Chapter Two Literature Review and Theoretical Framework

In an extreme view, the world can be seen as only connections, nothing else. We think of a dictionary as the repository of meaning, but it defines words only in terms of other words. I liked the idea that a piece of information is really defined only by what it's related to and how it's related. There really is little else to meaning. Structure is everything (Berners-Lee, 2000: 14).

It takes little time or structure to create community on-line, and therefore, the effort to maintain structure and community is not highly valued (Jones, 1999: xxii).

1. Introduction

The transdisciplinary nature of this study follows from the different areas of academic inquiry underpinning the research question. Outlined in Chapter One, the research question centres around travel information exchange among members of the *Thorn Tree*, a computer-mediated social network reliant on the Internet for exchanging text messages in an asynchronous manner. Network analysis provides both the base for a theoretical framework and the tools to investigate the structure of this network in order to ascertain what the nature and extent of information flow is.

The literature study covers the following areas. First, the Internet with reference to cyberculture and computer-mediated communication considers the medium of communication and the context in which exchanges take place, namely cyberspace. Second, the focus falls upon social ties among people resulting in a network. Thirdly, travel information exchange as a form of social capital considers the main reason why people are part of this particular network and the focus of the exchanges, i.e.

travel information. Lastly, network analysis of structures provides the tools and theoretical base for investigation and interpretation. This is discussed in Chapter Three and not included as part of the literature survey.

Based on the outline above, the key areas relevant to this study emphasise travel information exchanges across a computer-mediated social network. The latter are phenomena within cyberspace made possible by advanced information technologies (AIT). Associated concepts include: virtuality, cyberspace, cybercommunity, cyberculture, Internet, and computer-mediated communication (CMC). Travel information exchange involves leisure studies. Seen as a form of social capital among travellers, travel information is beneficial to making consumer decisions, amongst others. From a consumer behavioural point of view, gathering information is the first phase of the consumer decision-making process. Sources of information include a wide array, including other people. Relevant concepts in this regard include levels of connectivity and patterns of communication that suggest structure. From a social network perspective, a difference in levels of interaction results in differential levels of connectivity while exposure to information depends on an actor's position within a network.

In this literature survey the three key areas outlined above also provided the framework for literature searches and a review of major scholarly works. It is subsequently notable that Stokowski's (1988) work is seminal to the study of structure, travel information and leisure choices. While Field's (2003) work on social capital provides insight into this fast-developing area, Silver's (2000) assessment of the developing meta-field referred to as Internet studies provides insight and references to other works related to the Internet and computer-mediated communication amongst others.

The literature overview in this chapter describes aspects related to the study of the Internet and computer-mediated communication among people with an interest in

travel information. This chapter follows a particular layout. First, background is given about the Internet, while key concepts and an overview of trends in the study of the Internet are outlined in subsequent sub-sections. In a following sub-section social network analysis is brought into relation with the study of the Internet. This paves the way for a discussion about social capital, since networks and the Internet are known for exchanges, predominantly information. Seen as a form of capital, travel information is brought into relation with social capital in a subsequent sub-section. In the final sub-section, the Internet as medium to exchange travel information as a form of social capital among travellers in a network using computer-mediated communication is investigated. Network analysis as a tool and theoretical framework for the study of travel information exchanges in a computer-mediated environment is not covered as part of the literature survey but is discussed in Chapter Three where methodological aspects are outlined.

2. Context: the Internet as medium

2.1 Physical aspects: the Internet and WWW

Fully functional by the 1970s, the Internet is a network of networks without any central control that uses a set of standardised protocols for the transmission of electronic information. The standardised protocol is TCP/IP with a common addressing scheme that every computer on the Internet (or a network) understands (Giese M, 2003: 143-145).

