd* [2002] 3 All ER 305 (HL) 321; *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL) 1011.

[731] *Ruddock v Taylor* (2003) 58 NSWLR 269 286.

5 2 2 Factual Causation: "But For" Test

5 2 2 1 General

The traditional two-step process involved in establishing causation in other jurisdictions therefore also finds recognition in Australian law.[732] English decisions form the foundation of much of the Australian law of tort as far as causation is concerned.[733] In Australian law, the plaintiff bears the onus of proof in respect of causation on a balance of probabilities. Absolute precision and certainty are not required when proving causation.[734] In testing for causation, the most readily utilised tool is the "but for" test.[735] The High Court of Australia, in the matter of *March v E & MH Stramere (Pty) Ltd*[736], stated that the "but for" test has been stated to be of limited usefulness in determining whether a plaintiff's injuries were caused by a defendant's negligence. Mason CJ stated the following[737]:

> The case demonstrates the lesson of experience, namely that the test, applied as an exclusive criterion of causation, yields unacceptable results and that the results which it yields must be tempered by the making of value judgments and the infusion of policy considerations.

In Australia the "but for" test is regarded as useful as a negative test for causation and "has a place in the resolution of causal questions".[738] Yannoulides argues that every application of the "but for" test involves an evaluation of what probably would have happened had the defendant not been negligent, and a comparative evaluation with the

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[732] Yannoulides S (2001) (n723) 320. See para 3 *supra* in respect of the English decisions dealing with the establishment of factual and legal causation. See also *State Rail Authority of NSW v Wiegold* (1991) 25 NSWLR 500.
[733] See para 3 *supra* in respect of the English decisions dealing with the establishment of factual and legal causation.
[734] *Tabet v Gett* (2010) 265 ALR 227; *TNT Management v Brooks* (1979) 23 ALR 345 (AustHC); *State Government Insurance Commission (South Australia)* (1984) 37 SASR 31 (SASC); In *Elbourne v Gibbs* [2006] NSWCA 127 the court considered factors relating to causation in information cases. These include remoteness of risk; the patient's desire for treatment; previous and later procedures undertaken; degree of faith in the doctor; the patient's knowledge; the need for treatment and alternatives available. See also Khoury L (2006) (n122) 30, 64 fn 46; 140.
[735] Adeney E (1993) (n726) 26; Devereux J (2002) (n726) 246 – 247.
[736] (1991) 171 CLR 506. See also Chapter 2 para 2 2 2 *supra* in respect of the use of a "common sense" approach to causation.
[737] *March v E & MH Stramere (Pty) Ltd* (1991) 171 CLR 506. See also *Naxakis v Western General Hospital* [1999] HCA 22; *Seltsam Pty Ltd v McGuiness* (2000) NSWCA 29; *Finch v Rogers* (2004) NSWLR 39 (NSWSC) para 133.
[738] Yannoulides S (2001) (n723) 27 *Monash University Law Review* 319 323.

facts of the matter.[739] In *Bradshaw v McEwans (Pty) Ltd*[740] the High Court of Australia considered the relationship between proof, hypothesis, inference and probability in the following terms:

> [W]here direct proof is not available, it is enough if the circumstances appearing in evidence give rise to a reasonable and direct inference; …if circumstances are proved in which it is reasonable to find a balance of probabilities in favour of the conclusion sought then, though the conclusion may fall short of certainty, it is not to be regarded as mere conjecture or surmise… All that is necessary is that, according to the course of common experience, the more probable inference from the circumstances that sufficiently appear by evidence or admission, left unexplained, should be that the injury arose from the defendant's negligence. By more probable is meant no more than that, upon a balance of probabilities, such an inference might reasonably be considered to have a greater degree of likelihood.

The "but for" test is not intended to perform the role of a comprehensive test for factual causation in Australian law.[741] Theories such as the direct consequences theory[742] and the reasonable foreseeability theory[743] find application in Australian tort law.[744] Where it is established that a plaintiff has suffered an injury, an inference is raised that the defendant's negligence caused that injury.[745] This does not, however, raise a presumption of negligence on the part of the defendant.[746] The plaintiff has merely made out a rebuttable *prima facie* case of negligence against the defendant in terms of the maxim *res ipsa loquitur*.[747] The defendant is then burdened with an evidentiary onus to produce exculpatory evidence (the overall onus never shifting to the defendant).[748]

In *McLean v Tedman*[749] the defendant employer negligently failed to instruct its employees to use a safe garbage collection system. The defendant contended that the

[739] Yannoulides S (2001) (n723) 327.
[740] Unreported case, High Court of Australia 27 April 1951.
[741] *Roads and Traffic Authority v Royal* (2008) 245 CLR 653; Carver T & Smith MK (2014) (n720) 977; *Strong v Woolworths Ltd* (2012) 246 CLR 182 190; *Travel Compensation Fund v Tambree* (2005) 224 CLR 627; Carver T & Smith MK (2014) (n720) 978.
[742] See Chapter 3 para 6 3 *supra*.
[743] See Chapter 3 para 6 2 *supra*.
[744] Yannoulides S (2001) (n723) 325 – 327.
[745] Yannoulides S (2001) (n723) 328.
[746] Yannoulides S (2001) (n723) 328.
[747] Yannoulides S (2001) (n723) 328.
[748] Yannoulides S (2001) (n723) 328.
[749] (1984) 155 CLR 306.

plaintiff would have suffered his injuries even in the event of it taking reasonable precautions by providing the employees with instructions about the method of garbage collection. It was held that "it was for the defendant to establish in the circumstances of the case that it would have been unable to enforce compliance with the suggested system because employers would have resisted its implementation".[750] Courts may also cast an evidentiary burden on defendants by bringing the defendant's conduct under scrutiny in terms of the maxim *res ipsa loquitur*.[751]

5 2 2 2 Civil Liability Act 2002

In New South Wales and other Australian states[752], the elements of causation are now set out in sections 5D(1)(a) and (b) respectively of the Civil Liability Act 2002 (NSW). The statutory instruments which have been promulgated in respect of causation in tort reflect, in general terms, the common law of Australia.[753] Section 5D of the Civil Liability Act 2002 (NSW) (which section is mirrored in each relevant state and territory) incorporates the "but for" test for factual causation and reads as follows[754]:

(1) A determination that negligence caused particular harm comprises the following elements:

a. That the negligence was a necessary condition of the occurrence of the harm **(**"factual causation"), and

[750] *McLean v Tedman* (1984) 155 CLR 306 314; Gans J & Palmer A *Australian Principles of Evidence* (2004) 29; Ligertwood ALC *Australian Evidence* (1993) para 6.04; Yannoulides S (2001) (n723) 329; Heydon JD *Cross on Evidence (Australia)* (2004) 235.
[751] *Brown v Target Australia Pty Ltd* (1984) 37 SASR 145; Yannoulides S (2001) (n723) 329.
[752] In other jurisdictions: Civil Liability Act 2003 (QLD); Wrongs Act 1958 (VIC); Civil Liability Act (SA); Civil Liability Act 2002 (WA); Civil Liability Act 2002 (TAS); Civil Law (Wrongs) Act 2002 (ACT). See also *Strong v Woolworths Limited t/as Big W* (2012) 285 ALR 420, (2012) 86 ALJR 267, [2012] HCA 5; Hochroth A "Factual Caustion under the Civil Liability Act" (2012) *Bar News* 25 – 26.
[753] Carver T & Smith MK (2014) (n720) 976 – 977.
[754] See also Hamer D " 'Factual Causation' Values and Material Contribution" (2011) *Precedent* 29 32: "Causation in the CLA has two elements: factual causation and scope of liability. Contrary to appearances, value judgment is not confined to scope of liability but also plays a role in determining factual causation. It is inherent in the question, has the defendant's breach made a *material* contribution to the plaintiff's harm?"; Madden B & Cockburn T "Establishing Causation in Difficult Cases – Can Material Contribution Bridge the Gap?" (2011) *Precedent* 24 26ff; Downing J "Factual Causation and the Effect of s5D(3) of the Civil Liability Act in Professional Negligence Litigation" (2011) *Precedent* 14; *Stephens v Giovenco* (2011) NSWCA 53 para [5]; *Adeels Palace Pty Ltd v Moubarak* (2009) 239 CLR 420; *Benic v State of New South Wales* (2010) NSWSC 1039; *Zanner v Zanner* (2010) NSWCA 343; *McDonnell v Northern Sydney & Central Coast Area* (2010) NSWSC 376; *Strong v Woolworths Limited t/as Big W* (2012) 285 ALR 420, (2012) 86 ALJR 267, [2012] HCA 5.

> b. That it is appropriate for the scope of the negligent person's liability to extend to the harm so caused ("scope of liability").
>
> (2) In determining in an exceptional case, in accordance with established principles, whether negligence that cannot be established as a necessary condition of the occurrence of harm should be accepted as establishing factual causation, the court is to consider (amongst other relevant things) whether or not and why responsibility for the harm should be imposed on the negligent party.
>
> (3) If it is relevant to the determination of factual causation to determine what the person who suffered harm would have done if the negligent person had not been negligent:
>
> a. the matter is to be determined subjectively in the light of all relevant circumstances, subject to paragraph (b), and
>
> b. any statement made by the person after suffering the harm about what he or she would have done is inadmissible except to the extent (if any) that the statement is against his or her interest.
>
> (4) For the purpose of determining the scope of liability, the court is to consider (amongst other relevant things) whether or not and why responsibility for the harm should be imposed on the negligent party.

A plaintiff would still, to be successful, have to prove factual causation, which is a "necessary condition of the occurrence of the claimant's harm".[755] A "necessary condition" is a condition that must be present for the occurrence of the harm.[756] Causation is established if "on a balance of probabilities the claimant's harm would not have occurred 'but-for' the defendant's breach of his or her duty of care."[757] In exceptional cases, or where it may be appropriate, subsection (2) of the abovementioned provision makes provision for factual causation to be determined in accordance with "established principles."[758] In the latter case the court is to consider, amongst other things, whether in the circumstances liability should be imposed on the

[755] Carver T & Smith MK (2014) (n720) 977.
[756] Carver T & Smith MK (2014) (n720) 977; *Strong v Woolworths Ltd* (2012) 246 CLR 182 190.
[757] *Strong v Woolworths Ltd* (2012) 246 CLR 182 190; *Adeels Palace Pty Ltd v Moubarak* (2009) 239 CLR 420 440; Carver T & Smith MK (2014) (n720) 978.
[758] Carver T "Medical Negligence, Causation and 'Exceptional Cases' under Civil Liability Legislation" (2015) *Precedent* 58.

negligent party.[759] The instances which would be susceptible to a determination in terms of subsection (2) of the provision would include "evidentiary gap" cases such as *Fairchild v Glenhaven Funeral Services Ltd*[760] where two or more independent factors or breaches occur or operate either individually or cumulatively such that neither medicine nor science can provide an explanation in respect of their contribution to a plaintiff's injury to a degree that would satisfy the "but for" test.[761]

5 2 2 3 Powney v Kerang and District Health

In *Powney v Kerang and District Health*[762] Mr Powney was admitted for nasal surgery at the defendant's hospital. He suffered post-operative pain and was administered an intramuscular injection of pethidine in his left arm. After his discharge from hospital Mr Powney developed a severe infection in his left upper arm which progressed to septicaemia with a significant abcess in the arm.[763] Mr Powney alleged that the injection had been performed with an uncapped and unsterilised needle and that the infection had been caused by the injection. This led him, he alleged, to suffer from significant permanent injury to his left arm with an associated psychiatric condition. He further alleged that prior to his discharge from hospital nursing staff failed to heed his complaints of pain and symptoms in his left arm as a consequence of the infection. The defendant, while accepting that the infection was caused by the injection, denied negligence and that any negligence on its part caused the harm. In the court *a quo* it was accepted that performance of the injection without negligence carried a small risk of infection. Dr Hudson testified on behalf of the plaintiff that the risk of infection from an intramuscular injection would have been reduced if appropriate steps had been taken in its administration. In cross-examination Dr Hudson accepted that "he could not conclude that but for the failure to take precautions the infection would not have occurred."[764] The experts disagreed in respect of the time required between the

[759] Carver T (2015) (n758) 58.
[760] [2002] 3 All ER 305.
[761] Carver T (2015) (n758) 58; *Powney v Kerang and District Health* [2014] VSCA 221.
[762] [2014] VSCA 221.
[763] *Powney v Kerang and District Health* [2014] VSCA 221 paras [12] – [27].
[764] *Powney v Kerang and District Health* [2014] VSCA 221 para [27]. Dr Eisen, for the defendant, concluded that: "[I]f the injecting nurse had used a needle which had been uncapped for a period of minutes, and which had been placed and transported in a kidney dish without a cap, the risk of infection would not be significantly increased… it would take a period of months to years for an uncapped needle to become overtly contaminated."

administration of the injection by which the bacteria were inoculated into a patient's body and the development of clinical manifestations of infection. The latter aspect was important as it related to the question of whether it would have been possible to diagnose and treat the infection at the relevant time. The Court of Appeal discussed section 51(2) of the Wrongs Act (VIC) 1958 in general terms and when it should be properly applied. In paragraph [96] of the judgment the court said the following:

> [96] [T]he section was not intended as a fall back provision in a conventional case for a plaintiff who is unable to establish factual causation. Rather, it was designed to accommodate cases quite out of the ordinary — particularly those involving exposures to a particular agent on multiple occasions, all of which contributed to a disease process but factual causation could not be attributed to a specific exposure. Alternatively, it was to be employed where scientific evidence may be developing in identifying the level of exposure to a particular agent necessary to produce injury.
>
> [97] Notwithstanding the Victorian legislature's adoption of the word 'appropriate' as opposed to 'exceptional', those parts of the Ipp Report, the Second Reading Speech and the Explanatory Memorandum to which we have referred demonstrate that Parliament did not intend that the circumstances in which this provision could be engaged would extend to a simple case (such as this) where a plaintiff could not make out his or her case on factual causation
>
> [98] The appellant's submissions appear to treat expert evidence suggesting reasonable precautions which may reduce the risk of injury … as being sufficient to invoke the use of the section. However… that could not be enough to trigger operation of the section. This was simply a failure to prove what was in truth a very weak case; the appellant was unable to prove his case beyond demonstrating a somewhat increased risk of injury arising out of a contentious single event. It was not suggested that there was some body of developing scientific knowledge on this issue. Section 51(2) was not directed to the appellant's situation.

At paragraph [104] of the judgment the court commented that an increased risk of injury alone resulting from a tortious act or omission is insufficient to make out a case on causation. The court stated at paragraph [106] that an increase in the relevant risk of injury, particularly if significant, is one of the matters to be taken into account in determining if factual causation is established in a particular case.

5 2 3 Burden of Proof

5 2 3 1 Civil Standard of Proof

The civil standard of proof is generally stated to be the balance of probabilities, which is approximated to a standard of 51 percent or higher.[765] In *Briginshaw v Briginshaw & Anor*[766] Dixon J stated the following in respect of proof[767]:

> The truth is that, when the law requires the proof of any fact, the tribunal must feel an actual persuasion of its occurrence or its existence before it can be found. It cannot be found as a result of a mere mechanical comparison of probabilities independently of any belief in its reality.

Dixon J continued as follows[768]:

> But reasonable satisfaction is not a state of mind that is attained or established independently of the nature and consequences of the fact or facts to be proved. The seriousness of an allegation made, the inherent likelihood of an occurrence given description, or the gravity of the consequences flowing from a particular finding are considerations which must affect the answer to the question.

In *West v Government Insurance Office of New South Wales*[769], it was held that "the facts proved must form a reasonable basis for a definite conclusion affirmatively drawn of the truth of which the tribunal of fact may reasonably be satisfied."[770] The standard of proof in respect of causation in coronial matters in Australia is on a balance of probabilities in accordance with *Briginshaw v Briginshaw & Anor*[771]. The standard requires a coroner to "factor into his or her determination both the seriousness of allegations against a person and the likely impact of a finding that the allegations are made out.[772]

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[765] *Davies v Taylor* [1974] AC 207 219; *Hotson v East Berkshire Health Authority & Others* [1987] 2 WLR 287 292. The standard of proof in criminal cases in Australia is "beyond reasonable doubt". For tribunals it is one of "reasonable satisfaction" unless rules or governing legislation provide otherwise.
[766] (1938) 60 CLR 336.
[767] *Briginshaw v Briginshaw & Anor* (1938) 60 CLR 336 361. See also *Seltsam Pty Ltd v McGuiness* (2000) NSWCA 29.
[768] *Briginshaw v Briginshaw & Anor* (1938) 60 CLR 336 362.
[769] (1981) 148 CLR 62. See also *Seltsam Pty Ltd v McGuiness* (2000) NSWCA 29.
[770] *West v Government Insurance Office of New South Wales* (1981) 148 CLR 62 66.
[771] (1938) 60 CLR 336. See also *Anderson v Blashki* [1993] 2 VR 88 95 – 96.
[772] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 331 352.

5 2 3 2 Criminal Standard of Proof and Disciplinary Tribunals

Midson describes the basic foundational principles of causation in Australian criminal law in the following terms[773]:

> [I]t remains fundamental to Anglo-Saxon criminal law that liability arises out of the proof, beyond reasonable doubt, of the accused's commission of the *actus reus* of an offence, while concurrently possessing the requisite *mens rea*. But proof of the *actus reus* and *mens rea* is not always sufficient to establish liability. In a number of offences, the prosecution must also prove that the accused's act *caused* a particular result. A clear example is in homicide cases, where the act of the accused must have caused the death of the victim. In the majority of homicide cases, establishing causation is uncomplicated because it is not disputed that, for example, the infliction of grievous bodily injury by the accused caused the death of the victim. Other cases prove to be more difficult, particularly where there is an intervening event — a *novus actus interveniens* — or where there are multiple causes of death. In such cases, it may be that the act of the accused is not legally causative of death, even though a simple application of the but-for test would suggest otherwise.

The standard of proof in criminal cases in Australia is "beyond reasonable doubt".[774] For disciplinary tribunals it is one of "reasonable satisfaction" unless rules or

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[773] Midson B (2010) (n215) 1.

[774] For a general overview of criminal law and the standard of proof in Australian criminal law see Bronitt S & McSherry B *Principles of Criminal Law* (2010); Findlay M, Odgers S, Meng S & Yeo H *Australian Criminal Justice* (2014). See also the Criminal Code Act 1995 No. 12, 1995 (https://www.legislation.gov.au/Details/C2017C00408) (accessed on 4 May 2018); Tarrant S "Building Bridges in Australian Criminal Law: Codification and the Common Law" (2013) *Monash University Law Review* 838 – 863; Leader-Elliott I "Elements of Liability in the Commonwealth Criminal Code" (2002) *Criminal Law Journal* 28 31–2; Leader-Elliott I **"**The Australian Criminal Code: Time for Some Changes" (2009) 8 & (2009) *Federal Law Review* 205; Hemming A "The Criminal Code (Cth) Comes to the Northern Territory: Why Did the Original Criminal Code 1983 (NT) Last Only 20 Years?" [2010] *UWALawRw* 5; (2010) *University of Western Australia Law Review* 119; Hemming A *Criminal Law Guidebook* (2015); *Timbu Kolian v The Queen* (1968) 119 CLR 47 (HC) 69; Mendelson D "Disciplinary Proceedings Against Doctors Who Abuse Controlled Substances" (2015) *J Law Med* 24ff.

governing legislation provide otherwise.[775] In *Royall v R*[776] the issue of causation in Australian criminal law was considered. The case is generally accepted as the basis for the "substantial cause" test and the "common sense approach" in criminal causation. The court adopted the approach set out by Burt CJ in *Campbell v The Queen* in which it was agreed that the question of causation is not a philosophical or a scientific question, but a question to be determined by the jury in criminal cases through the application of common sense to the facts as they find them. An accused person will not be held criminally responsible unless his or her act is a "substantial cause" of the death.[777] "Substantial cause" refers to a cause that is "something more than *de minimis*".[778]

5 2 3 3 Coronial Inquests

In most Australian Territories and States coroners sit without the assistance of juries.[779] The standard of proof in coronial inquests in Australia is on a balance of probabilities

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[775] Wells D "Forensic Medicine: Issues in Causation" in Freckelton IR & Mendelson D (2002) (n238) 309ff; Freckelton IR "Causation in Coronial Law" in Freckelton IR & Mendelson D (2002) (n238) 331 347 – 354; Kune R & Kune G "Expert Medico-Scientific Evidence Before Tribunals: Approaches to Proof, Expertise and Conflicting Opinions" (2004) (Paper delivered to the Council of Australasian Tribunals, Victorian Chapter, 21 October 2004) 2, 8: "When medical tribunals considers the medico-scientific criteria of proof, it must bear in mind that a medical *possibility* of causation can allow a decision-maker to find causation proved as a *probability* in all the circumstances… For tribunals the rules of evidence are generally more persuasive than binding… This is true at common law and for most statutory tribunals." See also *R v Deputy Industrial Relations Commission; ex parte Moore* [1965] 1 QB 456 488; *EMI (Australia) Ltd v Bes* [1970] 2 NSWR 238 242; *Re Pochi & Minister for Immigration and Ethnic Affairs* (1979) 26 ALR 247 256; *Re Gyngell; ex parte Hardiman* (1980) ALJR 314; section 51 Chinese Medicine Registration Act 2000 (Vic); section 48 Chiropractors Registration Act 1996 (Vic); section 50 Dental Practice Act 1999; sections 407 & 408 Legal Practice Act 1996 (Vic); sections 52 &38G Medical Practice Act 1994 (Vic); sections 24(1) & (3) Mental Health Act 1986 (Vic); section 50 Nurse Act 1986 (Vic); section 51 Psychologists Registration Act 2000 (Vic); VCAT Act 1998 (Vic); Victims of Crime Assistance Act 1996 (Vic); Criminal Procedure Act 2009. See also Mendelson D "Disciplinary Proceedings Against Doctors Who Abuse Controlled Substances" (2015) *J Law Med* 24ff.

[776] [1991] HCA 27, (1991) 172 CLR 378. See also *R v Jordan* [1956] 40 Cr App Rep 152; *R v Hallett* [1969] SASR 141; *R v Blaue* [1975] 3 All ER 446; Midson B (2010) (n215) 2: "The majority of the judges determining the appeal in *Royall* favoured the natural consequences test. New Zealand courts have adopted and applied *Smith*'s substantial cause test, as have courts in Australia and Canada. The utility of the *Smith* approach is that it applies both to establish a causal link *and* to establish that the link was maintained in cases where there are multiple causes or intervening causes. Under this test, the chain of causation is not broken unless the act of the accused is no longer a substantial and operating cause of death. That is, it is only if the subsequent event is so overwhelming as to make the initial wound 'merely part of the history' that the chain of causation will be held to be broken.

[777] Storey T (2017) (n234) 154 – 156.

[778] Colvin E (1989) (n588) 253ff; Arenson KJ (1996) (n721) 211; *R v Evans and Gardener (No 2)* [1976] VicRp53, [1976] VR 523; *R v Hallett* [1969] SASR 141.

[779] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 352; See also Freckelton IR & Ranson D *Death Investigation and the Coroner's Inquest* (2006).