The WWW began in March 1989. It uses Hypertext Transfer Protocol (HTTP) across the Internet. Internet Protocol (IP) addresses are translated into domain names. The addressing scheme can potentially address any available document on any machine connected to the Internet. This resembles one of the most significant differences

between actual space and digital domains, or so-called cyberspace: in the former, an object is at an address; in the latter, it is located with an address (Chesher, 1997: 85).

Delivered across the Internet, the WWW or Web as it is also known, is a public forum that provides electronic content in various (combined) formats (sound, graphics, video, text and other multimedia) according to the rules of Hypertext Markup Language (HTML). Webpages can also contain links to files in other formats such as Word documents, or files in Portable Data Format (PDF), amongst others.

One of the outstanding features of webpages is that they can contain hyperlinks that point to other webpages or files within the same domain or other domains, thereby creating an interlinked electronic source of information that has no beginning or end; a web of interconnected pages in the true sense of the word. Mitra and Cohen state that WWW text "has made these links appear natural and has made moving from one text to another very simple". For web-text, the intertextuality is not implicit or hidden. Rather, it is "explicit and unambiguous". Moreover, it is non-linear (1999: 182-186).

No permission is necessary from website owners to point hyperlinks to their sites – this plays along with one of the basic characteristics of the web, namely that no-one controls it. This does not negate ownership of content once published.

Understandably, copyright and intellectual property rights concerning web content offer numerous difficulties from a legal point of view due to questions arising from jurisdiction and law enforcement across international borders, amongst many other reasons.

Nevertheless, the universality of digital language and the pure networking logic of this communication system create the technological conditions for horizontal, global communication with seemingly limitless scalability. Resultantly, the growth of the Internet and WWW has been phenomenal. For Rasmussen, one answer for the explosive success of the Internet indicates some sort of compatibility between the development of the Internet and the transformation of the societies in which it operates (2003: 444).

Jones (1999: xxiii) states that the architecture of this network technology is such that it appears borderless. Moreover, it is very difficult to censor or control it. Anyone with the necessary hardware, software and connectivity via an Internet Service Provider (ISP) can publish content to the Web or link their own web server to the Internet (Gauntlett, 2000:12; Castells, 1996: 352). Free access is a reality since the connection point is not significant in terms of entrance (Jones, 1999: xxiii). Freely available software applications called browsers are used to read web content while plug-in applications such as media players handle audio-visual formats. On 13 October 1994, Netscape's Mosaic browser was made available free of charge on a company website. According to the Pew Internet & American Life Project (2004),

if there was a moment that could be considered the dawn of the popular internet, that was it. That day, thousands of people downloaded the browser and began to experience the World Wide Web, itself a little more than three years old, in a completely new way. Browsers were to the Web what paper was to ink.

Other popular browsers include Internet Explorer and Opera, amongst others. In order to "surf the Net" or "cruise the information superhighway" as it is also referred to, users access domains (via translatable IP addresses) which are entered as a web address or Uniform Resource Locator (URL) in the browser's address bar. Notably, the URL of a document is both its name and its address (Chesher, 1997: 83-85).

2.2 Communication medium and a means to form social networks

Notions such as the post-industrial society, the information society, and the network society illustrate the increased focus of information and communication in technologically driven modern-day societies. Clearly, at the heart of the Internet and associated features lies communication, characterised not only by making information available in the public domain via webpages similar to the printed media, radio and television, but also offering means for exchanges that allow people to interact as they would do in real life. Although computer-mediated communication is predominantly text-based, the text also provides information within a social context, thereby creating a constantly expanding archive of socially-contextualised information (Burnett, Dickey, Kazmer and Chudoba, 2003).

One of the most outstanding characteristics of computer-mediated communication across the Internet is that distance and time as factors in this electronic form of many-to-many communication have ceased to be the barriers they once were. In a few years since the early Nineties, the Internet has become a medium as widespread in the public mind as television and radio before it. In fact, Willson (1997: 146) remarks that the Internet is depicted as being more interactive, accessible and democratising than these previous information technologies. This is reiterated by Holmes (1997: 32-34) who compares broadcasting media such as the TV with the high levels of reciprocity and interactivity possible on the Internet.