(on a sliding scale).[780] In *Commissioner of Police v Hallenstein*[781], the "common sense" approach as enunciated in *March v E & MH Stramere (Pty) Ltd*[782] (i.e. that causation is ultimately a matter of "common sense") was accepted.[783] In *Khan v Keown & Another*[784] the court held that "the legal issue is for others to resolve, not the coroner."

Freckelton opines that in Australia "the criminal law appears to have been adopted in coronial law, meaning that the connection between the act or omission and the death must be 'real' or perhaps 'significant' or 'substantial'."[785]

5 2 4 Legal Causation

To establish legal causation, and to limit liability, the factors which are considered in assessing legal causation are considerations of legal policy[786], community values[787] and distinguished from judicial or personal whim.[788] In some situations, it is possible therefore that, even though a physical connection exists between the issue complained of and the relevant harm or damage, a finding will result that no causal connection exists for legal purposes.[789] In *Travel Compensation Fund v Tambree*[790] Gleeson CJ stated the following in respect of the "normative considerations" which are to be considered as part of the scope of liability[791]:

> It is not in doubt that issues of causation commonly involve normative considerations, sometimes referred to by reference to 'values' or 'policy'. However, as Stephen J pointed out in *Caltex Oil*

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[780] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 352, 353; *Andersen v Blashki* [1993] 2 VR 89; *Secretary, Department of Health and Community Services v Gurvich* [1995] 2 VR 69; *Chief Commissioner of Police v Hallenstein* [1996] 2 VR 1. See also *Briginshaw v Briginshaw* (1938) 60 CLR 336.
[781] [1996] 2 VR 1; See also Coroners Act 1985 section 19(1)(b).
[782] (1991) 171 CLR 506.
[783] See para 5 2 2 1 *supra*.
[784] [2001] VSCA 137.
[785] Freckelton IR in Freckelton IR & Mendelson D (2002) (n238) 353.
[786] *Allianz Australia Insurance Ltd v GSF Australia Pty Ltd* (2005) 221 CLR 568 586 – 587; *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 643; Carver T & Smith MK (2014) (n720) 978.
[787] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 643; Carver T & Smith MK (2014) (n720) 978.
[788] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 650; Khoury L (2006) (n122) 16, 64; Carver T & Smith MK (2014) (n720) 978.
[789] *Australia Insurance Ltd v GSF Australia Pty Ltd* (2005) 221 CLR 568 586; *Roads and Traffic Authority v Royal* (2008) 245 CLR 653; Carver T & Smith MK (2014) (n720) 978.
[790] (2005) 224 CLR 627 para 28; Carver T & Smith MK (2014) (n720) 978.
[791] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 para 28; Carver T & Smith MK (2014) (n720) 978.

(Australia) Pty Ltd v The Dredge "Willemstad", the object is *to formulate principles from policy, and to apply those principles to the case in hand*. In the context of considering an issue of causation under the Fair Trading Act, the statutory purpose is the primary source of the relevant legal norms. The case did not call for a value judgment about the conduct of Ms Fry… To acknowledge that, in appropriate circumstances, normative considerations have a role to play in judgments about issues of causation *is not to invite judges to engage in value judgments at large*.

Gleeson CJ's speech aside, the considerations which are frequently taken into account are intervening and successive causes[792], foreseeability and remoteness[793], the terms of any applicable statute[794], and the purpose of the rule or duty of care violated.[795] As stated by Carver & Smith[796], the element of legal causation "reflects an 'instinctive belief that a person should not be held liable for every wrongful act or omission which is a necessary condition of the occurrence of the injury that [befalls a plaintiff]".

5 2 4 1 Wallace v Kam

In *Wallace v Kam*[797] Mr Wallace sought medical assistance about a condition of his lumbar spine. Dr Kam, a neurosurgeon, performed a surgical procedure for Mr Wallace. The surgical procedure was inherently risky. One such risk was that of temporary local damage to nerves within his thighs, described as "bilateral femoral neurapraxia", resulting from lying face down on the operating table for an extended period. Another distinct risk was a one-in-twenty chance of permanent and catastrophic paralysis resulting from damage to his spinal nerves. The surgical

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[792] *Monaghan Surveyors Pty Ltd v Stratford Glen-Avon Pty Ltd* [2012] NSWCA 94; *Travel Compensation Fund v Tambree* (2005) 224 CLR 627; Carver T & Smith MK (2014) (n720) 978.
[793] *Monaghan Surveyors Pty Ltd v Stratford Glen-Avon Pty Ltd* [2012] NSWCA 94; Carver T & Smith MK (2014) (720) 978.
[794]*Travel Compensation Fund v Tambree* (2005) 224 CLR 627; Carver T & Smith MK (2014) (n720) 978.
[795] Carver T & Smith MK (2014) (n720) 978.
[796] Carver T & Smith MK (2014) (n720) 989.
[797] *Wallace v Kam* [2013] HCA 19; 87 ALJR 648 para [17]: "In a case where a medical practitioner fails to exercise reasonable care and skill to warn a patient of one or more material risks inherent in a proposed treatment, factual causation is established if the patient proves, on the balance of probabilities, that the patient has sustained, as a consequence of having chosen to undergo the medical treatment, physical injury which the patient would not have sustained if warned of all material risks. Because that determination of factual causation necessarily turns on a determination of what the patient would have chosen to do if the medical practitioner had warned of all material risks, the determination of factual causation is governed by s 5D(3). What the patient would have done if warned is to be determined subjectively in the light of all relevant circumstances in accordance with s 5D(3)(a), but evidence by the patient about what he or she would have done is made inadmissible for that purpose by s 5D(3)(b), except to the extent that the evidence is against the interest of the patient."

procedure was unsuccessful: the condition of Mr Wallace's lumbar spine did not improve. The first risk materialised. Mr Wallace sustained neurapraxia which left him in severe pain for some time. The second risk did not materialise.

Mr Wallace claimed damages from Dr Kam in respect of the neurapraxia. Mr Wallace's claim in the Supreme Court of New South Wales was that Dr Kam negligently failed to warn him of risks including the risk of neurapraxia and the risk of paralysis and that, had he been warned of either risk, he would have chosen not to undergo the surgical procedure and would therefore not have sustained the neurapraxia. The claim was dismissed at trial. Harrison J found that Dr Kam negligently failed to warn Mr Wallace of the risk of neurapraxia. However, he also found that Mr Wallace would have chosen to undergo the surgical procedure even if warned of the risk of neurapraxia. He concluded, for that reason, that Dr Kam's negligent failure to warn Mr Wallace of the risk of neurapraxia was not a necessary condition of the occurrence of the neurapraxia. He declined to make any finding about whether Dr Kam negligently failed to warn Mr Wallace of the risk of paralysis, and about what Mr Wallace would have done if warned of the risk of paralysis, on the basis that the "legal cause" of the neurapraxia "could never be the failure to warn of some other risk that did not materialise".[798] The New South Wales Court of Appeal said the following in respect of the limitation of liability through the use of legal causation[799]:

> What is required in such a case is the identification and articulation of an evaluative judgment by reference to 'the purposes and policy of the relevant part of the law'. Language of 'directness', 'reality', 'effectiveness' or 'proximity' will rarely be adequate to that task. Resort to 'common sense' will ordinarily be of limited utility unless the perceptions or experience informing the sense that is common can be unpacked and explained.

5 2 4 2 Neville v Lam (No3)

On 3 November 2004 the defendant, Associate Professor Alan Lam operated on the plaintiff, Ms Lisa Neville. Amongst other procedures, he performed an endometrial

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[798] *Wallace v Ramsay Health Care Ltd* [2010] NSWSC 518 para [96].
[799] *Wallace v Kam* [2013] HCA 19 para 23; Carver T & Smith MK (2014) (n720) 990.

ablation. This procedure was undertaken to treat her severe menorrhagia. On 24 August 2006 Ms Neville gave birth to a boy, Samuel. Ms Neville pleaded that Samuel had been diagnosed as suffering from multiple joint contractures, neuronal migration disorder, hypopituitarism, right facial nerve palsy, and pyloric stenosis. Ms Neville stated that, after she underwent the endometrial ablation and before she conceived Samuel, she believed it was not possible for her to become pregnant. She contended that acting under that misapprehension, she did not use a contraceptive or undergo a tubal ligation before she fell pregnant. She argued that Associate Professor Lam was obliged to advise her of the risk that she could still conceive after she had undergone the endometrial ablation, but he failed to do so. She argued further that Professor Lam's failure to advise her of the risk constituted negligence. Professor Lam could not recall the advice he had provided in his consultations with Ms Neville. He denied that he had failed to warn Ms Neville that there remained a risk of her falling pregnant after undergoing the endometrial ablation, or of the ongoing need for her to use a safe and effective means of contraception. The court found that the third proposition from *Wallace v Kam*[800] was that the scope of liability is "often" coextensive with the content of the duty, and the policy of the law will "ordinarily" extend to "all harm" that occurs if it was "harm of a kind the risk" of which it was the defendant's duty to avoid. Assuming Samuel's disabilities are congenital, the court held that it would follow that "ordinarily" Associate Professor Lam would bear legal responsibility for all the reasonable financial costs of raising Samuel including those that arose from his disabilities. The financial costs consequent upon an unwanted pregnancy constituted the plaintiff's harm.[801] Despite dismissing the plaintiff's claim on the basis of lack of evidence, and referring to *Wallace v Kam*[802], Beech-Jones discussed normative causation in the context of section 5D of the Civil Liability Act[803]:

> Ms Neville's case on causation was that, had Associate Professor Lam proffered the advice she claimed that he was obliged to but did not, then she would have discussed contraceptive methods with him. She says she would have ultimately undergone a tubal ligation at the same time as her endometrial ablation. Had she done so she would have avoided conceiving. Mr Sullivan QC disputed this. He pointed to various matters which, it was submitted, suggested Ms Neville would have still assumed the residual

[800] *Wallace v Kam* [2013] HCA 19; 87 ALJR 648.
[801] *Neville v Lam [No3]* [2014] NSWSC 607 paras [192] – [195].
[802] *Wallace v Kam* [2013] HCA 19; 87 ALJR 648.
[803] *Neville v Lam [No3]* [2014] NSWSC 607 paras [171] - [172] [emphasis added].

risk of pregnancy that pertains following an endometrial ablation. These contentions were all directed towards the determination of whether Ms Neville's case satisfied the 'but for' test now encapsulated in s 5D(1)(a) of the CLA… The test posed by s 5D(1)(a) involves a strict application of the 'but for' test. *This test has been described by the High Court as 'entirely factual, turning on proof by the plaintiff of relevant facts on the balance of probabilities in accordance with s 5E' (Wallace v Kam [2013] HCA 19; 87 ALJR 648 at [14] ("Wallace")). This task eschews policy or value judgments (Wallace at [15] citing with approval Allsop P in Wallace v Kam [2012] NSWCA 82 at [4]). In contrast, s 5D(1)(b) requires a determination that it is appropriate for the scope of the negligent person's liability to extend to the harm so caused. In contrast to s 5D(1)(a), this is an entirely normative assessment.*

5 2 5 "Common Sense"

It is important to note that "common sense" approaches to causation will "differ according to the purpose for which the question is asked".[804] Stapleton opines that "common sense" is "simply the permission to infer facts from common experience".[805] "Common sense" is "not immutable and monolithic."[806] One of the normative factors which are to be considered in determining causation is an examination of the scope and purpose of the rule or duty of care which has been violated.[807] Yannoulides argues that, while it is reasonable to have recourse both to common sense and ordinary speech in the ascertainment of meaning, the use of such criteria are open to objections.[808] The main difficulty involved in the use of such criteria in establishing a particular cause is that "selection of such a cause is so vague that it becomes difficult to separate logical reasoning from arbitrary choice."[809] Brown mentions the concerns of critics of purely inferential reasoning which is premised on "common sense" as being understandable[810]:

That is, their driving concern may be that, if we are given no reasoned explanation for why an inference is or is not being drawn, then we are left to the impossible task of divining just *how* "common sense"

[804] *Environmental Agency v Empress Car Co (Abertillery) Ltd* [1999] 2 AC 22; Carver T & Smith MK (2014) (n720) 990. See also Devereux J (2002) (n726) 246; Khoury L (2006) (n122) 60, 64, 66, 69, 164.
[805] Stapleton J (2010) (n726) 469. See also Stapleton J "Reflections on Common Sense Causation in Australia" in Degeling S, Edelman J & Goudkamp J *Torts in Commercial Law* (2011) 331ff.
[806] Hamer D "Mind the Evidential Gap: Causation and Proof in *Amaca Pty Ltd v Ellis*" (2009) *Sydney Law Review* 465 466.
[807] Carver T & Smith MK (2014) (n720) 990. See also Stapleton J (2010) (n726) 468.
[808] Yannoulides S (2001) (n723) 322.
[809] Yannoulides S (2001) (n723) 322.
[810] Brown R in Goldberg R (2011) (n120) 107.

led to a particular outcome. In short, where "common sense" is deployed *not* as the *method*, but as the *explanation*, we have no explanation.

Vacuous judicial statements that rely on "common sense" without any logical basis should not be "conflated with inference-drawing, nor should concerns about the former be seen as necessarily implicating the latter."[811] Proponents of the common sense approach to causation are of the view that the use of a common sense approach should be mostly limited to restricting consequences.[812] This becomes evident in circumstances where a "too literal application of either scientific criterion or judicial discretion is considered to lead to decisions repugnant to an informed sense of justice."[813] Hart & Honoré set out a set of principles which underpin the "common sense" approach as follows[814]:

(a) Common sense causal judgments have been built up in the context of explanation. That to be explained is usually some change in the world any search for its cause or causes being a search for some preceding or accompanying event or state which may be regarded as 'intervening' in the normal course of events and accounting for the change. The paradigmatic case is that of the deliberate manipulation by human beings of objects, (pushing, striking), in order to bring about change.

(b) By analogy causal explanation is extended to other instances in which change is explained by reference to something which makes the difference between change and no change. For example, the explanation may lie in an action not intended to bring about the change; it may be an omission; a natural event; or a natural state of affairs.

(c) The choice of factors amongst the pool of conditions will be those which are abnormal in the context and often also unknown. They will not include factors that are ever present or indifferently present or not when the change occurs. Hence it will not be the presence of oxygen that is to be noted as the cause of the fire but rather the deliberate lighting of the match.

(d) Of similar explanatory force is the contravention of a rule prohibiting certain conduct in order to avoid harm. Such a contravention is analogous to an abnormality in the course of nature and has similar force as a causal explanation.

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[811] Brown R in Goldberg R (2011) (n120) 107.
[812] Yannoulides S (2001) (n723) 322.
[813] Yannoulides S (2001) (n723) 322.
[814] Hart HLA & Honoré T *Causation in the Law* (1985) 25 – 43; Yannoulides (2001) (n723) 323; Stapleton (2010) (n421) 469.

(e) While free human conduct is an adequate explanation of the harm it occasions, free actions can be explained by pointing to the reasons or opportunities that prompted or facilitated them. The provision of such reasons or opportunities may be regarded as a type, albeit a weak type, of causal relation.

A lawyer's approach to a particular event or state will most probably differ in significant respects from that of a doctor.[815] Neilson[816] demonstrates, with reference to *Rogers v Whitaker*[817] and *Chappel v Hart*[818], that policy considerations play an often decisive role, and that "common sense paired with 'the setting of standards which uphold the importance of the legal duty that was breached'" led to the decision in favour of the plaintiff in *Chappel v Hart*[819]. The Australian High Court unanimously applied a "common sense" approach test of causation supplemented with the "but for" test set out in *March v E & MH Stramere (Pty) Ltd*[820]. The court, in that case, cautioned, however, against unfettered use of vague and subjective values under the guise of "common sense"[821]:

Directions to use common sense notions of causation to find the 'proximate', 'real', 'efficient' or 'substantial' cause of an occurrence are invitations to use subjective, unexpressed and undefined extra-legal values to determine legal liability. To hold a person liable for damage resulting from a set of conditions or relations simply because his or her wrongful act or omission was a necessary condition of the occurrence of that damage would be an unacceptable extension of the boundaries of legal liability in some cases. But this truth does not justify the use of vague rules which permit liability to be determined by subjective, unexpressed and undefined values.

Lavery points out that "the application of the 'common sense' test of causation resulted in members of the court questioning each other's common sense."[822] Neilson argues that, because the common sense test of causation allows the individual judges to apply

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[815] Yannoulides S (2001) (n723) 323.
[816] Neilson E (1999) (n510) 322.
[817] (1992) 175 CLR 479.
[818] [1998] HCA 55.
[819] [1998] HCA 55 para 95. See also Kennedy I & Grubb A (2000) (n216) 465 – 469.
[820] (1991) 171 CLR 506. The High Court in *March v Stramere* concluded that the "but for" test is not a conclusive test for causation but that causation should be determined by a value judgment involving ordinary notions of language and common sense. See also Adeney E (1993) (n726) 27; *Bennett v Minister of Community Welfare* (1992) 176 CLR 408; *Roads and Traffic Authority v Royal* (2009) 82 ALJR 870; Morrison A (2011) *Precedent* 10 11ff.
[821] *March v E & MH Stramare Pty Ltd* (1991) 171 CLR 506 para [20].
[822] Lavery J *"Chappel v Hart*: The High Court's Lost Chance" (1998) *Australian Health Law Bulletin* 25.

their intuition to a certain set of facts, it is very likely that outcomes will become "extremely difficult for legal practitioners to predict, particularly in cases with complex facts like those in *Chappel v Hart*."[823] Lavery poses a most pertinent question in respect of the most problematic aspect of the use of a common sense approach to establishing causation[824]:

> How are lawyers to provide certain answers for doctors and patients if even the application of the finely tuned legal intuition of the members of the High Court results in totally different outcomes?

It may be so that a particular judge wishes to dispense justice to a particular plaintiff out of a feeling of what is "right" and out of a feeling of "common sense", but, as Gardner states[825]:

> [N]o judge may rule in favour of any plaintiff except by locating the plaintiff within a class of imaginable plaintiffs who would, according to the judge, be entitled to the same ruling.

To supplement the traditional "but for" test with "common sense" and "policy" is, according to Ricci & Gray, pragmatism.[826] These authors are of the view that "the law can no longer dictate that, unless the injury can be predominantly attributed to one source (that is unless it can be shown that the injury would not have occurred "but for" that source), recovery is impossible."[827] The traditional result of tort law in cases where a plaintiff is unable to demonstrate liability in respect of multiple causes or multiple defendants is argued by Ricci & Gray to be inequitable for plaintiffs.[828] They state the following in the context of asbestosis and mesothelioma cases[829]:

> When medical evidence is not sufficiently advanced to identify one 'but for' defendant, or because the disease may have been caused by cumulative exposure from multiple sources, the standard becomes unjust… Arguably… common sense and public policy would preclude this outcome. Nevertheless, the

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[823] Neilson E (1999) (n510) 322.
[824] Lavery J (1998) (n822) 322 – 323.
[825] Gardner J "What Is Law For? Part 2 – The Place of Distributive Justice" in Oberdiek J *Philosophical Foundations of the Law of Torts* (2014) 342.
[826] Ricci PF & Gray NJ "Toxic Torts and Causation: Towards an Equitable Solution in Australian Law: Part 1 – Legal Reasoning with Uncertainty" (1998) *University of New South Wales Law Journal* 787 797.
[827] Ricci PF & Gray NJ (1998) (n826) 797.
[828] Ricci PF & Gray NJ (1998) (n826) 797.
[829] Ricci PF 7 Gray NJ (1998) (n826) 797 - 798.

'but for' principle must be expanded to include the contribution or the attribution of liability through probability of causation methods. This is critical particularly because the level of epidemiological (and biological) knowledge available for dose-response between mesothelioma and asbestos is seldom available in toxic torts.

Milstein argues that the flexibility and subjectivity of the common sense test of causation allow for a judicial temptation to "blur the distinction between breach and causation".[830] This temptation arises from the fact that "when a doctor has been at fault, no court wishes to send his patient away empty-handed."[831] The adoption of an unfettered common sense approach would further, according to Milstein, be "an invitation to use subjective, unexpressed and undefined extra-legal values to determine legal liability."[832] An unfettered subjective test for causation further tends to place a plaintiff in a particularly advantageous position.[833]

Some courts in Australia have allowed common sense to play a role in the determination of causation only when "positive knowledge or common experience supplies some adequate ground for believing that the events are naturally associated".[834] The common sense approach has, however, despite Dixon J's *dicta* in *Adelaide Stevedoring v Frost*[835], remained a part of legal reasoning in matters regarding causation.[836] Ultimately, the dictum of Glass JA in *Fernandez v Tubemakers of Australia*[837] concerning the use of a common sense approach, the inessentiality of expert evidence and its subjection to normal legal principles is apposite[838]:

The evidence will be sufficient if, but only if, the materials offered justify an inference of probable connection. This is the only principle of law.

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[830] Milstein B "Causation in Medical Negligence – Recent Developments" (1997) *Australian Health Law Bulletin* 21 22.
[831] Milstein B (1997) (n830) 22.
[832] Milstein B (1997) (n830) 22 – 23; Stapleton J (2010) (n726) 470.
[833] Milstein B (1997) (n830) 23.
[834] *Adelaide Stevedoring v Frost* (1940) 64 CLR 538 570.
[835] (1940) 64 CLR 538.
[836] Adeney E (1993) (n726) 39. See *Nicolia v Commissioner for Railways (NSW)* (1971) 45 ALJR 465; *EMI (Australia) Ltd v Bes* [1970] 2 NSWLR 238.
[837] [1975] 2 NSWLR 190.
[838] *Fernandez v Tubemakers of Australia* [1975] 2 NSWLR 190 197.

5 2 5 1 Chappel v Hart

In *Chappel v Hart*[839] Mrs Hart underwent a procedure to remove a pouch of skin in her oesophagus which occasionally trapped food and caused problems in swallowing. Mrs Hart inquired about the risks associated with the procedure and was concerned about vocal damage. Dr Chappel performed the procedure in 1983 without negligence but perforated the oesophagus. Ordinarily, this would not have caused significant problems, but a rare complication, mediastinitis, arose as a result of the bacteria which, by chance, had been present in the throat at the time. The plaintiff's vocal chords were damaged, and her voice affected. The defendant warned Mrs Hart of the risk of perforation, but not of the very small risk of vocal damage. The original condition from which Mrs Hart suffered was progressive, and she did not argue that, had she been warned of the risks, she would not have undergone the procedure. She did, however, argue that, had the defendant warned her of the risk of vocal damage, she would have sought out a second opinion and sought out a more experienced surgeon for the procedure. The court said the following in respect of the use of a "common sense" approach instead of traditional reliance on the "but for" test[840]:

> In *March* this Court specifically rejected the 'but for' test as the exclusive test of factual causation. Instead the Court preferred the same common sense view of causation which it had expressed in its decision in *Fitzgerald v Penn*. There, the Court said that the question is to be determined by asking 'whether a particular act or omission ... can fairly and properly be considered a cause of the accident'. As a natural consequence of the rejection of the 'but for' test as the sole determinant of causation, the Court has refused to regard the concept of remoteness of damage as the appropriate mechanism for determining the extent to which policy considerations should limit the consequences of causation-in-fact. Consequently, value judgments and policy as well as our 'experience of the "constant conjunction" or "regular sequence of pairs of events in nature" are regarded as central to the common law's conception of causation. The rejection of the 'but for' test as the sole determinant of causation means that the plaintiff in this case cannot succeed merely because she would not have suffered injury 'but for' the defendant's failure to warn her of the risk of injury. However, his failure to warn her of the risk was one of the events that in combination with others led to the perforation of her oesophagus and damage to the right recurrent laryngeal nerve. Without that failure, the injury would not have occurred when it did and, statistically, the chance of it occurring during an operation on another occasion was very small. Moreover, that failure was the very breach of duty which the plaintiff alleges caused her injury. The

[839] (1998) 195 CLR 232; Devereux J (2002) (n726) 245 – 253.
[840] *Chappel v Hart* (1998) 195 CLR 232 paras [24] – [25]; Stapleton J (2010) (n726) 473 – 474.

defendant's failure to warn, therefore, must be regarded as a cause of the plaintiff's injury unless either common sense or legal policy requires the conclusion that, for the purposes of this action, the failure is not to be regarded as a cause of the plaintiff's injury.