With this ever-increasing focus on communication as mentioned by Rasmussen (2003: 445), the popularity of applications such as Internet Relay Chat (IRC), ICQ, electronic bulletin boards, newsgroups and email can be explained in terms of its many-to-many communication capabilities that can and indeed have given rise to so-called online communities. However, Etzioni (1999: 241) points out in a comparative analysis of face-to-face and computer-mediated communities that different ways of defining "community" is at the base of different conclusions about the capabilities of

computer-based communication (CMC) to provide for the formation and functioning of such communities. Since the 1980s, digital technologies have been linked to the breakdown of traditional community and, through this connection, to the destruction of urban form. Holmes (1997: 28) remarks that one of the views of community in the age of computer networks is developed through a reliance on depicting geographic or compositional community. Computerisation thereby reduces the place-centred functions of cities by limiting accidental contact among strangers. Since the 1990s, however, a shift in viewpoint has been taking place, which has meant that these technologies are now considered to revive community life. Ostwald remarks that it

did not matter whether the arguments were for or against the virtual technologies, it seemed that no case could be made without referring to both the social consequences of the technologies and their impact on the public space of the city (1997: 126).

Wellman reiterates this and states that computer-mediated communication has intensified privatised, exclusive relationships by turning people away from face-to-face relationships in public.

Yet, it is the highly privatized watching of television screens that is the modal leisure activity in the Western World. Hence, computer-mediated communication may actually be enhancing community because computer networks support public ... exchanges (1997: 193).

The ability to enhance community is also linked to the ever-increasing number of users from all spheres of life; growth has been phenomenal (Kiesler, 1997: ix). An increase in the number of applications and uses is also noted. A report about the

future trends of the Internet undertaken by Pew Internet & American Life Project (2004: 3) states that:

On a typical day at the end of 2004, some 70 million American adults logged onto the internet to use email, get news, access government information, check out health and medical information, participate in auctions, book travel reservations, research their genealogy, gamble, seek out romantic partners and engage in countless other activities. That represents a 37% increase from the 52 million adults who were online on an average day in 2000 when the Pew Internet & American Life Project began its study of online life.

As more people use the Internet expectations will change too. In the following diagram, Sheldon explores the manner in which people searching for travel information put the Internet to use. Clearly, they expect results, i.e. find the travel-related information they are looking for. In this diagram, reference is made to uniform resource locator (URL) or a website's address designated with the prefix "http://". Reference was made to this at the outset of this chapter. The prominence of so-called search engines is also obvious. These search engines use specific technologies to compile directories which make searches more effective and easier. Not noted in this diagram are programmes that scan search engine directories such as *Copernic Agent*.

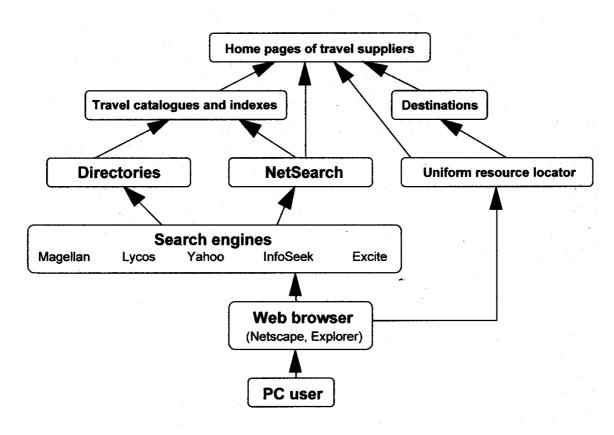


Figure 1 Pathways to travel information on the web (Source: Sheldon, 1997: 91)

Figure 1 emphasises one of the main ways in which people interact with the Internet, i.e. search for information on the WWW. However, social interaction is not excluded and is representative of the myriad of ways in which people have come to view the Internet and use what it has to offer, i.e. email, newsgroups, electronic bulletin boards and the WWW.