5 2 5 2 March v E & MH Stramere Pty Ltd

In *March v E & MH Stramare Pty Ltd*[841] The appellant sued to recover damages for personal injuries sustained when the offside of the front of his motor vehicle struck the nearside rear of the tray of a truck, owned by the first respondent, which was parked along the centre line of Frome Street in Adelaide. The second respondent had parked the truck in that position to load it with large wooden bins containing fruit and vegetables from premises in Frome Street where the first respondent carried on business as a wholesale fruit and vegetable merchant. The appellant was travelling south in the lane closest to the centre line of the road, there being three southbound lanes. The rear of the truck, with its parking and hazard lights illuminated, faced the southbound traffic and about one-half of the width of the truck projected into the lane in which the appellant was travelling. The court *a quo* found that the appellant was intoxicated at the time to such an extent that his ability to judge speed (including his own speed) and distance, his eye functions, his co-ordination and reaction times, and his vision while attending to the controls of the car were impaired, some substantially so. It was found that, although the parking and hazard lights of the truck were illuminated, the second respondent should have appreciated that the parked vehicle might, in some circumstances, constitute a danger to oncoming vehicles. The court *a quo* found that the second respondent was negligent in parking the truck in the middle of Frome Street. It went on to find the appellant guilty of contributory negligence in driving when his faculties were impaired by alcohol, in driving through the preceding intersection of Frome Street and Rundle Street at speed exceeding 60 kilometres per hour, in failing to see the truck and in failing to veer past the truck. Liability was apportioned 70 percent against the appellant and 30 percent against the respondents. On appeal, the majority in the Full Court held that the second respondent's negligence was not causative of the appellant's injuries, the negligence of the appellant being the "real cause".[842] Mason CJ rejected expressly rejected Mill's

[841] (1991) 171 CLR 506. Stapleton J (2010) (n726) 474.
[842] *March v E & MH Stramare Pty Ltd* (1991 171 CLR 506 paras [2] – [6], paras [17] – [19].

"sum of conditions" theory[843] and emphasised that Australian courts prefer to "pick one or more of the factual causes to which legal responsibility is attributed".[844] Mason CJ's analysis of the shortcomings of the "but for" test "highlighted, in particular, the test's inability to respond to the demands of multiple, successive or intervening causes".[845]

5 2 5 3 Adeels Palace Pty Ltd v Moubarak

In *Adeels Palace Pty Ltd v Moubarak*[846] the High Court of Australia considered the impact of statutory reforms such as those introduced through the promulgation of the Civil Liability Act 2002. According to the High Court, the common law "common sense" approach does not apply to the statutory provisions[847]:

> Dividing the issue of causation expresses the relevant questions in a way that may differ from what was said by Mason CJ in *March v Stramere (E & MH) Pty Ltd* at 515 to be the common law's approach to causation. The references in *March v Stramere* to causation being 'ultimately a matter of common sense' were evidently intended to disprove the proposition that 'value judgment has, or should have, no part to play in resolving causation as an issue of fact.' By contrast, s 5D(1) of the Civil Liability Act 2002 (NSW) treats factual causation and scope of liability as separate and distinct issues.

5 2 6 Intervening Acts

Australian courts, including the High Court of Australia, consistently held the view that only gross medical negligence will sever a causal chain in medical negligence cases.[848] So-called "ordinary actionable medical negligence" will not sever the causal chain and negligent defendants will be liable for a plaintiff's injury.[849] A mere error of

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[843] See Chapter 2 para 2 1 *supra*.
[844] *March v E & MH Stramare Pty Ltd* (1991) 171 CLR 506 509; Yannoulides S (2001) (n723) 332.
[845] Yannoulides S (2001) (n723) 333; Stapleton J (2010) (n726) 474 – 475.
[846] [2009] HCA 48.
[847] *Adeels Palace Pty Ltd v Moubarak* [2009] HCA 48 paras [42] – [44].
[848] Hodgson D (2013) (n683) 26; *Moore v AGC Insurances* [1968] SASR 389.
[849] *Moore v AGC Insurances* [1968] SASR 389. See also *South Australian Stevedoring Company Limited v Holbertson* [1939] SASR 257.

judgment will not sever the causal chain in Australian law.[850] An intervening cause[851], to sever the chain of causation, must ordinarily be either[852]:

(a) human action that is properly to be regarded as voluntary, or

(b) a causally independent event the conjunction of which with the wrongful act or omission is by ordinary standards so extremely unlikely as to be termed a coincidence.

The case of *Mahoney v J Kruschich (Demolitions) Pty Ltd*[853] is authority for the view that the determination of what is "voluntary" or "coincidental" is to be reached by the application of the "reasonable foreseeability" test.[854] In this case, an employer counterclaimed against Mahony, a doctor who had treated a plaintiff employee for injuries sustained in a workplace accident. The employer contended that Mahony's negligence led to the employee's subsequent disability. The issue in question was whether Mahony's negligence constituted an intervening event. The High Court decided that[855]:

When an injury is exacerbated by medical treatment… the exacerbation may be regarded as a foreseeable consequence for which the first tortfeasor is liable… The original injury can be regarded as carrying some risk that medical treatment might negligently be given.

The utilisation of "reasonable foreseeability" in determining whether an intervening act exists is, despite *Mahony v J Kruschich (Demolitions) Pty Ltd*[856], not without controversy.[857] Australian courts have entertained the view that "reasonable foreseeability of [a] subsequent event should not be relevant to the question of whether the defendant's negligence in fact caused [an] injury".[858]

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[850] *Liston v Liston* (1981) 31 SASR 245.
[851] Para 3 3 6 *supra*. See also Chapter 3 para 6 6 *supra*; Yannoulides S (2001) (n723) 329 – 330; Hodgson D (2013) (n683) 22; *Haber v Walker* [1963] VR 339; *Mahoney v J Kruschich (Demolitions) Pty Ltd* (1985) 156 CLR 522.
[852] *Haber v Walker* (1963) VR 339 358. See also Hamer D (1999) (n468) 560 – 561.
[853] (1985) 156 CLR 522.
[854] Yannoulides S (2001) (n723) 329.
[855] *Mahony v J Kruschich (Demolitions) Pty Ltd* (1985) 156 CLR 522 529.
[856] *Mahony v J Kruschich (Demolitions) Pty Ltd* (1985) 156 CLR 522. See also *Scout Association of Queensland Regional Health Authority* (1997) Australian Torts Reports 81-450.
[857] Yannoulides S (2001) (n723) 330.
[858] Yannoulides S (2001) (n723) 330. See also *Chapman v Hearse* (1961) 106 CLR 112; *Bennett v Minister for Community Welfare* (1992) 176 CLR 408.

5 2 7 Multiple Causes

Where multiple events lead to a particular result, such as where a dockside worker is negligently exposed to asbestos dust by a series of employers, difficulties arise in applying the "but for" test in a rigid manner.[859] Australian courts have taken note of English cases involving multiple possible causes.[860] In Australia a case such as *Bonnington Castings v Wardlaw*[861] has been taken, in toxic tort cases, to allow for a wider interpretation of the concept of "material contribution".[862] In *Power v Snowy Mountains Hydro Electric Authority*[863] an Australian court found in favour of a plaintiff on the basis of what was held in *Bonnington Castings v Wardlaw*[864] and in *Thompson v Johnson & Johnson Pty Ltd & Another*[865] which involved toxic shock, Vincent J stated[866]:

> The evidence does not suggest that tampons of themselves are responsible for the development of toxic shock but that they contribute to the establishment of an environment which is conducive to the production of [the] toxin.

In *Chance v Alcoa*[867] a dry eye might either have been caused by caustic soda burns, or might have been idiopathic, or both.[868] Medical evidence stated that the burns "could have made a contribution to the onset of the condition, but no view was stated as to whether the burns were a precipitating cause".[869] The evidence was accepted on the basis of the reasoning in *McGhee v National Coal Board*[870] and *Bonnington Castings v Wardlaw*[871] and the principles set out therein.

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[859] Adeney E (1993) (n726) 29.
[860] See para 3 3 4 2 – 3 3 4 7 *supra*.
[861] [1956] AC 613. See also para 3 3 4 3 *supra*.
[862] Adeney E (1993) (n726) 34. See also para 3 3 4 2 – 3 3 4 7 *supra*.
[863] (1957) 57 SR (NSW) 9.
[864] [1956] AC 613.
[865] [1989] Aust Torts Reports 80-278, 68 959.
[866] *Thompson v Johnson & Johnson Pty Ltd & Another* [1989] Aust Torts Reports 80-278, 68 959.
[867] [1990] Aust Torts Reports 81-017.
[868] Adeney E (1993) (n726) 35.
[869] Adeney E (1993) (n726) 35.
[870] [1972] 3 All ER 1008 (HL). See also para 3 3 4 4 *supra*.
[871] [1956] AC 613.

In *Barker v Permanent Seamless Floors Pty Ltd*[872] the respondent became aware in 1980 that he was suffering from toxic hepatic necrosis and that this condition was consistent with exposure to five toxic chemicals, to which he had been exposed for four years. Permanent Seamless Floors was Mr Barker's employer. Ciba Geigy, which was a supplier of the chemicals in question, was also a party to the litigation. The medical evidence which was presented was not conclusive but suggested that the disease was the result of the cumulative effect of constant exposure to the chemicals in question.[873] Ciba Geigy argued that, as it had only supplied one of the chemicals involved, and that any of the other four chemicals might have contributed to or caused the damage, no conclusive evidence existed in support of a cause of action against Ciba Geigy.[874] Ciba Geigy was, in effect, relying on the rigid application of the "but for" test in support of its argument, as well as the impossibility of proving concretely using evidence that its chemicals had led to the plaintiff's disease.[875] Connolly J dismissed Ciba Geigy's argument and turned to an old pollution case which served before the Chancery Division in 1887. In that case, *Blair & Summer v Deakin*[876], Kay J considered that it would be most unjust if none of the contributors to a nuisance could be sued if it were found that none of them singly poured "into this stream foul matter by itself enough to create a nuisance, but… what they all pour in together does not create a nuisance".[877] In *Thorpe v Brumfitt*[878] James LJ said the following in respect of a dispute over a right of way[879]:

> Then it was said that the Plaintiff alleges an obstruction caused by several persons acting independently of each other, and does not shew what share each had in causing it. It is probably impossible for a person in the Plaintiff's position to shew this. Nor do I think it is necessary that he should shew it. The amount of obstruction caused by any one of them might not, if it stood alone, be sufficient to give any ground of complaint, though the amount caused by them all may be a serious injury. Suppose one person leaves a wheelbarrow standing in a way, that may cause no appreciable inconvenience, but if a hundred do so, that may cause a serious inconvenience, which a person entitled to the use of the way has a right to prevent; and it is no defence to any one person among the hundred to say that what he does causes itself no damage to the complainant.

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[872] [1983] 2 Qd R 561.
[873] *Barker v Permanent Seamless Floors Pty Ltd* [1983] 2 Qd R 561 562.
[874] Adeney E (1993) (n726) 35.
[875] Adeney E (1993) (n726) 35.
[876] (1887) 57 LT 522.
[877] *Blair & Sumner v Deakin* (1887) 57 LT 522 525.
[878] (1873) LR 8 Ch App 650.
[879] *Thorpe v Brumfitt* (1873) LR 8 Ch App 650 656 – 657.

Importantly, it was held in this case that although it may be impossible to the exact contribution made by a single party, it might not be necessary to prove the precise extent of such contribution.[880]

5 2 8 Material Contribution

Hamer argues that the High Court in *Chappel v Hart*[881] and *Marsh v E & MH Stramare Pty Ltd*[882] did not use the material contribution test[883] to override a failure of the "but for" test, but was used to consider the force of different causes that have satisfied the "but for" test.[884] Khoury opines as follows in respect of the use of the material contribution test in Australia[885]:

> [T]he Ipp Report on the review of the Australian law of negligence recommended that legislation recognises that, in appropriate cases, proof that the negligence materially contributed to the harm or risk of harm may be treated as sufficient to establish factual causation, notwithstanding an inability to satisfy the 'but for' test. The report advised that this be done on normative grounds, by considering whether or not and why responsibility for the harm should be imposed on the negligent party, adding that the detailed criteria for determining this issue should be left to common law development. The recommendations were incorporated in the most part by State and Territory legislatures and given legislative effect – by adopting broader language without reference to the notion of risk, however. Thus, Australian law has proved willing within its common sense, flexible approach to factual causation to refer to, and sometimes apply, the concept of material increase of risk, but only in a small number of medical negligence cases.

5 2 8 1 Amaca Pty Ltd v Ellis

In *Ellis v South Australia*[886] the plaintiff sought to recover in respect of lung cancer contracted through workplace exposure to asbestos. The deceased, Mr Paul Cotton was

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[880] Adeney E (1993) (n726) 35 – 36.
[881] *Chappel v Hart* (1998) 195 CLR 232.
[882] *March v E & MH Stramare Pty Ltd* (1991) 171 CLR 506.
[883] See para 3 3 4 2 *supra*. See also para 4 11 *supra*.
[884] Hamer D (2009) (n806) 465.
[885] Khoury L (2006) (n122) 164; Ipp D "Negligence. Where Lies the Future?" (2003) *Australian Bar Review* 158; *Elayoubi v Zipser* (2008) NSWCA 335 paras [52] – [53]; Stapleton J (2010) (n726) 471 – 478; Morrison A (2011) (n820) 12; Kirby MD "Legal Obligations. Legal Revolutions" (2018) *Law Quarterly Review* 43 65 – 66.
[886] [2006] WASC 270. See also *Andrews v SC Lohse & Co v Ors* [1986] Aust Torts Reports 80-043, 67, 883; McHardy B "Causation of Dust Diseases" (2004) *Precedent* 14 17 – 18.

during his lifetime a regular smoker and proof of causation was not a simple matter. The trial court found in favour of the plaintiff. The Western Australian Court of Appeal upheld liability despite a dissenting judgment by Martin CJ.[887] The majority of the court held that the deceased's lung cancer was the cumulative result of carcinogens and that it was not possible to separate and distinguish precisely between the effect of the various carcinogens to which the deceased was exposed. The court found that the asbestos made a "material contribution" to the deceased's cancer. The High Court of Australia granted leave to appeal on 1 May 2009.[888] The High Court of Australia delivered its judgment on 3 March 2010.[889] It was accepted that smoking and the inhalation of asbestos fibres could, on their own, each cause lung cancer. It was further accepted that smoking in combination with the inhalation of asbestos fibres could increase the risk of developing lung cancer, although the process itself is not fully understood. Smoking and asbestos inhalation, on their own, do not inevitably result in lung cancer and lung cancer may result in individuals who are exposed to neither tobacco smoke nor asbestos. The expert evidence tendered could provide a precise and definitive cause of the deceased's cancer, and epidemiological evidence was given in support of the claim. Expert witnesses differed in respect of the precise mechanisms involved in the development of lung cancer but agreed that it was substantially more likely that Mr Cotton's lung cancer was caused by smoking rather than the inhalation of asbestos fibres alone. French CJ summarised the issue (and the evidence of the various experts) as follows[890]:

The proposition that smoking and asbestos *must* work together to cause cancer was not a proposition established by opinion evidence. As explained earlier, Dr Leigh accepted that the proposition was one that 'can be argued', but he did not adopt it as his opinion. We were taken to no other opinion evidence to the effect that, if there has been exposure to the two carcinogens, and a person develops lung cancer, the two *must* have worked together. It may be accepted (at least for the purposes of debate) that the synergistic or multiplicative effect suggests that in some cases the two carcinogens will have contributed to the development of an individual patient's cancer. But the proposition which the plaintiff advanced

[887] *South Australia v Ellis* [2008] WASCA 200, (2008) 37 WAR 1.
[888] *Amaca Pty Ltd v Ellis* [2009] HCA Trans 77.
[889] *Amaca Pty Limited v Ellis; The State of South Australia v Ellis; Millennium Inorganic Chemicals Limited v Ellis* [2010] HCA 5.
[890] *Amaca Pty Limited v Ellis; The State of South Australia v Ellis; Millennium Inorganic Chemicals Limited v Ellis* [2010] HCA 5 paras 48, 53 – 60. See also Segelov T "Causation in Malignant Diseases Cases" (2011) *Precedent* 33 33 – 34; *McDonald v The State Rail Authority (NSW) & Ors* (1991) 7 NSWCCR 201; *Evans v Queanbeyan City Council & Anor* (2010) NSWDDT 7.

was an absolute proposition of universal application: smoking and asbestos *must* work together and they must have worked together in this case. That proposition was not established. The second of the plaintiff's propositions requiring close consideration is that the only two relevant explanations of Mr Cotton's cancer that need be considered are smoking as sole cause, and the combined effect of both smoking and asbestos. The plaintiff submitted that all other possible causes of Mr Cotton's cancer were to be dismissed from consideration as improbable… This confinement of the field for consideration was said to follow from the way in which the case had developed and been argued at trial. It may greatly be doubted that argument at trial can be understood as having confined the field for debate in the manner asserted. Rather, the plaintiff's assertion is better understood as no more than an observation that the evidence of epidemiological studies established that most who developed lung cancer had been smokers and that the next highest group was formed by those who had been both smokers and exposed to asbestos. But if conclusions are to be drawn from population studies, all of the results obtained for all possible causes of the cancer must be considered. To consider whether one of two circumstances is more 'dangerous' than another must not be permitted to obscure examination of the relative dangers of all causes… None of the witnesses whose evidence is examined earlier in these reasons assigned a probability greater than 23% to the chance that Mr Cotton's cancer was caused by exposure to asbestos (whether alone or in combination with smoking). Professor Berry put that probability as low as 1%; Dr Leigh put it at between 2 and 12% (or 5 and 20% if higher exposure figures were used). Professor de Klerk considered the probability that Mr Cotton's cancer was due to asbestos exposure alone was only 3% and due to exposure to both was 20%. The witnesses who expressed an opinion on the matter agreed that the probability that Mr Cotton's cancer was caused by smoking alone was high (Professor de Klerk said 67%; Professor Berry said 92%). If the description of exposure to smoking and asbestos as 'more dangerous' than exposure to one or the other was intended to reflect a quantitative comparison of risk, it is a description that did not accurately reflect the evidence given by the witnesses about the relative risks of smoking compared with the relative risks of exposure to asbestos. And if the description 'more dangerous' was intended to convey no more than that those who were exposed to both smoking and asbestos were at greater risk of developing cancer than those who were exposed to only one of those carcinogens, it is necessary to bear steadily in mind that the evidence did *not* establish that smoking and asbestos *must* work together.

The majority of the court held, in respect of the plaintiff's reliance on "material contribution", as follows[891]:

[891] *Amaca Pty Limited v Ellis; The State of South Australia v Ellis; Millennium Inorganic Chemicals Limited v Ellis* [2010] HCA 5 paras 66 – 68. See also *Seltsam v McGuiness* [2000] NSWCA 29; *King v Western Sydney Local Health Network* [2013] NSWCA 162 para 34: "Upon this reasoning, the present case falls within s 5D(1)(a) of the *Civil Liability Act*, "factual causation" having been established. In the alternative, it might be thought that a case involving the elements to which reference has been made, but lacking a sufficient empirical basis for reaching a conclusion about the effectiveness of a recommended treatment, fell within s 5D(2) as an exceptional case of the kind illustrated by *Bonnington Castings Ltd v Wardlaw* [1956] UKHL 1; [1956] AC 613, referred to in *Strong v Woolworths Ltd* [2012] HCA 5; 86 ALJR 267 at [24]- [27]. At trial, it was said that the plaintiff eschewed reliance on s 5D(2). However, like the relationship between duty, content and breach, questions of factual causation and scope of liability, as separately identified in s 5D, do not readily fall into separate and independent

The plaintiff made a deal of reference to the decision of the House of Lords in *Bonnington Castings Ltd v Wardlaw*... The issue in *Bonnington Castings* was whether one source of an injurious substance contributed to a gradual accumulation of dust that resulted in disease. The issue here is whether one substance that *can* cause injury *did* cause injury. Or, to adopt and adapt what Starke J said in *Adelaide Stevedoring Co Ltd v Forst* was Mr Cotton's cancer 'intimately connected with and contributed to' by his exposure to asbestos? Questions of material contribution arise only if a connection between Mr Cotton's inhaling asbestos and his developing cancer was established. Knowing that inhaling asbestos *can* cause cancer does not entail that in this case it probably *did*. For the reasons given earlier, that inference was not to be drawn in this case. Questions of what is a material contribution do not arise.

5 2 9 Loss of a Chance

Liability for the loss of a chance[892] may be founded "upon the destruction or diminution of prospects for achieving a more favourable outcome, which requires an assessment of the probability of what would have occurred had the negligent event not happened."[893] The traditional view in Australian tort law is that until injury or economic loss is proved, no tort is committed, and no damages are payable.[894] Compensation may be based on a percentage of chance lost[895] or only if the lost chance exceeds 50 percent or is "substantial".[896] In cases of loss of chance, expert evidence would be required to indicate the level of loss of chance suffered by the plaintiff.[897] Section 5D(1)(a) of the Civil Liability Act 2002 requires the courts the apply the "but for" test for causation to establish factual causation. The statute permits a departure from the traditional "but for" test in "exceptional cases".[898]

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watertight compartments. Valuable as it is to separate the "factual" and "policy" elements of causation, the separation is, to an extent, an artefact. It would be a triumph of form over substance to deny the plaintiff recovery on that basis.; Civil Liability Act 2002 (NSW) sections 5B – 5E.

[892] Luntz H (2010) (n418) 15: "A more accurate way of defining the topic is to speak of a diminution in the opportunity for a more favourable outcome than that which has occurred." See also section 5D(1)(a) and section 5D(2) of the Civil Liability Act 2002 (NSW); Khoury L (2006) (n122) 106.

[893] Moynihan S & Mengersen K (2010) (n353) 321. See also Hamer D (1999) (n468) 560 – 561; Madden B & Cockburn T "Loss of Chance Cases Face a Turbulent Future*"* (2007) *Law Society Journal* 68.

[894] Luntz H & Hambly D *Torts: Cases and Commentary* (2002) 335.

[895] *Naxakis v Western General Hospital* [1999] HCA 22.

[896] *Gregg v Scott* [2005] UKHL 2.

[897] Yannoulides S (2001) (n723) 64.

[898] Luntz H (2010) (n418) 24: "It appears that the phrase 'in accordance with established principles' governs what is an 'exceptional case'; the Ipp committee had *Fairchild* in mind. Since, as already noted, dust diseases are excluded from the NSW Act, and therefore *Fairchild* cannot be treated as one of the 'exceptional' cases (and in any event it certainly does not represent an 'established principle' in Australia."

In *Tabet v Gett*[899] the High Court of Australia confirmed the view that the doctrine of loss of a chance enjoyed limited scope in the law of negligence of Australia.[900] The High Court did not reformulate the law of negligence in Australia to "permit recovery for physical injury not shown to be caused or contributed to by a negligent party, but which negligence has deprived the victim of the possibility (but not the probability) of a better outcome."[901] The High Court did not expressly exclude loss of chance forming the basis of a claim in the future, but was careful to imply that any development of the doctrine in medical negligence cases would be limited to cases in which plaintiffs' life expectancy had been significantly reduced, and the chance of survival (had there been no negligence) is determined to be higher than 50 percent.[902] The decision re-affirmed the applicability of the general standard of proof to all elements of a cause of action.[903]

5 2 10 Expert Witnesses and Expert Evidence

According to Freckelton, Australian courts are increasingly recognising causation as a "threshold criterion for success in tort litigation, without which there is little point in evaluating the content of duties of care and whether they were breached."[904] The evidence of expert witnesses exerts a heavy influence on the decisions of courts which include decisions in civil and criminal cases.[905] Generally speaking, any form of scientific evidence may be led as expert evidence if it satisfied the requirements for admissibility.[906] Sir Owen Dixon, speaking in 1940, summarised the basic principle in respect of the burden of proof in *Adelaide Stevedoring Co Ltd v Forst*[907]:

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[899] (2010) 240 CLR 537, [2010] HCA 12. See also *Gavalas v Singh* (2001) 3 VR 404 (VicCA); *Rufo v Hosking* (2004) NSWCA 391.
[900] Faunce T "The High Court's Lost Chance in Medical Negligence: *Tabet v Gett* (2010) 240 CLR 537" (2010) *JLM* 275 282; Liang Shi Wei J & Low Kee Y (2014) (n410) 103 - 104.
[901] *Tabet v Gett* (2010) 240 CLR 537 para [25].
[902] Dubrow D "Loss of a Chance in Medical Negligence" (2010) *LIJ* 37.
[903] Thomas V "*Tabet v Gett* [2010] HCA 12" 2010 *Bar News* 41; Freckelton IR "Scientific and Medical Evidence in Causation Decisions: The Australian Experience" in Goldberg R (2011) (n120) 243.
[904] Freckelton IR in Goldberg R (2011) (n120) 242.
[905] Freckelton IR in Goldberg R (2011) (n120) 241. See e.g. *R v Gilmore* (1977) 2 NSWLR 935 (criminal); *Tabet v Gett* [2010] HCA 12 (civil).
[906] Berger M "The Supreme Court's Trilogy on Admissibility of Expert Testimony" in *Reference Manual on Scientific Evidence* (2000) Federal Judicial Centre. In respect of tribunals see Kune R & Kune G (2004) (n775) 9 – 10: "A tribunal is entitled to act on its own knowledge (including scientific expertise) if that knowledge is relevant and the tribunal complies with the requirements of natural justice. For a medico-scientific opinion to be *relevant*, we suggest that it must be given by somebody who falls within the category of 'expert'."
[907] (1940) 64 CLR 538 569. See also *R v Gilmore* (1977) 2 NSWLR 935.

I think that upon a question of fact of a medical or scientific description a court can only say that the burden of proof has not been discharged where, upon the evidence, it appears that the present state of knowledge does not admit of an affirmative answer and that competent and trustworthy expert opinion regards an affirmative answer as lacking justification, either as a probable inference or as an accepted hypothesis.

In the Australian law of torts expert evidence is considered in terms of the decision of *Clark v Ryan*[908] where the following was stated[909]:

[T]he opinion of witnesses possessing particular skill is admissible whenever the subject matter of inquiry is such that inexperienced persons are unlikely to prove capable of forming a correct judgment upon it without such assistance, in other words, when it so far partakes of the nature of a science as to require a course of previous habit, or study, in order to obtain knowledge of it.

Australian courts have held that, to be admissible, expert evidence must derive from a field of expertise.[910] The witness must be an expert in the relevant field, and his opinion must be relevant to the issue.[911] The opinion must not be in respect of a matter which constitutes "common knowledge".[912] The opinion must not be in respect of an "ultimate issue".[913] The expert must disclose the facts (usually assumed) upon which

[908] (1960) 103 CLR 486.
[909] *Clark v Ryan* (1960) 103 CLR 486 491. See also Freckelton IR *The Trial of the Expert: A Study of Expert Evidence and Forensic Experts* (1987) 17ff; Freckelton IR "Expert Evidence and the Role of the Jury" (1994) *Australian Bar Review* 73; Ricci PF & Gray NJ (1998) (n826) 787; Khoury L (2006) (n122) 67 – 68; Browne NM & Harrison-Spoerl RR (2008) (n426) 1132 – 1133; Moynihan S & Mengersen K (2010) (n353) 317 – 318; Kune R & Kune G (2004) (n775) 7 – 8 list the appropriate experts in cancer cases to be *inter alia* cancer epidemiologist (cancer in humans), carcinogenesis experts (experimental science), molecular biologists (genetics of cancer development) clinical oncologists and cancer pathologists (medically trained pathologists); Freckelton IR, Goodman-Delahunty, Horan J, & McKimmie B *Expert Evidence in Jury Trials* (2017); Freckelton IR & Selby H *Law, Practice, Procedure and Advocacy* (2019).
[910] Odgers SJ & Richardson JT (1995) (n691) 109 – 110; Freckelton IR & Selby H *Expert Evidence: Law, Practice, Procedure and Advocacy* (2002) 23. See also sections 76 – 80 of the Evidence Act 1995 – see https://www.legislation.gov.au/Details/C2018C00015 (accessed on 24 April 2018); Federal Court Guidelines for Expert Witnesses in Proceedings in the Federal Court (19 March 2004); *Murphy v The Queen* (1989) 167 CLR 94 131.
[911] Freckelton IR (1987) (n909) 17 – 18; Odgers SJ & Richardson JT (1995) (n691) 109; Ricci PF & Gray NJ (1998) (n826) 791 – 792. See also *Royal Commission into the Chamberlain Convictions* (Justice TR Morling) Commonwealth Parliamentary Paper No 192 (1987) 338.
[912] Freckelton IR (1987) (n909) 17 – 18, 38ff; Odgers SJ & Richardson JT (1995) (n691) 109; *R v Ashcroft* [1965] 1 Qd 81 85; *Smith v R* (1990) 64 ALJR 588.
[913] Freckelton IR (1987) (n909) 68ff; Odgers SJ & Richardson JT (1995) (n691) 110; *Transport Publishing Co Pty Ltd v Literature Board of Review* (1956) 99 CLR 11 127; *Clark v Ryan* (1960) 103 CLR 486; *R v Ashcroft* [1965] 1 Qd 81 85; *R v Tonkin* [1975] Qd R 1. The "ultimate issue" rule was abolished by section 80 of the Evidence Act 1995.

the opinion is based.[914] The facts upon which the expert opinion is based must be capable of proof by admissible evidence.[915]Evidence must be admitted to prove the assumed facts upon which the opinion is based.[916] If adduced against a criminal defendant, the evidence must be more probative than prejudicial (with the burden of proof on the defence).[917]

Odgers & Richardson argue that there are authorities which adopt the "general acceptance" test as set out in *Frye v United States*[918] and the "sufficient reliability" test set out in *Daubert v Merrell Dow Pharmaceuticals*[919] or both tests.[920] Odgers & Richardson further argue that it is undesirable to apply a shift in the onus of proof in cases which do not involve toxic torts, as in toxic tort cases it may be desirable to force a defendant (who has more resources and knowledge at its disposal) to produce exculpatory scientific evidence in order to increase the "rigour of scientific scrutiny".[921] Shifting the burden of proof to a "powerful" defendant may overcome the difficulty faced by plaintiffs in toxic tort cases.[922] Australian courts[923] have recognised that it is "unreasonable to conclude that the subject of scientific testimony must be

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[914] Freckelton IR (1987) (n909) 18, 82ff; Odgers SJ & Richardson JT (1995) (n691) 110; *Bugg v Day* (1949) 79 CLR 442 462; *Arnotts Ltd v Trade Practices Commission* (1990) 24 FCR 313 348; *Makita (Australia) Pty Ltd v Sprowles* [2001] NSWCA 305 para [59]; *E M Baldwin & Sons Pty Ltd v Plane* (1999) Aust Torts Reports 91-499

[915] Freckelton IR (1987) (n909) 17ff; Odgers SJ & Richardson JT (1995) (n691) 110; *Steffan v Ruban* [1966] 2 NSWLR 623 626.

[916] Freckelton IR (1987) (n909) 18ff, 82ff; Odgers SJ & Richardson JT (1995) (n691) 110; *R v Perry* (1990) 49 A Crim R 243.

[917] Odgers SJ & Richardson JT (1995) (n691) 110.

[918] 293 F 1013, DC Cir (1923). See also Holdenson OP "The Admission of Expert Evidence of Opinion as to the Potential Unreliability of Evidence of Visual Identification" (1988) *Melbourne University Law Review* 521; Freckelton IR "Novel Scientific Evidence: The Challenge of Tomorrow" (1987) *Australian Bar Review* 243 246 – 247; Bourke J "Misapplied Science: Unreliability in Scientific Test Evidence" (1993) *Australian Bar Review* 123 132 – 134; Ligertwood ALC (1993) (n750) 378; Freckelton IR "Expert Evidence and the Role of the Jury" (1994) *Australian Bar Review* 73 87 – 91; Bernstein DE (1996) (n440) 126ff.

[919] 61 USLW 4805 (1993). See also Cranor CF (2006) (n691) 47ff; Mavroforou A & Michalodimitrakis E "The Impact of the Daubert Case on Modern Litigation" (2008) *Medicine and Law* 755 763: "If a judge does not have adequate training or experience in dealing with scientific uncertainty, understand the full value or limit of currently used methodologies, or recognise hidden assumptions, misrepresentations of scientific data, or the strengths of scientific inferences, he or she may reach an incorrect decision on the reliability and relevance of evidence linking environmental factors to human disease. This could lead to the unfair exclusion of valid scientific evidence."

[920] Odgers SJ & Richardson JT (1995) (n691) 122 – 123. See also *Ingles v R* (Unreported, Tasmanian Court of Criminal Appeal, 4 May 1993); *United States v Baller* 519 F 2d 463 (1975) 466 – 467.

[921] Odgers SJ & Richardson JT (1995) (n691) 128.

[922] *Sindell v Abbot Laboratories* 6 Cal 3d, 163 Cal Reptr 132, 607 P 2d 924, 101 S Ct 286 (1980).

[923] *R v Gilmore* [1977] 2 NSWLR 935 939, 941.

'known' to a certainty; arguably there are no certainties in science'."[924] The Evidence Act 1995 did not leave the general principles pertaining to expert evidence as referred to above unchanged. Section 76 of the Act provides that opinion evidence is (generally) not admissible, but section 79 provides[925]:

If a person has specialised knowledge based on the person's training, study or experience, the opinion rule does not apply to evidence of an opinion of that person that is wholly or substantially based on that knowledge.

Sections 135 and 136 of the Evidence Act 1995 read as follows:

135 General discretion to exclude evidence

The court may refuse to admit evidence if its probative value is substantially outweighed by the danger that the evidence might:

(a) be unfairly prejudicial to a party; or

(b) be misleading or confusing; or

(c) cause or result in undue waste of time.

136 General discretion to limit use of evidence

The court may limit the use to be made of evidence if there is a danger that a particular use of the evidence might:

(a) be unfairly prejudicial to a party; or

[924] Odgers SJ & Richardson JT (1995) (n691) 124.
[925] Section 79 is based on Federal Rule of Evidence 702 (United States); Weinstein J "Improving Expert Testimony" (1986) *University of Richmond Law Review* 473 495 – 496: "Passivity of the court is no virtue when serious scientific questions or more than passing importance are involved. The court owes an obligation to the parties, to society, and to itself to assist in obtaining the best possible answers to the scientific questions before it. This will mean forcing the parties to gather and present evidence effectively, calling upon other experts as necessary, and studying to obtain the understanding needed to maintain effective control." See also Weinstein J "Rule 702 of the Federal Rules of Evidence Is Sound; It Should Not Be Amended" (1991) 138 *FRD* 631 632.

(b) be misleading or confusing.

Odgers & Richardson argue that the aforementioned principles provide Australian courts with flexible tools in establishing the admissibility and value of expert evidence.[926] Section 135 of the Evidence Act 1995 provides Australian courts with certain exclusionary mechanisms. As section 135 of the Evidence Act 1995 is modelled on Federal Rule of Evidence 403 (United States), the following comment by Weinstein J in *Daubert v Merrell Dow Pharmaceuticals*[927] is of importance when considering the application of section 135 of the Australian statute[928]:

Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under rule 403 of the present rules exercises more control over experts than over lay witnesses.

Freckelton states that a salient problem with expert evidence is that it can be cloaked in scientific terminology and nomenclature and that it can thereby acquire[929]:

[A] mystical air of infallibility… The fear is, therefore, rather than assist laypersons in forming judgments, that the use of expert evidence will usurp the function of the trier of fact and distort the proceedings by bolstering the evidence of parties and overwhelm a jury.

The learned writer continues[930]:

This is particularly so in respect of expert evidence about causation which often relates to complex and technical areas of specialist discourse and can have a significant statistical component. An archetypal example of this phenomenon is to be seen in *Commissioner for Government Transport v Adamcik* in which the Australian High Court was called upon to consider how extraordinary evidence from a medical practitioner, who had expressed the view that leukaemia could be caused by emotional disturbance, should be evaluated.

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[926] Odgers SJ & Richardson JT (1995) (n691) 124.
[927] 61 USLW 4805 (1993).
[928] Bernstein DE (1996) (n440) 162. Weinstein J (1991) (n925) 632.
[929] Freckelton IR in Goldberg R (2011) (n120) referring to the Canadian cases of *R v C (G)* (1996) 110 CCC (3d) 233 para [65] and *R v DD* [2000] SCC 43.
[930] Freckelton IR in Goldberg R (2011) (n120) 245.

In *Commissioner for Transport v Adamcik*[931], the risk of the admission of unreliable evidence became apparent in respect of the evidence of a medical practitioner who claimed that an emotional disturbance could cause leukaemia. The issue before the court was not the admissibility of the expert evidence, but whether a causal nexus existed between the negligence of the defendants and the death of Mrs Adamcik's husband. The expert witness conceded in evidence that he was the first proponent of the theory that and emotional disturbance was capable of causing lymphatic leukaemia.[932] The confusion of the jury and their sympathy for Mrs Adamcik led to their acceptance of the strange arguments in respect of the connection between leukaemia and emotional stress and the High Court of Australia was "loathe to interfere with the jurors' fact-finding primacy, commenting that it was up to them to determine whether the witness was a 'charlatan' – 'they might think so, or they might regard him as a discoverer and prophet in some other way.'"[933] Freckelton emphasises the importance of proper cross-examination of expert witnesses in such situations so that "the potential for uncritical acceptance of such opinions by triers of fact is minimised."[934] In *R v Parenzee*[935] Sulan J held that the evidence of the first witness called on behalf of the accused was "so out of line with the prevailing opinions and prevailing evidence" that her evidence could not be relied upon by a jury.[936] Sulan J found her "not to be independent, to be an advocate for a cause, to lack objectivity, and to refuse to acknowledge or to be inclined to dismiss any evidence unsupportive of her views."[937] The second witness called in support of the accused's arguments, although medically qualified, was found to be lacking in practical experience in the treatment of viral diseases[938] and his knowledge on the subject limited to that which had been acquired only through reading.[939] The two witnesses were held not to be adequately qualified to express views on matters requiring appropriate qualification

[931] (1961)106 CLR 292.
[932] Freckelton IR in Goldberg R (2011) (n120) 245; *Commissioner for Government Transport v Adamcik* (1961) 106 CLR 292.
[933] Freckelton IR in Goldberg R (2011) (n120) 245.
[934] Freckelton IR in Goldberg R (2011) (n120) 245.
[935] [2007] SASC 143, [2007] SASC 316.
[936] *R v Parenzee* [2007] SASC 316 para [136].
[937] Freckelton IR in Goldberg R (2011) (n120) 247.
[938] The accused argued, *inter alia*, that HIV does not exist and, if it exists, the risk of its transmission was impossibly low.
[939] Freckelton IR in Goldberg R (2011) (n120) 245; *R v Parenzee* [2007] SASC 143, [2007] SASC 316 para [143].

and their evidence was ruled to be inadmissible and untenable.[940] The risk of the distraction of courts by problematic expert evidence is amplified, argues Freckelton, in cases where "the law is unclear on crucial issues of causation law (e.g. admissibility of possibility evidence: *Seltsam, Amaca*), what might occur in the future (*Malec, Sellars*), or loss of chance reasoning (*Tabet*)".[941]

5 2 11 Statistical and Epidemiological Evidence

Epidemiological evidence plays an important role in medical research, and it is "explicitly recognised by evidence-based medicine as evidence about the effectiveness of a medical treatment or procedure".[942] Statistical evidence based on epidemiological studies is admissible as supporting proof of a negligent event's propensity to cause, or not cause, a particular form of injury or harm.[943] Epidemiological studies may also contribute to inferences of causation as part of comprehensive "test-based" approaches.[944] Where it is proven that a medical practitioner has failed to act properly, causation will be established if the harm would not have resulted "but for" the defendant's negligence, although epidemiological evidence alone would not be proof of causation.[945] Ultimately, the value of statistics and epidemiological evidence depends on its quality.[946] In *Seltsam Pty Ltd v McGuiness*[947] Spigelman CJ held that:

> [E]vidence of possibility, including epidemiological studies, should be regarded as circumstantial evidence which may, alone or in combination with other evidence, establish causation in a specific case.

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[940] Freckelton IR in Goldberg R (2011) (n120) 245.
[941] Freckelton IR in Goldberg R (2011) (n120) 260; *Sellars v Adelaide Petroleum NL* [1994] HCA 4, (1994) 179 CLR 332; *Malec v JC Hutton Pty Ltd* [1990] HCA, (1990) 169 CLR 638.
[942] Freckelton IR "Epidemiology Evidence and Causation" (2004) *Plaintiff* 18; Croucher J "Causation and Statistics" (2004) *Plaintiff* 13; Hamer D (2009) (n806) 466 – 467; Moynihan S & Mengersen K (2010) (n353) 320.
[943] Feinstein A & Horwitz R "Problems in the Evidence of Evidence-Based Medicine" (1997) *The American Journal of Medicine* 529; Greenberg P "The Cause of Disease and Illness: Medical Views and Uncertainties" in Freckelton IR & Mendelson D (2002) (n238) 58ff; Freckelton IR "Epilogue: Dilemmas in Proof of Causation" in Freckelton IR & Mendelson D (2002) (n238) 442ff; Moynihan S & Mengersen K (2010) (n353) 320.
[944] Doll R "Proof of Causality: Deduction from Epidemiological Observation" (2002) *Perspectives in Biology and Medicine* 499. See also Dawid PA "The Role of Scientific and Statistical Evidence in Assessing Causality" in Goldberg R (2011) (n120) 133 – 147.
[945] Moynihan S & Mengersen K (2010) (n353) 321; *McGhee v National Coal Board* [1972] 3 All ER 1008 (HL).
[946] *Gregg v Scott* [2005] UKHL 2, [2005] 2 AC 176 187. See also
[947] [2000] NSWCA 29 para [89].

Where circumstantial evidence of disease causation amounts to "more than a possibility, then causation can be found proved on the balance of probabilities or even higher standards."[948] Freckelton emphasises the difficulties which may be inherent in the use of epidemiological evidence[949]:

Two important questions arise. The first is how to determine the point at which [epidemiological] evidence becomes useful or even compelling. There is a risk of misunderstanding or misevaluating the evidence, particularly in respect of the nexus between the general scenario and the specific instance. This difficulty is often exacerbated, as it was in *Seltsam* and *Fairhaven*, where the epidemiological evidence is limited in terms of its ability to distinguish between various risks and their relative contributions... The second important question is the relevance of epidemiological evidence to the particular case, especially where other risk factors for incurring the disease or injury are claimed by the litigant to be attributable to the defendant's negligence. A substantial series of factors personal to the plaintiff may heighten their susceptibility. In turn, epidemiological evidence can help to evaluate the significance of such factors and provide statistical likelihoods of the plaintiff suffering the illness or sustaining the injury, but for the exposure to the agent.

The learned writer continues[950]:

The situation is complicated by the new statutory formulations of causation. In general terms, these provide that legal causation is not established unless the negligence played a part in bringing about the harm ('factual causation') and the plaintiff can prove that the responsible for the harm was under a duty to avoid it ('scope of liability'). New tests for the scope and content of the duty of care have made it more difficult to establish defendants' fault, and it appears to have been the intention of the legislatures to ease the burden of plaintiffs in overcoming the 'the evidential gap'. However, the new provisions have imported policy considerations into the causation determination in a way that will make decision-making – at least in the short term – inconsistent. This will especially be so in cases where epidemiology evidence takes plaintiffs only a part of the way toward establishing causation.

The learned writer concludes[951]:

There remains the potential for significant misunderstanding by judges and jurors alike of the statistical underpinnings and ramifications of epidemiological evidence. An example is the potential for erroneous equation of the magnitude of relative risk with statistical significance. Three things, though, are clear. The first is that plaintiffs who rely on epidemiological evidence alone do so at considerable peril to their

[948] Kune R & Kune G (2004) (n775) 3.
[949] Freckelton IR "Epidemiology Evidence and Causation" (2004) *Plaintiff* 23 – 24.
[950] Freckelton IR (2004) (n949) 24.
[951] Freckelton IR (2004) (n949) 24.

forensic prospects. The second is that courts are likely to continue to struggle with the science-law interface, especially when epidemiology evidence is adduced both in relation to the general and the specific issue. The third is that the evidence relating the general risk-ratio evidence to the particular plaintiff and the specific facts asserted must be pertinent and compelling in order to make feasible a finding by a court that causation is proved on the balance of probabilities in the case before it. Moreover, forensic epidemiology evidence needs to be both scientifically and medically sound, as well as statistically comprehensible. The evidence needs to be given by experts who have a facility in explaining otherwise alienating and intimidating concepts in a way that is accessible and compelling. Even then, though, epidemiological evidence will take plaintiffs only part of the distance towards proving causation; much remains to be done by that dangerous and ill-defined creature – what Mason P has described as the 'glib submission that causation is a question of fact and a matter of common sense.'