2.3 Scholarly interest

From the point of medium of communication, i.e. computer-mediated communication with its many-to-many capabilities, the Internet is still evolving and with an increase in the number of empirical studies, an understanding of it too. For some, perhaps, it

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is easy to dismiss Internet research with the question: Who cares? On the other hand, Jones (1999: ix) claims that the Internet's "very ubiquitousness has ingrained in us its importance", which might make intense scholarly studies seem unnecessary.

Stolterman, Ågren and Croon (ca 2002) however, remark that the Internet is a development which will take time to understand and to include in our everyday conception of what it means to live in a society and in a world. Like others, Stolterman et al (ca. 2002) note that cyberspace attracts a lot of researchers from almost every academic field. From an investigation of the literature, it seems as if this so-called "new media" raises interesting questions to everybody and also places old questions in a new perspective. From various fields of study, questions about the Internet abound: What is it? How does it affect us? What effects does it have on society? How is communication across the Internet different from other forms of communication? Perhaps more importantly, what does the Internet and its popularity reveal about society in general? Do cyberspace and virtual reality mirror real life? However, in addition to these issues it is the role of the Internet as a means to form social ties and for people to become part of expansive networks that draw particular attention among scholars interested in social capital, social networks and the social impact of the Internet.

As was the case with mass media such as radio and TV preceding it, the Internet commands public attention and understanding. Described by many as "new media", Aarseth (2003: 415-417) refers to this new technology not as "new media", but convincingly argues for the use of the concept "digital media". Indeed, what will be new about it in two decades from now? Understandably, existing models, methods and theories are drawn from communication research, media studies, anthropology, sociology, literary criticism, cultural studies, psychology and political economy, amongst others (Jones, 1999: xi).

If the manner in which the Internet has become intertwined with mainstream society is taken into account – at least in industrialised societies – it would be a mistake to try and study it apart from the so-called "off-line" world (Jones, 1999: xii). This correlates well with a related statement by Aarseth, namely that the

newness of digital media ... cannot be answered in a singular way, except perhaps by a simple tautology: the digital media are different and new because they are computerised, mediated by a computer/processor/chip. But mediated in what way? (2003: 418)

It is suggested that the Internet mirrors real life. In an analysis of future trends, a report by Pew Internet & America Online Project (2004: 4) claims that people bring to the Internet the activities, interests and behaviours that preoccupied them before the Web existed. Still, the Internet has also enabled new kinds of activities that "no one ever dreamed of doing before — certainly not in the way people are doing them now." In Figure 2 the Internet is centrally placed while outlining the various activities and avenues or mediated interactions. This example refers to the tourism industry. On the diagram, newsgroups, electronic bulletin boards (EBB) and chatrooms are examples of avenues that exist for the exchange of travel information. Notably, the *Thorn Tree* falls into this category.

2.3.1 Studying the Internet: key concepts

The emergence and subsequent exponential growth of the Internet and associated technologies like the WWW, email and others since the 1970s have opened a new arena for social interactions in contemporary societies (Jones, 1999: xi). Considering the ontological dimension (Mouton and Marais, 1996: 11) and the responsibility of

the social sciences to study the products of human ingenuity such as the Internet, these technological developments were bound to impact on academia.

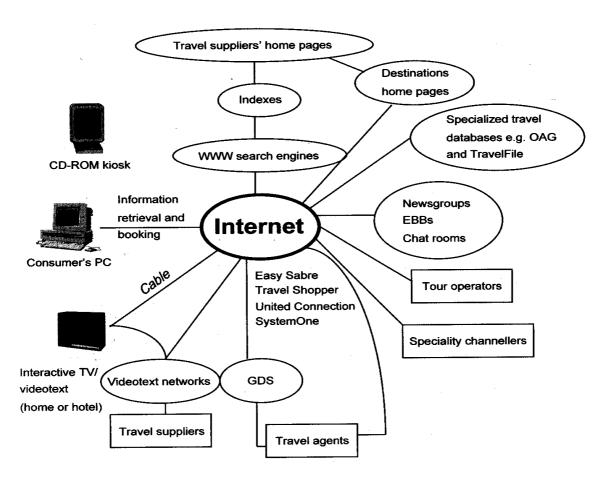


Figure 2 Model of electronic travel distribution channels (Source: Sheldon, 1997: 105)