5 3 Discussion: Causation and Medical Negligence in Australia

The principles applied by Australian courts demonstrate a balanced approach to causation in medical negligence cases. It is apparent that the "but for" test remains the point of departure in determining factual causation in Australia and that the test has found a measure of codification in section 5D of the Civil Liability Act 2002. Its application remains a factual inquiry, particularly in the context of "non-disclosure" cases, but normative and policy issues have become part of any consideration of causation in the application of the Civil Liability Act 2002 in such cases.[952]

Australian courts have also have used a flexible, common sense-based approach to cases of pure causal uncertainty in medical negligence cases.[953] Although Australian courts have taken note of the English mesothelioma cases, and they have allowed a broader interpretation of the concept of "material contribution" in light of those cases. It is evident from what is set out *supra* that Australian courts have also been influenced by the concept of "material increase of risk" in order to find causation proven in a number of important medical negligence cases.[954]

[952] E.g. *Wallace v Kam* [2013] HCA 19; *Neville v Lam [No3]* [2014] NSWSC 607.
[953] Khoury L (2006) (n122) 162.
[954] Khoury L (2006) (n122) 162; *Chappel v Hart* (1998) 195 CLR 232; *Crockett v Roberts* (2002) TASSC 73; *Hughes v Minister for Health* (1999) WASCA 131; *Chapman v Caska* (2005) NSWCA 113; *Naxakis v Western General Hospital* (1999) 197 CLR 269.

6 SUMMARY AND CONCLUSION

The selected jurisdictions referred to hereinabove utilise a variety of principles to deal with the complex issue of uncertain causation in medical negligence matters. The approaches vary from the utilisation of the traditional "but for" test amplified by flexible common sense approaches, normative approaches which focus on the scope of the rule which is breached by a defendant, remoteness of damage, foreseeability, material increase of risk, material contribution to harm and inferential reasoning. The various approaches mentioned herein *supra* are applied either casuistically or form part of a general principle which is applied to a particular set of facts flexibly. The advantages and disadvantages of the approaches set out *supra* are varied and numerous. Direct incorporation of these principles into South African law may prove a complex and problematic endeavour, especially as the doctrinal principles governing delicts in the selected jurisdictions do not share a common historical origin.

Chapter 5 will cover relevant comments, criticism and recommendations in respect of causation in medical law in South Africa, seen against the background of the principles governing causation in medical law in the jurisdictions mentioned in this chapter.

CHAPTER 5

DISCUSSION, CONCLUSIONS, AND SUBMISSIONS

1 INTRODUCTION

Determining causation in the context of medical negligence litigation presents jurists with particular challenges. The nature of medical practice, the nature of disease, and the ever-evolving state of medical science render the determination of causation in medical negligence litigation a most contentious and vexing problem. A finder of fact in medical negligence litigation will usually be confronted by factual and expert evidence of a highly technical and complex nature. Experts who assist courts may disagree not only in respect of the interpretation of factual evidence but also in respect of the current state of medical science and accepted practice. In some cases the complexity and development of a dread disease, in combination with a multitude of further variables, render the determination of causation in medical negligence matters a virtual impossibility. Notwithstanding such difficulties, a judge or finder of fact must decide in favour of, or against, a particular litigant.

This dissertation addresses the most prominent difficulties involved in the determination of causation in the context of medical law in South Africa. It has provided an exposition of the main principles governing factual and legal causation in South Africa, Germany, England & Wales, Canada, and Australia[1]. It further provides an exposition of the main problems faced by jurists and judges when considering the

[1]The main problems in respect of the determination of causation in South Africa were discussed in chapter 3 *supra*, with a similar exposition provided in respect of the law of Germany, England & Wales, Canada and Australia in chapter 4 *supra*. It is submitted that the present comparative analysis should be seen in the light of specific significant structural and doctrinal differences between the legal systems of South Africa, and the foreign jurisdictions selected for comparison. The present comparative study is therefore not aimed at an indiscriminate appropriation of legal principles without consideration of contextual background - the codified nature of German law, for example, does not find any precise comparative structural parallel in the un-codified South African or Anglophone systems. In addition to the aforementioned fundamental differences, it should be emphasised that essential differences exist between the individualised and casuistic torts found in Common Law jurisdictions and the applied principles of delict in South African (and German) law. Any comparison between the systems mentioned above must necessarily, therefore, be made and considered subject to recognition of the dangers inherent in the indiscriminate appropriation and incorporation of foreign legal principles.

element of causation in the context of medical negligence litigation.[2] A comparison of the South African principles governing causation as set out in chapter 3 and the congruent principles in other jurisdictions as discussed in chapter 4 demonstrate the universality and complexity of the determination of causation in medical law cases. From a comparison of the aforementioned legal systems, it is apparent that specific prominent issues require consideration: Firstly, which principles govern causation in South African medical law? Secondly, what are the most problematic issues in establishing causation in medical law in South Africa? Thirdly, what are the proposed solutions and recommendations in respect of *lacunae* in the established principles of causation in South African medical law? Are foreign legal principles of use in addressing problems with causation in South African medical law?

This chapter will address the aforementioned questions in turn, with specific reference to the legal systems and principles which are compared. The exposition in respect of the various principles governing causation in the previous chapters, and their application to South African medical law, require certain concluding discussions, conclusions and submissions. The present chapter will commence with a discussion of the main principles and problems relevant to causation in medical law in South Africa and the legal systems which are used for comparison, as set out and discussed respectively in chapters 3 and 4 *supra*.[3] The analysis mentioned above will be followed by a brief comparative investigation in respect of those principles of foreign law which may, or may not, as the case may be, demonstrate promise in respect of the

[2] From the discussion of the subject of causation in the jurisdictions under comparison as outlined in chapters 3 and 4 *supra*, it is evident that a comprehensive and all-encompassing exposition of the principles governing the establishment and determination of causation on a comparative basis constitutes a monumental, if not impossible, task. The discussion of principles in foreign jurisdictions in intended to provide an *overview* of such principles and a fully comprehensive treatise on such principles is not practically possible within the spatial limits of the present dissertation.

[3] In this chapter all of the principles relating to the determination of causation in medical law in South Africa and the selected comparative jurisdictions as set out in previous chapters will not be repeated, but emphasis will be placed on the exposition of similarities, differences, critique and, where possible, certain recommendations. The purpose of the present chapter is to identify some main elements of comparison pertaining to causation in the selected jurisdictions, and to provide an analysis of those elements of causation in South African law in a medical law context utilising, where necessary and possible, principles which may contribute to the development of South African law. A broad comparative perspective is taken, which to some extent necessitates generalisations and broad overviews of many intricate and complex legal principles. It is submitted that a comparative analysis of the aforementioned legal systems evidences many similarities in respect of the approaches utilised by courts in determining especially factual causation in litigation.

development of South African medical law. The chapter will conclude with thoughts on causation in South African medical law.

2 COMPARATIVE OVERVIEW

2 1 South Africa

2 1 1 Factual Causation

The main principles in respect of causation in the law of delict and the various approaches which have been adopted by South African courts in establishing causation were discussed and outlined in chapter 3 *supra*. It was established that factual causation is established through application of the *conditio sine qua non* theory, a "common sense" approach to factual causation, and a "flexible" test for factual causation.[4] Once factual causation is established, the liability of a defendant is limited through legal causation.[5]

The *conditio sine qua non* theory today remains one of the most critical methods utilised by courts to determine and establish factual causation in delictual matters. In chapters 3 and 4 *supra*, it was demonstrated that all of the legal systems under comparison utilise a two-step approach to the determination of causation. The traditional *conditio sine qua non* (or "but for" test) is the first port of call for determining factual causation in the law of delict (or the law of tort).[6] The plaintiff must establish that it is more likely than not that, but for the defendant's wrongful and negligent conduct, the plaintiff's harm would not have ensued. The plaintiff is not required to establish this causal link with certainty but must do so on a preponderance

[4] Chapter 3 paras 2 1 1, 2 5 1, 2 5 2, 2 5 3, 2 5 4, 3 1, 3 2 *supra*.
[5] Chapter 3 para 5ff.
[6] German law (*Äquivalenzteorie*, *Haftungsbegründende Kausalität*) deals with the establishment of causation under the law of obligations, and not delict – see chapter 4 paras 2 1, 3 3 3, 4 2, 5 2 2 *supra*. The definitions and requirements of the *conditio sine qua non* test in South Africa, Germany, England, Canada and Australia display remarkable similarities, with courts requiring a factual nexus between cause and event as a basis for factual causation. Similarities are also found in the process of "elimination" from (or "insertion" of), specific hypothetical conduct into the relevant factual scenario in all of the legal systems which are being compared.

of probabilities.[7] Although purists in some of the jurisdictions support a binary or "all-or-nothing" approach to factual causation[8], South African courts have recognised the potential for injustice as a result of a strict application of the *conditio sine qua non* theory in multiple, cumulative or concurrent cause scenarios.[9] The main difficulties which may confront a judge when applying the *conditio sine qua non* theory in instances of multiple or concurrent factual causation are succinctly summarised as follows[10]:

> [I]n some cases [the facts] prevent the selection of any cause, with the inevitable result that the plaintiff fails to meet his burden of proof. Such a hurdle is most frequently encountered where a plurality of causal factors is involved in the production of the injury. For instance, it occurs where damage is caused by two (or more) events, which combine to produce the total outcome, in cases where each of them would have been sufficient to produce it individually. In such cases, the strict application of the *causa sine qua non* test leads to the absurd result that neither event would qualify as a cause since the defendant can invoke the existence of alternative explanations for the plaintiff's injury as proof that the damage would have happened without his negligence.

In addition to leading to unjust outcomes, the *conditio sine qua non* theory has been described as an "over-blunt and inadequate tool for securing constitutionally tailored justice" in cases where the origin, source or development of a particular injury, together with negligent conduct on the part of a defendant, makes pinpointing the cause of the plaintiff's injury difficult or impossible.[11] It has attracted widespread academic criticism, mainly in that it (1) involves clumsy and indirect processes of thought that lead to circular logic[12]; (2) that it elevates the question of whether other antecedents have caused a particular result to the essence of, or the only criterion to be used in the inquiry into causation[13]; (3) that it fails in instances of cumulative causation[14]; and (4)

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[7] *Za v Smith* 2015 4 SA 574 (SCA) para [30]; *Minister of Finance v Gore* 2007 1 SA 111 (SCA) paras [32] – [33].
[8] Neethling J & Potgieter JM *Neethling-Potgieter-Visser Law of Delict* (2015) 183.
[9] Chapter 3 para 5 1ff; Chapter 4 para 2 7; Chapter 4 para 3 3 4 1ff; Chapter 4 para 4 5ff; Chapter 4 para 5 2 7ff *supra*.
[10] Khoury L *Uncertain Causation in Medical Liability* (2006) 20.
[11] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [49] – [54], [68].
[12] Neethling J & Potgieter JM (2015) (n8) 187 – 181; Van der Walt JC *Delict: Principles and Cases* (1979) 96 – 97.
[13] Neethling J & Potgieter JM (2015) (n8) 187; Van Oosten FFW "Oorsaaklikheid by Moord en Strafbare Manslag" (LLD Thesis, University of Pretoria) (1981) 137ff; Van der Walt JC (1979) (n12) 97.
[14] Neethling J & Potgieter JM (2015) (n8) 188; Rabie PJ & Faris J *The Law of South Africa* (2005) 239; Van Oosten FFW (1981) (n13) 136, 136 fn 60; Boberg PQR *The Law of Delict (Aquilian Liability: Volume One)* (1984) 383; Van der Walt JC (1979) (n12) 97.

that it is not a test of causation "because it is merely an *ex-post facto* way of expressing a predetermined causal nexus."[15]

In most instances, the application of the *conditio sine qua non* theory will not prove problematic, and factual causation may be readily established. Where the use of the *conditio sine qua non* theory fails, or it provides unjust results, South African courts resort to the "flexible" test for factual causation as enumerated in *Lee v Minister of Correctional Services*.[16] The decision in *Lee v Minister of Correctional Services*[17] heralded a new approach to factual causation in South African law and introduced a "flexible" approach to factual causation, which takes into account "normative considerations".[18] In that judgment, it was decided that the *conditio sine qua non* theory should not be applied inflexibly, and that "common sense" might, in certain circumstances, have to prevail over strict logic.[19] Where the traditional *conditio sine qua non* theory is adequate to establish factual causation, it may not be necessary to resort to the "flexible" test for factual causation described in *Lee v Minister of Correctional Services*[20] but, where the traditional *conditio sine qua non* theory is not adequate to establish factual causation, or where the strict application of the traditional *conditio sine qua non* theory will lead to an injustice, courts may resort to the "flexible" test for factual causation.[21] South African courts also resort, as an alternative approach to factual causation in multiple, cumulative or concurrent cause situations, to a "common sense" approach to factual causation.[22]

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[15] Neethling J & Potgieter JM (2015) (n8) 189; Rabie PJ & Faris J (2005) (n14) 238; Van Oosten FFW (1981) (n13) 124 – 126; Van der Walt JC (1979) (n12) 97.
[16] 2013 2 SA 144 (CC); *Mashongwa v PRASA* 2016 3 SA 528 (CC).
[17] 2013 2 SA 144 (CC)
[18] See Chapter 3 para 3 2ff *supra*.
[19] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [49].
[20] 2013 2 SA 144 (CC).
[21] *Mashongwa v PRASA* 2016 3 SA 528 (CC); para 4 4 *supra*; *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [41].
[22] *Portwood v Swamvur* 1970 4 SA 8 (RA).

2 1 2 Legal Causation

The best-known recognised theories in respect of the determination of legal causation are the theory of adequate causation[23], the "direct consequences" theory[24], the theory of "fault"[25], reasonable foreseeability criterion[26] and the "flexible approach".[27] South African courts utilise the "flexible" approach espoused in *S v Mokgheti*[28]. Our courts presently follow a flexible approach to the determination of legal causation (which method was delineated in *S v Mokgethi*[29]) and which approach was confirmed in several subsequent cases dealing with private law.[30] In *S v Mokgethi*[31], Van Heerden JA held that there is no single and general criterion for legal causation which is applicable in all instances, and a flexible approach is accordingly suggested.[32] The essence of the flexible approach as set out in *S v Mokgethi*[33] is whether there is a close enough relationship between the wrongdoer's conduct and its consequence for such consequence to be attributed to the wrongdoer because of policy considerations based on reasonableness, fairness, and justice.[34] When considering the test for legal causation, the test should be utilised as a flexible one in which factors such as reasonable foreseeability, directness, the absence or presence of a *novus actus interveniens*, legal policy, reasonability, fairness, and justice all play their part. [35] The existing criteria for legal causation (such as reasonable foreseeability, adequate cause) remain important tools in determining legal causation, albeit as subsidiary criteria.[36] The flexible approach for legal causation requires that the subsidiary (or existing) criteria for establishing legal causation are to be utilised as aids in answering the fundamental question of imputability of harm.[37] Differences in emphasis in various decisions on the role of criteria such as reasonable foreseeability or direct

[23] Neethling J & Potgieter JM (2015) (n8) 203; Van der Walt JC & Midgley JR *Principles of Delict* (2005) 210. See also the discussion of adequate causation in Snyman CR *Criminal Law* (2002) 81ff.
[24] Neethling J & Potgieter JM (2015) (n8) 205; Van der Walt JC & Midgley JR (2005) (n23) 206.
[25] Neethling J & Potgieter JM (2015) (n8) 207; Van der Walt JC & Midgley JR (2005) (n23) 205.
[26] Neethling J & Potgieter JM (2015) (n8) 214; Van der Walt JC & Midgley JR (2005) (n23) 208.
[27] Neethling J & Potgieter JM (2015) (n8) 200; Van der Walt JC & Midgley JR (2005) (n23) 202.
[28] 1990 1 SA 32 (A); Chapter 3 para 3 *supra*.
[29] 1990 1 SA 32 (A).
[30] Neethling J &Potgieter JM (2015) (n8) 200.
[31] 1990 1 SA 32 (A).
[32] Neethling J & Potgieter JM (2015) (n8) 200.
[33] 1990 1 SA 32 (A).
[34] *S v Mokgethi* 1990 1 SA 32 (A) 40 – 41; Neethling J & Potgieter JM (2015) (n8) 201.
[35] *Groenewald v Groenewald* 1998 2 SA 1106 (SCA) 1114.
[36] Neethling J & Potgieter JM (2015) (n8) 201, 201 fn 116.
[37] Neethling J & Potgieter JM (2015) (n8) 202.

consequences are quite acceptable "as long as justice prevails in the end."[38] The various theories of legal causation are at the service of the imputability question and not *vice versa*.[39] Any restriction of the principle lies in the principle itself.[40] The flexible approach can allay fears of so-called "limitless liability".[41] All the circumstances of a case should be considered, and the facts of each case should be carefully considered as such facts play an important role when the umbrella concept (or flexible criterion) is applied.[42] The criteria and principles set out hereinabove all have, together with the separate enquiry into wrongfulness, an essential role as "control and balancing devices to establish a fair balance in fixing the limiting liability"[43] and "which aims to strike a fair balance between the interests of the plaintiff and the defendant."[44]

2 2 Germany

2 2 1 Factual Causation

German law deals with multiple causation and the difficulties faced by plaintiffs in establishing factual causation where the *conditio sine qua non* theory cannot be utilised, in various ways. There is little theoretical difficulty with the application of the *conditio sine qua non* theory in medical malpractice cases.[45] In Germany the burden of showing that a faulty breach of a duty by a doctor or hospital (as well as a factual causal link between such breach and the plaintiff's injury) lies primarily with the plaintiff. In medical negligence cases in Germany, the patient's injury is usually considered to fall within the spectrum of risk from which the doctor was obliged to protect the patient.[46] In medical negligence cases, the German courts shift the burden

[38] Neethling J & Potgieter JM (2015) (n8) 202.
[39] Neethling J & Potgieter JM (2015) (n8) 202, 202 fn122. *Contra* Van der Merwe NJ & Olivier PJJ *Die Onregmatige Daad in die Suid-Afrikaanse Reg* (1989) 211 – 212.
[40] Van der Walt JC & Midgley JR (2005) (n23) 205 fn 21; *Smit v Abrahams* 1992 3 SA 158 (C); *Bonitas Medical Aid Fund v Volkskas Bank Ltd* 1992 2 SA 42 (W) 49.
[41] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [52]; Neethling J & Potgieter JM (2015) (n8) 202.
[42] Van der Walt JC & Midgley JR (2005) (n23) 203.
[43] Van der Walt JC & Midgley JR (2005) (n23) 204.
[44] Van der Walt JC & Midgley JR (2005) (n23) 204.
[45] Stauch MS "Medical Malpractice and Compensation In Germany" (2011) *Chicago-Kent Law Review* 1139 1143. See also Chapter 4 para 2 1 *supra*.
[46] Stauch MS (2011) (n45) 1152.

of proof from the plaintiff to the defendant. The legal construct of "fully masterable risks" is used in some instances and the onus is shifted to the defendant to explain and justify how a particular injury occurred.[47] German courts apply, in certain instances, a formal presumption in cases of inadequate documentation on the part of a medical practitioner. The courts will assume, in the absence of a particular record such as a diagnostic test or record of a therapeutic procedure, that such records were omitted.[48] Where a plaintiff is exposed to several risks, such as those posed by his illness and by the treatment given, the current state of medical science renders identification of the respective contributions of the aforementioned factors impossible and, had it not been for faulty treatment the patient would have avoided injury, the German courts have been prepared to relax the high burden of proof of "judicial conviction".[49] Where an injury may be seen as "secondary" to some earlier infringement of the plaintiff's bodily integrity or health and which was caused by the particular defendant, the courts will assess the putative link between the initial and secondary harm according to the balance of probabilities.[50] German courts have also developed a doctrine allowing for a complete reversal of the onus of proof in respect of causation in cases of gross negligence (*grobe Behandlungsfehler*).[51] Where this approach places the plaintiff in a better position than the defendant, the plaintiff will obtain full recovery "even where the likelihood exists that the error played a small part in her injury".[52] In many instances, a plaintiff can circumvent the difficult rules relating to proof and evidentiary standards by reformulating his or her claim as one of "disclosure malpractice".[53] The German case law in this regard is characterised by a tendency to lean in favour of plaintiffs.[54] The effect of such an approach is over-compensation.[55]

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[47] Chapter 4 para 2 7 *supra*.
[48] Stauch MS (2011) (n45) 1154; Chapter 4 para 2 7 *supra*.
[49] Stauch MS (2011) (n45) 1154; Chapter 4 para 2 7 *supra*.
[50] Stauch MS (2011) (n45) 1154; Chapter 4 para 2 7 *supra*.
[51] Stauch MS (2011) (n45) 1154; Chapter 4 para 2 7 *supra*.
[52] Stauch MS (2011) (n45) 1154; Chapter 4 para 2 7 *supra*.
[53] Stauch MS (2011) (n45) 1156 - 1157: "Claims for disclosure malpractice provide an alternative basis of argument in cases of iatrogenic injury. Instead of showing the injury stemmed from a fault in the execution of treatment, the patient may argue that, insofar as the risk of such injury was indeed inherent in the treatment, the doctor failed in his anterior duty to warn of it. As a result, so the argument continues, the patient's agreement to treatment was defective, and the doctor should be liable for the injuries arising from it… the German courts have evolved a high standard of required information disclosure."; Chapter 4 para 2 7 *supra.*
[54] Stauch MS (2011) (n45) 1167 – 1168; Chapter 4 para 2 7 *supra*.
[55] Stauch MS (2011) (n45) 1168: "This has been seen as an aspect of permissible loss re-distribution. At least in the past, in the context of the affluent conditions of German society, with costs shared between the social security system and liability insurers, this was a stable solution with broad support, which kept reform initiatives in this area largely off the political agenda."; Chapter 4 para 2 7 *supra*.

2 2 2 Legal Causation

German courts deal with legal liability in terms of the criterion of "imputability" and utilise, among other things, the *Schutzzweck der Norm* theory (translated as the "scope of rule" theory).[56] According to this theory, damage can be recovered only when it is within the scope of protection of the norm which has been infringed.[57] The assessment of causation is taken away from the actual circumstances of the case towards the analysis of the infringed norm.[58] The theory is essentially mostly legal policy theory.[59] The *Risikobereich*-theory holds that every person has to bear a certain amount of risk and some risks by their very nature fall within his or her *Risikobereich*, which includes a "general risk associated with existence".[60] When the occurrence of damage represents no more than the realisation of a risk which was within the *Risikobereich* of the plaintiff, the loss cannot be attributed to the defendant. [61] The "scope of risk" is one step removed from the actual circumstances of the case and it implies a "value judgment" in respect of the risk or risks which one should be required to bear in the ordinary course of one's life.[62]

2 3 England

2 3 1 Factual Causation

In general terms, English courts utilise the general principles of causation when deciding medical negligence cases, with attempts to apply the principles developed in asbestos cases facing resistance.[63] Reversal of burden of proof and loss of a chance have not found acceptance in medical negligence cases with courts returning to a more

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[56] Van Gerven W, Lever J & Larouche P *Cases, Materials and Text on National, Supranational and International Tort Law* (2000) 398.
[57] Van Gerven W, Lever J & Larouche P (2000) (n56) 398.
[58] Van Gerven W, Lever J & Larouche P (2000) (n56) 398 398 fn 27; Honoré AM "Causation and Remoteness of Damage*"* in Tunc A *International Encyclopedia of Comparative Law* (1971) Vol XI Chapter 7 60 para 97.
[59] Honore (1971) (n58) 60 para 97.
[60] Van Gerven W, Lever J & Larouche P (2000) (n56) 398.
[61] Van Gerven W, Lever J & Larouche P (2000) (n56) 398.
[62] Van Gerven W, Lever J & Larouche P (2000) (n56) 398.
[63] With appropriate applications of the general rules where torts other than negligence are concerned – see Chapter 4 paras 3 3 5 1 - 3 3 5 2 *supra.*

traditional approach based on the balance of probabilities.[64] The doctrine of "loss of a chance" opens a Pandora's box of overwhelming difficulties which can be avoided by application of the established alternatives.[65] A reversal of the burden of proof in medical negligence cases is an unrealistic option in light of the current state of English law.[66] A traditional application of the rules of evidence in English law leads, as in other systems, to a systematic refusal of compensation for plaintiffs dealing with causal uncertainty in medical negligence cases.[67] The principles set out in *McGhee v National Coal Board*[68], and *Fairchild v Glenhaven Funeral Services Ltd*[69], seem attractive solutions to claimants in medical negligence cases.[70] The mooted solutions in respect of uncertain causation lie in reliance on inferences and factual presumptions which take into account the need for flexibility in cases involving uncertainty.[71]

2 3 2 Legal Causation

English law limits liability by application of various principles. It seeks to limit the liability of a defendant by application of tests devised to establish whether, apart from factual causation, such defendant should be held liable in law lest liability continues indefinitely.[72] Legal causation or "remoteness" operates as a further limiting device which may exclude liability even where the defendant's conduct played a necessary part in the claimant's injury (factual causation having been established).[73] The doctrine of reasonable foreseeability functions as a useful device in determining legal causation. The principle of reasonable foreseeability was restored to English law in the case of *Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd*[74] after being rejected in *Re an Arbitration between Polemis and Furness, Withy and Co.*[75] A

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[64] Khoury L (2006) (n10) 230. See also Goldberg R "Medical Malpractice and Compensation in the UK" (2012) *Chicago-Kent Law Review* 131 142 – 146.
[65] Khoury L (2006) (n10) 230.
[66] Khoury L (2006) (n10) 230.
[67] Khoury L (2006) (n10) 230.
[68] [1972] 3 All ER 1008 (HL); Chapter 4 para 3 3 4 4 *supra*.
[69] [2003] 1 AC 32 (HL).
[70] Khoury L (2006) (n10) 56.
[71] Khoury L (2006) (n10) 230; Chapter 4 para 3 3 10 *supra*.
[72] Rogers WVH *Winfield and Jolowicz on Tort* (2002) 223 – 224.
[73]Stauch MS, Wheat K & Tingle J *Text, Cases & Materials on Medical Law* (2011) 323.
[74] *(The Wagon Mound)* [1961] 1 All ER 404 (PC). See also Jackson RM & Powell JL *Jackson & Powell on Professional Negligence* (1997) 734 – 737; Jackson RM & Powell JL *Jackson & Powell on Professional Negligence (Second Supplement)* (1999) 95 – 96; Rogers WVH (2002) (n72) 224 – 231.
[75] [1921] 3 KB 560.

tortfeasor is liable for any damage which he can reasonably foresee, however unlikely it may be unless it can be brushed aside as far-fetched.[76] A reasonably foreseeable intervening event occasioned by the plaintiff could still constitute a *novus actus interveniens* unless it could be said to be the natural and probable result of the defendant's negligence.[77] An intervening act, or *novus actus interveniens*, may sever the chain of causation, and its determination involves a determination of mixed questions of law and fact.[78]

2 4 Canada

2 4 1 Factual Causation

Canadian courts have been reluctant to hold a defendant liable in medical negligence cases where the plaintiff has not established causation on a balance of probabilities.[79] The Supreme Court of Canada reaffirmed the general applicability of the "but-for" test for causation in negligence cases and the need, in some cases, for a "robust and pragmatic approach" to the evidence required to meet the relevant standard.[80] The "material contribution" test is not simply the application of the "but for" test to cases where multiple causes could have materially contributed to the harm.[81] The "material contribution" test finds very narrow application. [82] The so-called "special circumstances" in terms of which the "material contribution" test may be applied were set out in *Resurfice Corporation v Henke*[83], and no reason exists for relaxing the standard of proof on appeal.[84] Courts should not turn to the material contribution test until the plaintiff has established that it is impossible to meet the "but for" test.[85]

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[76] For noted exceptions to this principle, see Heuston RFV & Buckley RA *Salmond and Heuston on the Law of Torts* (1996) 507 – 520. See also Brazier M *The Law of Torts (Street on Torts)* (1993) 252 – 262; Rogers WVH (2002) (n72) 223 – 236.
[77] Hodgson D (2008) *The Law of Intervening Causation* (2008) 34.
[78] Hodgson D (2008) (n77) 5.
[79] Chapter 4 para 4 16 *supra*.
[80] Willcock PM & Lepp JM (2008) (n288) 36; *Resurfice Corporation v Henke* 2007 SCC 7; Chapter 4 para 4 16 *supra*.
[81] Willcock PM & Lepp JM "Causation in Medical Negligence Cases" (Paper presented at the Continuing Legal Education Society of British Columbia) (2008) 36; Chapter 4 para 4 16 *supra*.
[82] Willcock PM & Lepp JM (2008) (n81) 37; Chapter 4 para 4 16 *supra*.
[83] 2007 SCC 7 para 22. See also *Bohun v Sennewald* 2007 BCSC 269; *BSA Investors Ltd v DSB* 2007 BCCA 94; *Barker v Montfort Hospital* 2007 ONCA 282; *Fullowka v Royal Oak Ventures Inc* 2008 NWTCA 04; Willcock PM & Lepp JM (2008) (n81) 37 – 39.
[84] Chapter 4 para 4 16 *supra*.
[85] Chapter 4 para 4 16 *supra*.

Plaintiffs must prove not only that it is difficult or impossible for the evidence to address causation, but that it is impossible in principle to do so.[86] Impossibility must be a result of logical or structural difficulties, not because of practical problems.[87]There should be no resort to the "material contribution" test unless the application of the "but for" test to the facts of the case would offend basic notions of fairness and justice. The "material contribution" test should only be employed in challenging cases and then as a policy decision.[88] The solution to evidential problems in the establishment of causation does not lie in modifying the substantive rules of civil liability or evidence law or creating new ones to address evidential difficulties, but rather in re-evaluating the way indirect evidence of causation is judicially assessed.[89] Canadian law favours a "common sense" and flexible approach which remains tied to an assessment of probabilities in medical negligence matters.

2 4 2 Legal Causation

In Canadian tort law, causation need not be determined with scientific precision.[90] Factfinders are to take a "robust and pragmatic approach" to the facts that the injured person asserts in support of the conclusion that the misconduct of a defendant is a factual cause of his or her injury. [91] Where the relevant facts are mainly within the knowledge of the defendant, "very little affirmative evidence will be needed to justify an inference of causation in the absence of evidence to the contrary". [92] Causation is a question to be answered by the application of "ordinary common sense".[93]

[86] Chapter 4 para 4 16 *supra*.
[87] Chapter 4 para 4 16 *supra*.
[88] Chapter 4 para 4 16 *supra*.
[89] Khoury L (2006) (n10) 230.
[90] Thomas MG "Causation in Medical Negligence Cases: A Perspective from British Columbia" (2011) *The Advocates' Quarterly* 67 73; *Snell v Farrell supra* 326, 329 – 330.
[91] Thomas MG (2011) (n90) 73; *Snell v Farrell supra* 326, 329 – 330.
[92] Thomas MG (2011) (n90) 73; *Snell v Farrell supra* 326, 329 – 330.
[93] Thomas MG (2011) (n90) 73; *Snell v Farrell supra* 326, 329 – 330.

2 5 Australia

2 5 1 Factual Causation

It is evident from what is set out *supra* that Australian courts have been influenced by the concept of material increase of risk to find causation proven in a few important medical negligence cases.[94] Australian courts use a flexible, common sense-based approach to cases of real causal uncertainty in medical negligence cases.[95] Statutory enactments such as the Civil Liability Act 2002 (and specifically section 5D thereof) have altered the way in which Australian courts deal with factual causation, particularly in "non-disclosure"cases.

2 5 2 Legal Causation

In Australia, to establish legal causation, and in order to limit liability, the factors which are considered in assessing legal causation are considerations of legal policy[96], community values[97] and which are distinguished from judicial or personal whim.[98] It is possible therefore that, even though a physical connection exists between the issue complained of and the related harm or damage, a finding will result that no causal connection exists for legal purposes.[99] Normative considerations are to be considered as part of the scope of liability.[100] The considerations which are frequently taken into

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[94] Khoury L (2006) (n10) 230ff; *Chappel v Hart* (1998) 195 CLR 232; *Crockett v Roberts* (2002) TASSC 73; *Hughes v Minister for Health* (1999) WASCA 131; *Chapman v Caska* (2005) NSWCA 113; *Naxakis v Western General Hospital* (1999) 197 CLR 269.

[95] Khoury L (2006) (n10) 162.

[96] *Allianz Australia Insurance Ltd v GSF Australia Pty Ltd* (2005) 221 CLR 568 586 – 587; *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 643; Carver T & Smith MK "Medical Negligence, Causation and Liability For Non-Disclosure Of Risk: A Post-Wallace Framework and Critique" (2014) *University of New South Wales Law Journal* 972 978.

[97] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 643; Carver T & Smith MK (2014) (n96) 978.

[98] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 650; Carver T & Smith MK (2014) (n96) 978.

[99] *Australia Insurance Ltd v GSF Australia Pty Ltd* (2005) 221 CLR 568 586; *Roads and Traffic Authority v Royal* (2008) 245 CLR 653; Carver T & Smith MK (2014) (n96) 978.

[100] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 para 28; Carver T & Smith MK (2014) (n96) 978.

account are intervening, and successive causes[101], foreseeability and remoteness[102], the terms of any applicable statute[103], and the purpose of the rule or duty of care violated.[104] The element of legal causation reflects an "instinctive belief that a person should not be held liable for every wrongful act or omission which is a necessary condition of the occurrence of the injury that befalls a plaintiff." [105]

3 COMPARATIVE ANALYSIS

3 1 South Africa and Germany

3 1 1 Law of Delict

The discussion of causation in chapter 4 *supra* revealed that South African and German law share a foundational system of principles which are rooted within a traditional *conditio sine qua non* paradigm.[106] The two systems also share use of the adequacy theory, with German law utilising the approach as a probability-based theory without assigning the approach any particular position within the available tools used in establishing causation. South African law categorises the theory as one of the various approaches utilised in limiting liability under the umbrella of a "flexible" criterion for legal causation. Normative assessments are used in German law where a defendant infringes a specific norm or "rule". Normative assessments are useful in situations where specifically defined rules or norms have crystallised casuistically, but, for all of their strengths, fail to provide rules which are capable of general application between all plaintiffs and all defendants. Insofar as it has assessed causation in an atmosphere which is removed from the actual circumstances of the case (towards an analysis of an infringed norm) the South African Constitutional Court has in *Lee v Minister of*

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[101] *Monaghan Surveyors Pty Ltd v Stratford Glen-Avon Pty Ltd* [2012] NSWCA 94; *Travel Compensation Fund v Tambree* (2005) 224 CLR 627; Carver T & Smith MK (2014) (n96) 978.
[102] *Monaghan Surveyors Pty Ltd v Stratford Glen-Avon Pty Ltd* [2012] NSWCA 94; Carver T & Smith MK (2014) (n96) 978.
[103]*Travel Compensation Fund v Tambree* (2005) 224 CLR 627; Carver T & Smith MK (2014) (n96) 978.
[104] Carver T & Smith MK (2014) (n96) 978.
[105] Carver T & Smith MK (2014) (n96) 989.
[106] Compare Chapter 3 para 2 1ff and Chapter 4 para 2 2ff. There are, of course, specific structural and doctrinal differences such as, for example, *among other th*ings, the codified nature of German law *versus* the uncodified system of law and the doctrine of *stare decisis* in South African law.

Correctional Services[107], whether inadvertently or by design, moved the law of causation in South Africa closer to that which is established in German law. Both systems emphasise the fact that the establishment of causation is, to a great extent, legal policy theory.

3 1 2 Medical Law

German judges have recognised the complex and intricate problems which plague medical negligence cases. They address such issues by employing doctrines related to the reversal of the burden of proof and constitutional provisions[108] aimed at ensuring fair hearings for plaintiffs. The onus of proof lies with plaintiffs in medical negligence cases, but German law has recognised that "fully masterable risks" exist within the sphere of medical practice.[109] In cases where "fully masterable risks" eventuate in problematic circumstances, German law requires medical practitioners to provide an explanation and justification in respect of how an injury occurred.[110] Judicial inroads into traditional rules of proof have resulted in a system which favours plaintiffs, with over-compensation as a result.

It is submitted that the principle which requires medical practitioners to explain the mechanism of and reasons for the occurrence of "fully masterable risks" is a useful one. The principle should not be adopted wholesale, i.e. in terms of a full reversal of the onus of proof. Such a reversal of the onus of proof would not, it is submitted, be justifiable in terms of the established principles of South African law and it would most certainly result, as it has in Germany, in over-compensation. Its usefulness, it is submitted, is to be found as a supplementary adjunct to the "risk-based" approach as referred to by Cameron J in *Lee v Minister of Correctional Services*[111]. The determination of "masterable risks" within the sphere of medical practice can narrow the scope of the enquiry into negligence and, it is submitted, causation. Once a *prima facie* case is made out by a plaintiff, and it has been proved that a medical practitioner

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[107] 2013 2 SA 144 (CC).
[108] Article 103(1) of the *Grundgesetz* – see chapter 4 para 2 1 *supra*.
[109] Stauch MS "Medical Malpractice and Compensation in Germany" (2011) *Chicago-Kent Law Review* 1139 1154.
[110] Stauch MS (2011) (n109) 1154; Chapter 4 para 2 7 *supra*.
[111] 2013 2 SA 144 (CC). See also Chapter 3 para 3 1ff *supra*.

has negligently exposed the plaintiff to an increase in risk, and such a risk has eventuated, the availability of a benchmark in respect of "masterable risks" may usefully narrow the scope of any investigation into risk and exposure to risk. Its acceptance is, of course, contingent on the development of South African medical law in line with the approach of Cameron J and the minority of the Constitutional Court in *Lee v Minister of Correctional Services*[112]. In this regard, German principles of medical law may prove useful in the development of South African medical law.

3 2 South Africa and England

3 2 1 Tort Law

English decisions have influenced the judgments of South African courts in several cases and have provided useful guidance in the development of specific South African legal principles.[113] The fundamental differences between a writ-based system of law in England and the general applicability of South African delictual principles prevent a direct appropriation of English legal principles into South African law.[114] Despite the differences mentioned above, there are many similarities between the two systems which are apparent from the general discussion of factual and legal causation in those systems in previous chapters.[115]

English law deals with multiple cumulative causes by utilising the "material contribution to damage" and "material increase in risk" approaches as formulated in cases such as *Bonnington Castings v Wardlaw*[116], *McGhee v National Coal Board*[117], and arguably the most famous English case on causation, *Fairchild v Glenhaven Funeral Services Ltd*[118]. Where it is established that conduct of a certain type creates a risk of injury, or increases an existing risk that injury will occur, and the plaintiff is owed a duty of care by the defendant (and the defendant does suffer risk), the defendant is considered to have caused the injury even though the existence and the extent of the

[112] 2013 2 SA 144 (CC); See also Chapter 3 para 3 1ff *supra*.
[113] See Chapters 3 and 4 *supra*.
[114] Zweigert H & Kotz H *An Introduction to Comparative Law* (1998) 605.
[115] Compare Chapter 3 paras 2, 3 and 5 and Chapter 4 paras 2 – 6 *supra*.
[116] [1956] AC 613.
[117] [1972] 3 All ER 1008 (HL).
[118] [2003] 1 AC 32 (HL).

contribution made by the defendant cannot be determined with certainty.[119] English Courts have held that there is no substantial difference between a material increase in the risk of a defendant's injury as opposed to a material contribution to his or her injury.[120] Ultimately, if it is established that conduct of a particular kind creates a risk that a plaintiff will suffer an injury, or increases an existing risk that injury will occur where a legal duty exists between the parties, the defendant is considered to have caused the plaintiff's injury even though the existence and the extent of the contribution made by the breach cannot be precisely determined.[121]

3 2 2 Medical Law

English law and South African law both use established principles of tort and delict to deal with causation in medical negligence cases. Both systems do not look favourably on the utilisation of the doctrine of a loss of a chance, and both systems are wary of relaxing or reversing the burden of proof in favour of plaintiffs. The principles set out in *Bonnington Castings v Wardlaw*[122], *McGhee v National Coal Board*[123], *Fairchild v Glenhaven Funeral Services Ltd*[124] and *Sienkiewicz v Greif*[125] and *Gregg v Scott*[126] provide possible solutions to plaintiffs in medical negligence cases in England. Proportional liability[127] and the use of statistical analysis[128], although not perfect solutions, provide useful comparative insights into possible solutions to problems of causation in South African medical law. Plaintiffs in English medical law must prove causation on a balance of probabilities, and English courts will only come to the assistance of plaintiffs by using the principles set out in the abovementioned cases in exceptional circumstances, and only once specific criteria have been met. English law

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[119] *Wilsher v Essex Area Health Authority* [1998] 1 AC 1074 (HL). In comparative terms, the test mentioned above is congruent with the "risk-based" approach of Cameron J in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC).
[120] *McGhee v National Coal Board* [1972] 3 All ER 1008 1011 (HL) (Lord Reid). Where more than one risk, or type of risk, is involved, the principles enumerated in the aforementioned case will not assist a Court in reaching a decision – see *Wilsher v Essex Area Health Authority* [1987] QB 730 771 – 772 (Lord Mustill).
[121] *Wilsher v Essex Area Health Authority* [1987] QB 730 771 – 772 (Lord Mustill).
[122] [1956] AC 613; Chapter 4 para 3 4 1 3 *supra*.
[123][1972] 3 All ER 1008 (HL).
[124] [2003] 1 AC 32 (HL).
[125] [2011] UKSC 10; Chapter 4 para 3 3 4 7 *supra*.
[126] [2005] UKHL 2; Chapter 4 para 3 3 9 *supra*.
[127] *Gregg v Scott* [2005] UKHL 2; Chapter 4 para 3 3 9 *supra*.
[128] Stauch MS "Causation, Risk, and Loss of Chance in Medical Negligence" (1997) 17 *OJLS* 205.

approaches uncertain causation in medical negligence cases conservatively, and with caution.

It is submitted that the English approach to uncertain causation demonstrates a realisation on the part of English judges that hard cases, such as mesothelioma cases, require drastic solutions.[129] Such solutions should, it is submitted, be considered in their proper context, and the principles set out in cases such as *Fairchild v Glenhaven Funeral Services Ltd*[130] should be utilised and adopted in South African medical law with great caution. The cases as mentioned earlier all involved a single causative agent, i.e., exposure to asbestos, while medical negligence cases may include many different factors, none of which act through similar mechanisms or processes, whereas causative elements and methods in medical negligence cases may be drastically different or varied. The mentioned cases were also decided within a specific policy-driven context, i.e., the recovery of damages by workers from economically powerful defendants. The general principles enumerated in the cases as mentioned earlier, especially those about material contribution to risk and material contribution to damage have already found recognition, to a greater or lesser degree, in some South African cases.[131]

It is submitted that the most important lesson to be learnt from a comparative study of English principles on causation in a medical law context is that well-intended principles, which are of great use in cases where policy requires that plaintiffs be compensated, such as the mesothelioma cases, may not be entirely appropriate for use in medical negligence cases. Ultimately English law requires that, in medical negligence cases, causation be proven on a balance of probabilities. The principles set out in the abovementioned cases should only be utilised in exceptional circumstances and, even then, the use of such principles should not be permitted to significantly change the nature of the onus of proof or causation.

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[129] See *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC).
[130] [2003] 1 AC 32 (HL).
[131] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [46]; *Kakamas Bestuursraad v Louw* 1960 2 SA 202 (A) 220B – C.

3 3 South Africa and Canada

3 3 1 Tort Law

English decisions on causation profoundly influence Canadian Courts. Canadian law and South African law both utilise the *conditio sine qua non* theory (or "but for" test) in establishing factual causation. South African and Canadian courts have, out of a sense of fairness and justice, recognised the need to assist plaintiffs in instances where the "but for" test is unworkable. The further foremost similarities between the Canadian and South African legal systems (insofar as causation in tort and delict is concerned) are evident from a general comparison of fundamental principles as set out in previous chapters.[132] Canadian courts have recognised the difficulties inherent in uncertain causation in negligence cases. Canadian courts have recognised that causation need not be determined with scientific precision and that fact-finders should take a robust, pragmatic and "common sense" approach to causation. Canadian decisions illustrate that the approaches as mentioned above are not intended to be seen as justifying inferential leaps of fact or logic.[133] The "material contribution to damage" approach occupies a prominent place in the arsenal of weapons available to Canadian judges in difficult medical negligence cases. It is mostly applied in medical negligence cases where the "but for" test is unworkable.[134]

3 3 2 Medical Law

Canadian courts are reluctant to hold defendants liable in medical negligence cases where causation has not been established on a balance of probabilities. In medical negligence cases, the "material contribution" test is applied by Canadian courts where it is impossible to say what caused an injury.[135] Canadian decisions on uncertain causation in medical negligence cases provide useful principles which may assist South African Courts in difficult cases. It is submitted that the most important of these

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[132] Compare Chapter 3 para 2ff and Chapter 4 paras 4 1 – 4 3 *supra*.
[133] *Bigcharles v Dawson Creek & District Health Care Society* (2001) 91 BCLR (3rd) 82, 251 WAC 134, 5 CCLT (3rd) 157 (CA), [2001] SCCA 390; Chapter 4 para 4 6 *supra*.
[134] *Athey v Leonati* [1996] 3 SCR 458, 140 DLR (4th) 235, [1997] 1 WWR 97; Chapter 4 para 4 12 – 4 14 *supra*.
[135] *Cook v Lewis* [1951] SCR 830; *Walker Estate v York Finch General Hospital* [2001] 1 SCR 647.

principles is that, in order to rely on the "material contribution" test, a plaintiff must prove that it is impossible to meet the requirements of the *conditio sine qua non* theory, and that it is not only difficult or impossible on the evidence to address causation, but that it is *objectively* impossible to do so.[136] It is submitted that the very structural and doctrinal problems which complicate or prevent a wholesale appropriation by South African Courts of English legal principles will equally plague any attempt to import Canadian legal principles into South African law.[137]

3 4 South Africa and Australia

3 4 1 Tort Law

Similarities between the legal systems of South Africa and Australia echo those which are apparent between the other Common Law systems under comparison in this dissertation. Both systems utilise the "but for" test for factual causation, and both systems accept that the application of the "but for" test may lead to unjust or absurd results in multiple uncertain causation cases. Australian Courts are critical of vague, subjective, unexpressed and undefined values where "common sense" approaches to causation are followed. Ultimately, Australian courts accept evidence of causation as sufficient only if the materials offered to justify an inference of probable connection.[138]

3 4 2 Medical Law

Australian courts utilise the "material contribution to damage" test in difficult medical negligence cases.[139] Australian courts have taken note of the English mesothelioma cases, and they have allowed a broader interpretation of the concept of "material contribution". Australian law does not require proof of the exact extent of a contribution made by a party to the damage suffered by a plaintiff. Non-disclosure

[136] *Barker v Montfort Hospital* 207 ONCA 282; *Tonizzo v Moysa* 2007 ABQB 245; *Aristorenas v Comcare Health Services* 2006 OJ 4039; *Resurfice Corporation v Hanke* 2007 SCC 7.s
[137] See para 3 2 *supra*.
[138] Chapter 4 para 5 2 5 *supra*.
[139] Chapter 4 para 5 2 6 – 5 2 7 *supra*.

cases are specifically covered by the provisions of section 5D of the Civil Liability Act 2002, but proof of factual causation remains rooted in the "but for" test.[140]

4 CAUSATION IN SOUTH AFRICAN MEDICAL LAW

4 1 Discussion: Uncomplicated Cases

4 1 1 *Conditio Sine Qua Non* Theory and the "Common Sense" Approach

In chapter 3 *supra* it was demonstrated that causation in South African medical law is determined by utilisation of the general principles in respect of causation in the law of delict.[141] It is submitted that, in assessing factual causation in any medical law matter, the ordinary principles on the use of the *conditio sine qua non* theory should be applied with reference to the facts of each case. In medical law cases where individual causes are readily identifiable, the *conditio sine qua non* theory, as it was formulated in the judgments decided before and confirmed by, *Lee v Minister of Correctional Services*[142] will provide a clear and just result in respect of factual causation. Where the facts are considered and found to be uncomplicated, factual causation may be readily determined in terms of a "common sense" approach, and no resort to the "flexible" test for causation in *Lee v Minister of Correctional Services*[143] would be required.[144]

4 1 2 Material Contribution to Damage Test

The "material contribution to damage" test has long formed a part of the South African law of delict, and it is submitted that its application to uncomplicated cases is unproblematic.[145]

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[140] Chapter 4 para 5 2 2 2 *supra*.
[141] Chapter 3 *supra.* Relevant criminal cases dealing with factual causation were also mentioned in Chapter 3 *supra*.
[142] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [39].
[143] 2013 2 SA 144 (CC).
[144] *Mashongwa v PRASA* 2016 3 SA 528 (CC).
[145] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [46]; *Kakamas Bestuursraad v Louw* 1960 2 SA 202 (A) 220B – C.

4 2 Discussion: Complicated Cases

In medical law cases in South Africa, the principal difficulty in establishing factual causation lies in the identification of an exact cause in the face of a multiplicity of uncertain, concurrent or cumulative factors. The decision in *Lee v Minister of Correctional Services*[146] addressed, to a certain extent, the issue of factual causation in the context of an uncertain causal mechanism (a tuberculosis infection within a prison environment with no apparent single or discernible origin). The judgment in that matter, however, brought several problematic questions to the fore, which problems directly affect the determination of causation in medical negligence matters. The first of those questions, discussed *infra*, concerns the use of a "common sense" approach to causation in medical negligence matters.[147] The second question, also discussed *infra*, relates to the "flexible" test for factual causation in medical negligence cases.[148] The third pertains to possible solutions to the main problems encountered in multiple-cause scenarios, including the "material increase in risk" approach, and the "material contribution" approach to factual causation in medical negligence matters.

4 2 1 "Common Sense" Approaches to Factual Causation: Applicability to Complicated Medical Negligence Cases

A "common sense" approach forms the basis of many of the established principles related to factual causation in the South African law of delict.[149] It was established *supra* that a mathematical, purely scientific or philosophical approach to factual causation is eschewed by South African courts in favour of "common sense, based on the practical way in which the minds of ordinary people work, against the backdrop of everyday-life experiences."[150] Everyday life experiences are most certainly useful in establishing factual causation in cases where readily identifiable single agents and single actors or uncomplicated factual scenarios are involved. Although it cannot be doubted that "common sense" notions are valuable in considering factual causation, it

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[146] 2013 2 SA 144 (CC)
[147] Chapter 3 para 2 5 3 *supra*.
[148] Chapter 3 para 3 1 *supra*.
[149] *Portwood v Swamvur* 1970 4 SA 8 (RA); *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC); *Bridgman NO v Witzenberg Municipality (JL & Another Intervening*) 2017 3 SA 435 (WCC).
[150] *Za v Smith* 2015 4 SA 574 (SCA) para [30]; *Lee v Minister of Correctional* Services 2013 2 SA SA 144 (CC); Chapter 3 para 2 3 *supra*.

is submitted that "common sense" and "everyday life experiences" do not readily provide solutions to highly complicated and multi-factorial problems involved in medical negligence cases. A further problem in respect of a "common sense" approach is that it is difficult to define or establish a conceptual benchmark in respect of such a concept. Should the "common sense" of a particular judge in a particular cultural or political milieu be the standard? What should happen when two or more judges cannot agree on the meaning of "common sense", or each of them asserts that their form of "common sense" is correct? Should the idiosyncratic interpretations formed by individual judges provide the basis for a test for causation? Where does "common sense" end? Where does precision begin? Should accuracy be jettisoned in favour of "judicial instinct" and a sense of fairness? Unexpressed, idiosyncratic, intuitive and vague notions, or undefined values, cannot, it is submitted, constitute a basis for a legal principle which is to be universally applied.

It is submitted that the "common sense" approach will be of limited use unless a universal standard for "common sense" is determined.[151] The difficulty created by a nebulous and intuitive approach to factual causation is that every individual finder of fact will exercise a different approach to a similar set of facts, ultimately leading to legal uncertainty. In such circumstances, advising medical practitioners in respect of the current legal position becomes problematic. Uniformity and predictability are essential in establishing legal certainty. It may be so that judges would not wish to send injured plaintiffs away without a remedy where a medical practitioner has been at fault, but the adoption of an unfettered common sense approach would be "an invitation to use subjective, unexpressed and undefined extra-legal values to determine legal liability."[152] It is by no means submitted that "common sense" has no valuable role to play in the determination of factual causation – on the contrary – its value lies in its practicality and utility *in straightforward cases*.

The "common sense" approach is well-suited to medical negligence claims involving a single causative agent or defendant, or where the facts are of such a nature that the

[151] The establishment of a universal standard for "common sense" in a heterogeneous society is doubtful, if not impossible.
[152] Milstein B "Causation in Medical Negligence – Recent Developments" (1997) *Australian Health Law Bulletin* 21 22 – 23.

inference of factual causation may be drawn on a conspectus of the available evidence. There is no reason to question the use of a "common sense" approach to factual causation in a case where a massive drug overdose causes the death of a patient, where (an otherwise healthy) patient is negligently burnt during the taking of X-Ray photos, or where a negligent failure to correctly connect an oxygen supply tube to a ventilator causes brain damage in a patient.

It is submitted that a "common sense" approach should be utilised with circumspection in medical negligence cases involving multiple, concurrent, cumulative or uncertain causes. Where it is equally probable that an injury was caused by the conduct of a medical practitioner or the progression of an as-yet unidentified disease, the "common sense" approach cannot provide any meaningful resolution to questions of factual causation. The everyday-life experiences of the man in the street offer little assistance in cases where newly discovered diseases, idiosyncratic patient anatomy, and adverse drug reactions are suspected to be involved in a plaintiff's injury. Such factors may be further compounded by scientific controversy and difference in expert opinion. It is, of course, accepted that "many legal rules contain elements of uncertainty, and every judicial decision involves the exercise of a discretion"[153], but to acknowledge that, in appropriate circumstances, a "common sense" approach must find application "is not to invite judges to engage in value judgments at large."[154]

It is submitted that the "common sense" approach referred to in the decided cases on factual causation in South Africa should continue to form an adjunct to (and an important element of) any enquiry into factual causation. In cases where evidence is objectively unavailable, where uncertainty exists in respect of the chain of events leading up to an injury, or where multiple possible explanations exist in respect of an injury, a subjective and intuitive "common sense" test for factual causation will not, it is submitted, provide an appropriate solution to complex questions of factual causation. Such an approach should not be permitted to become a judicial *factotum* or panacea in cases where multiple possible causes of an injury are involved. The "common sense" approach to factual causation cannot, despite its practicality and

[153] Waddams SM "Judicial Discretion" (2001) *Oxford University Commonwealth Law Journal* 59.
[154] *Travel Compensation Fund v Tambree* (2005) 224 CLR 627 para 28; Carver T & Smith MK (2014) (n96) 978.

utility, breach the evidentiary chasm which confronts plaintiffs in medical negligence cases involving uncertain multiple, concurrent or cumulative causes. It is therefore submitted that the "common sense" approach to factual causation should be utilised with circumspection in medical negligence cases where multiple potential causes are involved.

4 2 2 "Flexible" Test for Factual Causation: Applicability to Complicated Medical Negligence Cases

4 2 2 1 "Flexible" Test for Factual Causation: Advantages

Where the application of the traditional *conditio sine qua non*-theory (or the "common sense" theory referred to *supra*) produces absurd, inadequate or unjust results, the "flexible" approach set out by the majority of the court in *Lee v Minister of Correctional Services*[155] is to be applied in accordance with the Constitutional Court's gloss in *Mashongwa v PRASA*[156]. It is submitted that all determinations of factual causation in medical law matters in South Africa will thus be subject to the two-stage process set out in the cases decided before *Lee v Minister of Correctional Services*[157] and *Mashongwa v PRASA*[158]. Once the *conditio sine qua non*-theory produces an absurd result in a complicated medical negligence case involving multiple possible causes, South African Courts are, in terms of the gloss in *Mashongwa v PRASA*[159], compelled to apply the remaining tests for factual causation. One of the remaining options, the "common sense" test, will, for the reasons discussed *supra*, take the enquiry no further, leaving only the "flexible" test for factual causation remaining.

The decision in *Lee v Minister of Correctional Services*[160] was, it is respectfully submitted, apparently motivated by a sense of fairness and a defined constitutional imperative aimed at achieving just results. It seems manifestly unfair that meritorious plaintiffs should find themselves without legal remedy as a result of impassable

[155] 2013 2 SA 144 (CC).
[156] 2016 3 SA 528 (CC).
[157] 2013 2 SA 144 (CC).
[158] 2016 3 SA 528 (CC).
[159] 2016 3 SA 528 (CC).
[160] 2013 2 SA 144 (CC).

evidentiary chasms (or the unfortunate results of a strict application of the *conditio sine qua non* theory). The intended consequence of the introduction of the "flexible" approach to factual causation was, with respect, to assist plaintiffs facing an "evidentiary gap" situation and to avoid the binary "all-or-nothing" result which flows from a strict application of the *conditio sine qua non* theory.[161] In this regard the "flexible" test for factual causation is advantageous to plaintiffs as it permits finders of fact to venture beyond the strictures of the traditional approaches to factual causation.

4 2 2 2 "Flexible" Test for Factual Causation: Disadvantages

The content of the "flexible" test, apart from the Constitutional Court's references to "normative considerations", remains undefined. In the absence of a clearer definition and contextualisation of the concept of "normative considerations" (and the content and principles which underpin the test), the "flexible" test for factual causation constitutes no accurate test for factual causation, but rather a policy-based mechanism for achieving casuistic and *ad hoc* results. The "flexible" test as it is currently enumerated cannot provide legal certainty in the form of a clear legal principle which finds universal application. The determination of factual causation in terms of the "flexible" test will, it is submitted, be subject to the same difficulties raised in respect of the "common sense" approach, i.e. subject to arbitrary application or "judicial caprice". It is clear that the Constitutional Court intended to refer to "normative considerations" in describing a departure from the "all-or-nothing" results obtained by a strict application of the *conditio sine qua non* theory, but insofar as such a reference has created a new set of values or principles to be read into the "flexible" test for factual causation, clarity is, with respect, required. What are the boundaries of the aforementioned "normative considerations"? Who is to decide upon the definition or scope of such "normative considerations"? Are "normative considerations" the product of a particular society, culture, or historical point of view? Does the application of normative requirements suggest that *every* plaintiff who cannot provide

[161] The tension between the traditional purist views of factual causation and the "flexible" test, therefore, remains problematic and entirely unresolved.

evidence of a single factual cause (faced with uncertain multiple or concurrent causes) should be assisted, as was the plaintiff in *Lee v Minister of Correctional Services*[162]? Are plaintiffs to be assisted automatically in line with consideration of equity and policy, as opposed to established principles of law or on an *ad hoc* basis? These questions, unfortunately, remain unanswered.

It is respectfully submitted that, unless the "flexible" test for factual causation is explained, defined and provided with structure, the temptation may present itself to judges to err on the side of plaintiffs in medical negligence matters. This temptation may be all the greater as far as factual causation is concerned where plaintiffs are faced with an "evidential gap". It is submitted that the use of an undefined and un-contextualised concept such as "normative considerations" in determining factual causation may result in a causal nexus being inferred where none is properly proved. It is submitted that the "flexible" approach to factual causation, insofar as it pertains to medical law in South Africa, suffers from a lack of clarity and specificity. Such flaws can only lead to legal uncertainty, and it is submitted that the Constitutional Court should, when an appropriate medical negligence case presents itself, properly delineate the terms of the "flexible" approach and the "normative considerations" that inform such an approach. It is respectfully submitted that an undefined "flexible" test for factual causation may potentially lead to a "policy-driven" over-extension of liability against medical practitioners. Medical negligence litigation has reached unprecedented proportions in South Africa[163] and, it is submitted that opportunistic reliance on the "flexible" test for factual causation in uncertain medical negligence cases will lead to a flood of litigation against medical practitioners.

In a previous chapter,[164] it was submitted that specific additional grounds of criticism might be raised against the utility of the "flexible" approach to factual causation in a medical law context. As submitted *supra*, the "flexible" approach to factual causation cannot, with respect, be properly described as a "test" for factual causation. Its terms,

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[162] 2013 2 SA 144 (CC).

[163] https://www.timeslive.co.za/news/south-africa/2017-08-17-medical-negligence-cases-make-health-departments-budgets-sick/; https://www.enca.com/south-africa/malpractice-insurance-puts-pressure-on-gynaecologists (Accessed 05 October 2017); Taylor B, Van Waart J, Ranchod S & Taylor A "Medicolegal Storm Threatening Maternal and Child Healthcare Services" (2018) *SAMJ* 149 – 150.

[164] Chapter 3 para 6 2 4 *supra*.

structure, and content (apart from general references to "flexibility" and "normative considerations") provide no specific criteria against which factual causation is to be determined. It further provides no discernible principles which are capable of general application in medical negligence cases.[165] It is submitted that the use of the "flexible" test for factual causation ultimately constitutes an expression of, and application of, nothing but policy considerations in difficult cases.

In addition to what was previously submitted, it is clear that purists have always contended that factual causation cannot depend on normative considerations or policy views – a fact either exists or it does not. It is submitted that to provide a modicum of certainty to the amorphous nature of the "flexible" test for factual causation the Constitutional Court should provide clarity and guidance in respect of the precise nature of the "flexible" test for factual causation or abandon its use altogether when an appropriate case arises. It is respectfully submitted that guidance should be provided in respect of the nature, scope, and extent of the concept of relevant normative considerations as referred to in the judgment above. It is respectfully submitted that normative considerations should not merely involve a "judge's instinct" or desire to assist a plaintiff on an equitable or casuistic basis. If reliance is placed merely on judicial instinct, it is respectfully submitted, the nature of the law of delict and, by necessary implication, medical law, will be fundamentally changed. It is further respectfully submitted that reliance on an undefined and amorphous normative approach to factual causation does not lead to the crystallisation and formulation of a general rule which applies to *all* plaintiffs and *all* defendants, but to a casuistic and individualistic dispensing of justice. Such an approach, it is respectfully submitted, will lead to the decimation of the medical profession through litigation and legal uncertainty. Doctors will therefore find themselves at a severe disadvantage in instances where patients suffer injury in multiple or concurrent-cause scenarios as policy and normative considerations, and not a binary "all-or-nothing" approach, will triumph in respect of factual causation in medical negligence matters. The "flexible" approach may be fair to patients, but manifestly unfair to medical practitioners who will be refused absolution from the instance and forced to face lengthy, costly and burdensome litigation. It is respectfully submitted that the need for the introduction of

[165] It appears, with respect, to be more akin to casuistic legal policy than to legal principle or "test".

the "flexible" test for factual causation, separate to the *conditio sine qua non*, remains both questionable and problematic if seen from the perspective of defendants in medical law matters. Despite all of the aforementioned issues and disadvantages, it is submitted that courts, fortunately, retain an invaluable limiting device in respect of liability in the form of legal causation.

As is evident from what is set out *supra*[166] the accepted adequate causation theory, which forms part of the various tests utilised by South African courts in establishing legal causation, already integrates both factual and normative elements of causation to determine whether any cause is adequately, or suitably, close to a particular result.[167] The advantage of the adequate causation theory is that it limits the field of possibility "by taking into account man's ability to direct or steer the chain of causation and in this way eliminates the role of mere chance."[168] From the discussion of factual causation *supra*, it is evident that the *conditio sine qua non* theory is, and remains, the primary test for factual causation in South African medical law. It is respectfully submitted that, until such time as the Constitutional Court provides guidance on the structural elements and defining characteristics of the "flexible" test for factual causation, use of the "flexible" test for factual causation should be restricted in medical negligence cases.

4 2 3 "Risk-Based" Approaches to Factual Causation

4 2 3 1 Unqualified Risk-Based Approach

The Constitutional Court in *Lee v Minister of Correctional Services*[169] further contemplated a "risk-based" approach to factual causation. The majority of the Constitutional Court[170] contemplated (albeit by implication) a version of the approach

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[166] Chapter 3 para 6 1 *supra*.
[167] Van der Walt JC & Midgley JR (2005) (n23) 210. Snyman CR (2002) (n23) 82 emphasises the objective and diagnostic nature of the *conditio sine qua non* test, whereas adequate causation uses an objective prognostic test that looks forward as from the moment of the act and asks whether such result was expected. See Chapter 3 para 6 1 *supra*.
[168] Snyman CR (2002) (n23) 82.
[169] 2013 2 SA 144 (CC).
[170] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [60] (per Nkabinde J).

which would result in liability where a defendant materially increases risk or contributes to a plaintiff's exposure to risk.[171] Alternatively, stated differently[172]:

> Even if [the] harm were likely to result despite reasonable measures being taken, the defendant would still be liable because the risk was increased, even if only nominally.

Application of such an approach to factual causation in medical negligence matters is, it is submitted, highly problematic. As previously stated, medical procedures are inherently risky, and the mere performance of a medical procedure may significantly increase a patient's exposure to risk. If the majority of the Court's approach in *Lee v Minister of Correctional Services*[173] is applied to a medical negligence case, *any increase in risk* on the part of the patient will result in liability on the part of the medical practitioner. It is submitted that any "risk-based" approach which requires *only* exposure to the risk of injury, or an *increase* in risk for liability to result, is untenable in South African medical law. Many medical procedures are inherently dangerous, and their performance may involve an unavoidable increase in the risk of injury to a patient.[174] Such an unqualified approach to increase in risk is therefore ill-suited to medical negligence matters. Its adoption would do violence to the established principles governing causation in the law of delict (and South African medical law), and it would lead to an avalanche of litigation against medical practitioners. It is therefore submitted that an unqualified risk-based approach as mentioned above must be rejected as a candidate for an assistive mechanism in the determination of causation in South African medical law.

4 2 3 2 Qualified Risk-Based Approach

As far as a "risk-based" approach to factual causation is concerned, the minority of the Constitutional Court contemplated a different, somewhat qualified version of the approach. The minority of the Court raised three important points of qualification in

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[171] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [60] – [61].
[172] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [109].
[173] 2013 2 SA 144 (CC).
[174] For example, the administration of anaesthesia in a patient suffering from severe asthma and pneumonia, or the development of adverse effects in ill patients who participate in experimental drug trials.

respect of a "risk-based" approach to factual causation.[175] Firstly, it is not possible to infer probable factual causation merely from an increase in exposure to risk itself.[176] Secondly, the very nature of negligent conduct is that it increases risk and thus makes harm more likely to occur. To infer probable factual causation merely from an increased likelihood of harm "is neither useful nor appropriate"[177], and, thirdly, it entails that factual causation may be inferred from *any* increase in risk.[178] Cameron J, speaking for the minority of the Court in *Lee v Minister of Correctional Services*[179] stated the following[180]:

> It seems to me that our common law of recovery for negligent injury should be developed to allow for recovery in cases where a plaintiff can prove that the defendant *negligently exposed him or her to the risk of harm, and the harm eventuated*.

Cameron J's qualification as quoted *supra* appears to be more palatable in the context of South African medical law. If Cameron J's qualified risk-based approach is to be applied to factual causation, liability should only follow where a medical practitioner *negligently* increases the risk of harm to a patient, *and such risk eventuates.* Such an approach would accept the inherent risks involved in the performance of medical procedures without attaching liability merely as a result of an increase of risk to a patient. A negligent increase in risk to a patient would require a medical practitioner to justify the level of risk (over and above the accepted standards of risk)[181] created by his or her negligence. To fully reverse the onus of proof in such cases, however, is to accept that a doctor is liable merely because "something went wrong".

The approach as mentioned above may be workable in scenarios which involve readily identifiable single-cause mechanisms. If the "negligent exposure to risk" approach as suggested by Cameron J concerning *Fairchild v Glenhaven Funeral Services*[182] is

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[175] Chapter 3 para 4 3 *supra*.
[176] Lee v Minister of Correctional Services 2013 2 SA 144 (CC) para [106].
[177] Lee v Minister of Correctional Services 2013 2 SA 144 (CC) para [107].
[178] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) paras [106] – [108].
[179] 2013 2 SA 144 (CC).
[180] *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC) para [97] [emphasis added].
[181] It is submitted that the German law concept of "fully masterable risks" may be useful in determining which of the risks involved in an intervention were objectively impossible to control (or "masterable") by the medical practitioner, and which were outside of his or her control. This aspect, however, is relevant more to the question of foreseeability and negligence in South African law and care must be taken not to confuse the requirements of one element of liability in delict for another.
[182] [2003] 1 AC 32 (HL).

applied, any negligent exposure to risk must be substantial and not insignificant, or *de minimis*.[183] The difficulty which immediately presents itself in this regard is that the definition of what may be *de minimis* or "substantial" may itself become susceptible to circular reasoning. If very little or a very low threshold is required to satisfy the requirement of "substantiality", the approach will favour plaintiffs.[184] Plaintiffs would thus be able to recover their full damages (subject to apportionment of damages in respect of the defendants in line with their measure of negligence[185]), despite the fact that they have not proven the precise mechanism or extent of the defendant's contribution to her injury.[186] The plaintiff's injury, although caused by multiple defendants, is seen as "indivisible".[187] It is submitted that such a risk-based approach to factual causation (which requires a *negligent* exposure to risk) is not without its difficulties.[188]

The traditional principles of the law of delict determine that factual causation should be established independently of fault and that the requirements of each of the two elements should not be confused with one another. Cameron J's proposed approach introduces, with respect, a somewhat interdependent link between the requirements for factual causation and negligence. It further implies that factual causation can no longer be established independently at the outset of a matter, and all of the evidence (including evidence in respect of negligence) would have to be adduced at trial. The loss of the opportunity to decide causation separately from other requirements for liability might be considered as a small price to pay for the advantages presented by the pragmatic approach suggested by Cameron J. Although it is accepted that Cameron J's approach represents *a departure* from the traditional principles of delict[189], it is submitted that Cameron J's suggested approach presently constitutes a potentially workable solution to the problem of uncertain multiple causation in some medical negligence cases in South Africa. It is submitted, however, that an unqualified acceptance of such an

[183] Khoury L (2006) (n10) 25.
[184] Khoury L (2006) (n10) 25.
[185] Apportionment of Damages Act 34 of 1956.
[186] Khoury L (2006) (n10) 25.
[187] Sanders J in Goldberg R *Perspectives on Causation* (2011) 36 – 37; Feldschreiber P, Mulcahy LA & Day S "Biostatistics and Causation in Medicinal Product Liability Suits" in Goldberg R *Perspectives on Causation* (2011) 193 – 194.
[188] Feldschreiber P, Mulcahy LA & Day S in Goldberg R (2011) (n187) 179ff
[189] See Chapter 3 para 5 4 *supra* in respect of fault as a criterion for imputability or limitation of liability.

approach would imply the creation of a further complex legal fiction. Such a fiction would move away from the traditional approaches to factual causation.

It is further submitted that the following "risk-based" approach to the determination of factual causation may provide an element of structure to the "flexible" test for causation, without limiting the "flexibility" of such a test. The suggested approach is as follows[190]:

(1) The plaintiff should establish that it is impossible to meet the requirements of the *conditio sine qua non* theory or to prove factual causation in terms of a "common sense" approach.

(2) The plaintiff must prove that it is not only difficult or subjectively impossible on the evidence to address causation in terms of the *conditio sine qua non* theory or a "common sense" approach, but that it is objectively impossible to do so. If the plaintiff is objectively capable of leading evidence to address causation in terms of the aforementioned approaches but fails to do so, the plaintiff should not succeed. In other words, the plaintiff must prove that the impossibility must be as a result of logical or structural difficulties, and not because of practical problems.

(3) Once the plaintiff has satisfied the requirements set out in paragraphs (1) and (2) *supra*, the plaintiff should be permitted to resort to the "negligent increase in risk/exposure to risk" approach as enumerated by the minority of the Constitutional Court per Cameron J. This would entail proof that the defendant negligently exposed the plaintiff to a material risk of injury, and that such risk eventuated.

No resort should be made to the approach set out in paragraph (3) *supra* unless the first two sets of requirements have been met. It is submitted that the proposed method is

[190] *Barker v Montfort Hospital* 2007 ONCA 282; *Tonizzo v Moysa* 2007 ABQB 245; *Aristorenas v Comcare Health Services* 2006 OJ 4039; *Resurfice Corporation v Hanke* 2007 SCC 7. The Australian courts have recognised the applicability of the "material contribution" test, but only in limited circumstances – see Chapter 4 para 5 2 6 *supra*.

preferable to a vague and undefined policy-based "flexible" test for factual causation as it is capable of general application in medical negligence cases. It is further submitted that the suggested approach referred to in paragraphs (1) to (3) *supra* may offer the following useful advantages:

(i) The method does not offend against the established principles of the South African law of evidence. The plaintiff retains the overall *onus* to prove his or her case. No reversal of onus is necessary.

(ii) The approach accords with the established principles of "reasonableness, fairness and justice" which is an accepted principle of South African law.[191]

(iii) The approach does not unduly restrict the court's capacity to decide matters on the basis of policy considerations.

(iv) The approach does not unduly favour plaintiffs or defendants, nor does it unduly limit the rights of plaintiffs or defendants.

(v) The approach does not offend the provisions of the Constitution of the Republic of South Africa 108 of 1996. It neither adds nor detracts from the right to a fair hearing of either a plaintiff or a defendant while advancing a non-arbitrary method of determining factual causation.

(vi) The approach provides a measure of structure and guidance in respect of the application of the "flexible" test for factual causation.

It is submitted that any approach which requires a mere exposure to risk (in *any* degree) for liability to attach should be rejected as a test for factual causation and that Cameron J's approach as mentioned above provides a useful addition to the mechanisms available to courts when deciding causation in uncertain multiple-factor causation scenarios.

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[191] *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs and Others* 2004 4 SA 490 (CC); *Barnard v Minister of Justice, Constitutional Development and Correctional Services and Another* 2016 1 SACR 179 (GP).

4 2 4 Material Contribution to Damage

South African writers Neethling & Potgieter argue that "it is usually sufficient for factual causation if a defendant's conduct has *in any way* contributed to the damage sustained by a plaintiff; for causation, it is unnecessary that his conduct should be the only cause, or the main cause, or a direct cause."[192] A factor, however, must first be demonstrated to be a cause before its contribution (material or otherwise) to damage can be taken into account.[193] It is submitted that the "material contribution to damage" approach remains a useful assistive device for any plaintiff in medical negligence cases where factual causation is to be determined. Insofar as comparative references to the English mesothelioma cases referred to in previous chapters are concerned[194], it is respectfully submitted that any variation of or addition to the existing material contribution approach in South African law should be approached with circumspection. It is submitted that mesothelioma cases such as *Fairchild v Glenhaven Funeral Services Ltd*[195] were decided within a specific social and economic context and that such context does not necessarily accord with the context within which medical negligence cases are decided. The English mesothelioma cases involved large groups of plaintiffs who suffered similar injuries and a group of financially powerful defendants who were availed of significant financial resources. It is further submitted that medical practitioners *qua* defendants are not in a position to litigate on the same scale as the defendants in the asbestos cases. Care should be taken, it is submitted, not to apply a risk-based approach indiscriminately across a wide range of defendants. It is further submitted that any direct comparative assimilation of the methods adopted in *Fairchild v Glenhaven Funeral Services Ltd*[196] and subsequent cases should therefore not be lightly undertaken.

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[192] Neethling J & Potgieter JM (2015) (n8) 197 fn 77.
[193] David H, McCague P & Yaniszewski PF (2005) "Proving Causation where the "But For" Test is Unworkable" (2005) *The Advocates' Quarterly* 216 220.
[194] Chapter 4 para 3 3 4 6 *supra*.
[195] [2003] 1 AC 32 (HL).
[196] [2003] 1 AC 32 (HL).

4 2 5 Alternative Approaches to Factual Causation

4 2 5 1 Proportional Liability

Neethling[197] proposes the solution mooted by the European Group on Tort Law[198] (considered to be *terra nova*[199]) which introduces proportional liability in instances involving multiple causation. The proposed solution is that "a person is liable for damage that he might have caused (but did not cause)". Stated more fully[200]:

> Proportional liability may be illustrated by the well-known problem of the three hunters, X, Y, and Z. In a forest, frequently visited by hikers, all three of them fire a shot to bring down a bird. One bullet hits and kills P. While there is no doubt that all three acted negligently, it is unknown whether X, Y or Z fired the fatal shot. It is thus a situation of multiple activities where each of them alone would have been sufficient to cause the damage, but it remains uncertain which one, in fact, caused it. The legal systems proffer various solutions to the problem. The European Group on Tort Law considered these and proposed that in the case of multiple activities, *the best solution is that each action should be regarded as a cause to the extent corresponding to the likelihood that it may have caused the damage.* This means that in the case of the three hunters, each of them would in principle be liable for one-third of the damage (loss of support by P's dependants) since the likelihood that any of the three shots killed P is similar.

Neethling continues the justification of the proposed solution by basing it on "grounds of fairness, reasonableness, and justice."[201] This solution is fair, reasonable and just, so Neethling opines because it is impossible to prove which hunter (actually) caused P's death and it is impossible to determine who he or she was.[202] Rather than letting them all go free because of lack of proof, each is regarded as having caused the loss to the extent corresponding to the likelihood that he or she "may" have caused P's death.[203] This radical departure from the traditional principles of delict in respect of causation and more specifically factual causation would introduce a "new form of

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[197] Neethling J "The Case of the Three Hunters, Or Delictual Liability for Alternative Causes" (2003) *SALJ* 263 265 – 266.
[198] Neethling J "Towards a European *Ius Commune* in Tort Law: A Practical Experience" (2006) *Fundamina* 89. See also Chapter 3 para 4 1 *supra***.**
[199] And not necessarily in line with the traditional principles of South African Law.
[200] Neethling J (2006) (n198) 90 [emphasis added].
[201] Neethling J (2006) (n198) 90.
[202] Neethling J (2006) (n198) 91.
[203] Neethling J (2006) (n198) 91.

delictual liability, namely *partial liability* for the tort of another person."[204] It seems manifestly unjust, however, that a medical practitioner should be held liable for harm which he or she did not cause. It is submitted that a defendant's liability should be commensurate with her culpability. To extend a medical practitioner's liability for damage which he or she *might* have caused (as opposed to that which he or she *actually* caused) appears to be a pragmatic solution to problems involving multiple uncertain causation. It is submitted, however, that such an approach may work better in a "three hunters" scenario in which the causative factor or mechanism is similar (i.e. a fatal shot) than in instances where multiple uncertain factors are involved. The extent of the contribution of each shooter in such a scenario is virtually certain, whereas certainty may elude the finder of fact in a medical negligence matter where the contributing mechanisms are entirely disparate. It is submitted that the "proportional liability" solution proposed by Neethling would have all three hunters held liable, which seems preferable to letting them all go free. Where the contribution of one or more, but not all of the contributory causal mechanisms are ascertainable, such a solution does not appear to be fair. Where three medical practitioners (from different disciplines) perform an intervention and it is uncertain who among them has caused a patient's injury, is it fairer to hold *all* of them liable rather than exculpating them all, or only holding some of them liable for their respective negligence? It is submitted that any proportional-liability approach may be a valuable assistive mechanism for determining causation subject to the relevant qualification that each action (or, it is submitted, contributory mechanism) should be considered to be a cause only insofar as it corresponds to the likelihood that such action or mechanism may have caused the harm. It is submitted that the approach would only be useful in a medical negligence context where the likelihood that any of the contributory factors may have caused harm *is known or reasonably ascertainable.* The solution, according to Neethling, is based on the grounds of fairness, reasonableness and justice.[205] Any application of the approach should, therefore - on the basis of fairness, reasonableness and justice - carefully balance any potential injustice faced by patients against the potential over-extension of liability on the part of medical practitioners.

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[204] Neethling J (2006) (n198) 91 [emphasis added]. See also the comprehensive factual scenario and proposed solution based on the "full information" approach – Paizes A "Factual Causation: Which '*Conditio*' Must be a '*Sine Qua Non*'? A Critical Discussion of the Decision in *Lee v Minister of Correctional Services*" (2014) *SALJ* 500 504ff.
[205] Neethling J (2006) (n198) 91.

4 2 5 2 Evidential Solutions

Another proposed solution to the difficulties facing the *conditio sine qua non* theory is an evidential one, which "[relies] on inferences and factual presumptions which takes into account the need for flexibility in cases involving uncertainty"[206] and that "the solution to this evidential problem does not lie in modifying the substantive rules of civil liability or evidence law, or creating new ones to address evidential difficulties, but rather in re-evaluating the way indirect evidence of causation is judicially assessed."[207] Another proposed solution to the problem lies in taking a "robust and pragmatic approach to the facts that the injured person asserts support the conclusion that the misconduct of a defendant is a factual cause of his or her injury".[208] Where the relevant facts are particularly within the knowledge of the defendant "very little affirmative evidence will be needed to justify an inference of causation, in the absence of evidence to the contrary and factual causation is a question to be answered by the application of 'ordinary common sense.'"[209] It is submitted that the difficulties inherent in the application of a "robust and pragmatic" approach are identical to those inherent in the "common sense" approach to causation which is referred to elsewhere in this dissertation.

As previously submitted, to reverse the onus of proof in medical negligence cases is tantamount to accepting that a medical practitioner is liable merely because "something went wrong". Such a reversal of the onus of proof cannot be adopted in South African medical law.

4 2 5 3 Statistical Analysis

It is submitted that statistical evidence based on epidemiological studies may be useful to illustrate the chances of the development of illnesses, problematic medical interventions and the realisation of adverse events in drug administration. Such evidence may provide valuable insight into the chances of specific risks eventuating

[206] Khoury L (2006) (n10) 230.
[207] Khoury L (2006) (n10) 230.
[208] Thomas MG (2011) (n90) 73; *Snell v Farrell supra* 326, 329 – 330.
[209] Thomas MG (2011) (n90) 73; *Snell v Farrell supra* 326, 329 – 330.

during medical interventions, or whether such medical interventions are capable of causing a particular form or forms of injury. It is submitted that such evidence must (aside from being relevant and ordinarily admissible in terms of the law of evidence) be credible and subject to peer-review. It is submitted that statistical evidence should perform a secondary role as an assistive device for the establishment of causation in problematic cases. Statistical evidence may provide important corroborating evidence in respect to the known and accepted levels of risk involved in medical interventions, or the chances of adverse events occurring in medical practice. It is submitted that statistical evidence should not, however, be elevated to an independent basis upon which findings of causation may be made. It is submitted that care should be taken, when utilising and considering statistical evidence, not to jettison the particular facts of a matter in favour of broad statistics. The fact that drug X has caused an adverse event in a hundred reported cases is not proof of causation in every subsequent case. It is therefore submitted that epidemiological evidence, although not conclusive proof of causation, may prove to be a useful assistive device in uncertain causation cases in South African medical law.

4 2 5 4 "NESS"

The attributes of the NESS theory of causation were discussed in a previous chapter[210]. The theory is considered to be a more "accurate" form of the *conditio sine qua non* theory, seen against the background of "necessity" versus "sufficiency". The theory moves away, to a certain degree, from "absolute necessity" towards "absolute sufficiency" as requirements for causation. Courts appear reluctant to adopt the NESS theory, despite significant academic debate in respect to the theory, as the NESS theory appears, superficially, to be more complicated than the *conditio sine qua non* theory. It is submitted that there exists no present need for wholesale adoption of the NESS theory in South African law, but that the theory may form a useful adjunct to the existing principles which govern causation in South African law.

[210] Chapter 4 para 3 6 *supra*.

4 2 5 5 Purism versus Policy

It is submitted that, in terms of pure logic (and purist perspectives[211]), causation and more specifically factual causation will be present in a factual matrix, or it will not, just as a fact either exists, or it does not exist. Strict adherence by judges to a purist approach to factual causation may lead to unjust results; in such cases, alternative approaches to the determination of factual causation may prove useful. It is submitted, however, that the tension between the purist approach espoused by South African writers and the "flexible" approach to factual causation set out in *Lee v Minister of Correctional Services*[212] is yet to be adequately resolved. The approach of Cameron J in the matter mentioned above does not fall within the boundaries of the traditional *conditio sine qua non* theory. It refers, *inter alia*, to negligent increases in or exposure to risk, which concept requires the finder of fact to consider, it is respectfully submitted, questions such as foreseeability (of risk) and negligence. Fault, and more particularly negligence, should not be used as a test for factual causation in South African medical law.[213] It is submitted that such considerations should be considered with care and that the elements of negligence and causation should not be confused or intertwined in determining factual causation in terms of Cameron J's approach. It is submitted that, until a perfect alternative approach to factual causation is devised, Cameron J's approach may serve, carefully applied, as a useful alternative approach to the traditional theories which govern factual causation in South African medical law. The use of Cameron J's approach must, however, be considered to be an imperfect compromise and limiting device[214] until an ideal alternative approach to factual causation is devised.

4 2 6 Legal Causation

Once factual causation has been established in medical negligence matters, the issue of legal causation remains to be determined. As stated elsewhere in this dissertation, legal causation is intended to act as a device which limits liability on the part of a

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[211] Neethling J & Potgieter JM (2015) (n8) 195.
[212] 2013 2 SA 144 (CC).
[213] Chapter 3 para 5 4 *supra*. See also the discussion of "reasonable foreseeability" in Chapter 3 para 5 2 *supra*.
[214] As opposed to the wide, purely risk-based approach of the majority of the Constitutional Court.

defendant and which acts as a safeguard against the over-extension of liability. If the "flexible" test for factual causation as set out in *Lee v Minister of Correctional Services*[215] is applied, a finder of fact will apply the various theories governing factual causation which have been discussed elsewhere in this dissertation. Once factual causation has been established, the Court or finder of fact will determine whether legal causation has been established. This will involve, to a high degree, the application of principles based on policy.[216]

The principles governing legal causation serve as a useful protective measure against the over-extension of liability against medical practitioners. It is submitted that the element of legal causation forms an essential limiting device where the liability of a medical practitioner is to be determined in South African law.

5 CONCLUDING THOUGHTS

In this dissertation, it was demonstrated that the development of South African medical law in the face of a multitude of doctrinal and practical problems is no easy task. A balance must be struck between Constitutional imperatives aimed at the protection of patients' rights to bodily integrity, life and access to justice on the one hand, and the rights of medical practitioners to fair hearings and to practice their profession of choice on the other. Legal certainty and the well-established tests for causation in South African medical law should be balanced appropriately against legal policy which is intended to assist meritorious plaintiffs.[217] Although Courts must take policy, justice, fairness, and reasonableness into account when reaching their conclusions on factual causation in order to achieve a just result, it should be remembered that patients in medical negligence matters must ultimately prove on a balance of probabilities that a factual nexus exists between the defendant's actions and their injuries. It remains so that any decision on causation, whether in the law of delict, criminal law or medical law will ultimately involve policy decisions and judicial intuition *to a degree*. The

[215] 2013 2 SA 144 (CC).
[216] See Chapter 3 para 5 5 *supra*.
[217] In this regard, the German approach to factual causation and the policy-based nature of alternative approaches demonstrates that such methods may lead to over-compensation of plaintiffs. See Chapter 4 para 2 7.

ideal situation, it is submitted, is to improve and impose assistive policy considerations in medical negligence cases without eroding legal certainty.

Medical practitioners are not robots or machines, and the complexity and realities of medical practice in South Africa require a measure of understanding on the part of any finder of fact in medical negligence cases. Medical practitioners should, however, be alive to the fact that patients today have a greater awareness of their rights and available legal remedies. In addition to what is stated *supra,* the norm of accountability compels jurists to reconsider and develop the traditional approaches to factual causation in South African medical law.[218]

It is submitted that the approach of Cameron J in *Lee v Minister of Correctional Services*[219], insofar as it is aimed at achieving a fair, just and reasonable result for a plaintiff who otherwise is not availed of any other remedy in medical negligence matters is to be welcomed. It is however submitted that such an approach should not be permitted to erode the fundamental tenets of the principles on the establishment of factual causation to the point where legal certainty is compromised and, ultimately, sacrificed.[220]

As far as factual causation and medical negligence are concerned after *Lee v Minister of Correctional Services*[221], a systematic examination of factual causation in medical negligence litigation (whether it be against an organ of state or a private defendant) is of critical importance should such a matter reach the Constitutional Court in future. It is submitted that a comprehensive consideration of factual causation is required, with a clear delineation of the limits of factual causation in medical negligence matters.[222]

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[218] Meerkotter A "The Dudley Lee Case: A New Approach to Factual Causation and its Implications for Transformative Jurisprudence*"* (2015) *SAPL* 273 287.
[219] 2013 2 SA 144 (CC).
[220] A situation must not be permitted to arise in which plaintiffs, in order to appeal to a judge's sense of reasonableness and fairness (and relying on an "evidential gap"), present a case which is unnecessarily vague or nebulous, or one that falls short of at least proving a probable factual link between a particular act and a particular result, with the ultimate aim of bringing such case under the rubric of the "flexible" test set out by the majority of the Constitutional Court in *Lee v Minister of Correctional Services* 2013 2 SA 144 (CC).
[221] 2013 2 SA 144 (CC).
[222] Such cases will require the consideration of a factual matrix which is based on the provision of medical treatment and premised explicitly on the principles of medical law, i.e., a "medical negligence" matter.

Such development should, it is submitted, occur incrementally and carefully. It is further submitted that the approach suggested by Cameron J in the aforementioned case is to be welcomed; the approach focuses on a *negligent increase in risk*. Where medical practitioners do not negligently increase risks, the suggested approach will place no additional or reverse onus on such medical practitioner. Where the increase in risk suffered by a patient is, however, due to the negligence of a medical practitioner, the approach will provide a useful tool to finders of fact in assessing causation until an ideal test for factual causation is developed and accepted by the Courts.[223]

In the field of medical negligence litigation, causation has become a vexing problem for both patients and medical practitioners alike. Its challenges are, across national boundaries and legal jurisdictions, universally similar. The development of causation in South African medical law requires a pragmatic yet balanced developmental approach to causation. Such an approach should provide solutions to plaintiffs in difficult medical law matters without opening the floodgates of litigation against the medical profession. Legal uncertainty will profit neither patient nor medical practitioner.

The issue of causation in medical law remains a difficult one. Perhaps Liezi Lieh-Tzu knew the answer to the problems of causation when he said enigmatically[224]:

> When two things occur successively we call them cause and effect if we believe one event made the other one happen. If we think one event is the response to the other, we call it a reaction. If we feel that the two incidents are not related, we call it a mere coincidence. If we think someone deserved what happened, we call it retribution or reward, depending on whether the event was negative or positive for the recipient. If we cannot find a reason for the two events' occurring simultaneously or in close proximity, we call it an accident. Therefore, how we explain coincidences depends on how we see the world. Is everything connected, so that events create resonances like ripples across a net? Or do things merely co-occur and we give meaning to these co-occurrences based on our belief system? Lieh-Tzu's answer:
>
> *It's all in how you think.*

[223] The important distinction between the elements of negligence and causation should not be lost.
[224] Liezi Lieh-Tzu – *A Taoist Guide to Practical Living* at https://www.goodreads.com/quotes/tag/coincidence.

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LIST OF ABBREVIATIONS

Alta L Rev	Alberta Law Review
ALJ	Australian Law Journal
CLJ	Cambridge Law Journal
CL & J	Criminal Law and Justice
CLP	Current Legal Problems
Colum L Rev	Columbia Law Review
Crim LR	Criminal Law Review
Dalhousie LJ	Dalhousie Law Journal
Harv L Rev	Harvard Law Review
ICLQ	International and Comparative Law Quarterly
Int'l & Comp LQ	International and Comparative Law Quarterly
JETL	Journal of European Tort Law
J Crim L	Journal of Criminal Law and Criminology
J Law Med	Journal of Law and Medicine
JBL	Journal of Business Law
JCL	Journal of Criminal Law
JLM	Journal of Law and Medicine
LCP	Law and Contemporary Problems
LQR	Law Quarterly Review
LS	Legal Studies
Med & Law	Medicine and Law
MLR	Modern Law Review
MULR	Melbourne University Law Review
Nott LJ	Nottingham Law Journal
NY L Sch J Int'l L	New York Law School Journal of International and Comparative Law.
OJLS	Oxford Journal of Legal Studies
PL	Public Law
PN	Professional Negligence
SALJ	South African Law Journal
SAJBL	South African Journal of Bioethics and Law
SAMJ	South African Medical Journal
SAPL	South African Public Law
Stan L Rev	Stanford Law Review
Syd LR	Sydney Law Review
THRHR	Tydskrif vir Hedendaagse Romeins-Hollandse Reg
TSAR	Tydskrif vir Suid-Afrikaanse Reg
UWALawRw	University of Western Australia Law Review
UNSWLJ	University of New South Wales Law Journal