Rasmussen, for example, points out that as

the ARPANET and other network experiments unfolded in the 1960s and 1970s, the computer as medium inspired the transition of computer science toward information science...(2003: 442).

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Rasmussen furthermore remarks that the Internet may help to catalyse not only the development of computer and information science, but sociology and social theory as well. In fact, the Internet may even act as a design or "as an inspiration for the understanding of what society is" (2003: 443-444). The Internet has indeed brought about numerous changes across many sectors of society, for example education, advertising and marketing, commerce, entertainment, health care, travel and tourism, and so forth.

Moreover, it has given rise to phenomena described and made understandable with new metaphors and concepts (Schultze and Orlikowski, 2001: 46-48). "Space" has from the start been used as metaphor for these newly created digital domains. According to Chesher (1997) the spatial metaphor helped make computers and Internet-related concepts more tangible. However, this metaphor and concepts such as "virtual" are not without their problems. Talamo and Ligorio (2001: 109) state that "when we think about cyberspace our minds immediately approach something that is not supposed to be physical at all, far from the real world and everyday life". The question arises whether these extended communication technologies and agencies can be viewed as instruments serving pre-given bodies and communities. Or, are these technologies instead contexts which bring about new ways of being, new chains of values and as Holmes (1997: 29) remarks, "new sensibilities about time and the events of culture". A concept that is irrevocably linked to these so-called new sensibilities is cyberspace. However, "cyberspace", for example, is misleading because digital domains are not spatial at all. Networks do not reproduce space, but actually eliminate it (Chesher, 1997: 83). Nevertheless, the idea that computers create new spaces has subtly set the terms of debates around computer technologies.

Similarly, Miller as cited by Silver (2000: 26) outlines another metaphor, namely the "net-as-frontier". This aptly encapsulates the idea of no control, a place for the tough

similar to the American Wild West during the 18th and 19th centuries. The term conjures images of lawlessness, but also prospect of great wealth.

Yet, despite the use of these metaphors and other concepts, computer domains are hard to imagine. The new practices are qualitatively different to analogue predecessors precisely because computers are not spatial. In the case of computer-mediated communication, no equivalent existed before the computer. Technologies constitute new fields of possible action in which different logics and dynamics emerge (Chesher, 1997: 79). Ways to investigate these technologies and their impact in order to reach empirical findings are evolving. Silver (2000: 19) remarks that

[w]hile still an emerging field of scholarship, the study of cyberculture flourished throughout the last half of the 1990s, as witnessed in the countless monographs and anthologies published by both academic and popular presses, and the growing number of papers and panels presented at scholarly conferences across the disciplines and around the world. Significantly, the field of study has developed, formed, reformed and transformed, adding new topics and theories when needed, testing new methods when applicable.

As computers took over our lives, two words became embedded into our vocabulary: "cyberspace" and "virtual". The science fiction writer, Gibson, originally coined the term "cyberspace" in *Neuromancer*. The second concept "carries the prestige and load of a philosophical tradition dating back to the Middle Ages" (Ryan, 1999: 78). Ryan correctly remarks that "cyberspace" and "virtual" have come to be used almost interchangeably, especially if "virtual" is appended to "reality". In the popular mind, computers offer the means to transport people into cyberspace and cyberspace is virtual reality.

Unlike Ryan who distinguishes Virtual Reality (VR, the technology) from virtual realities (creations of imaginations) and from the philosophical concept virtuality, Heim states that

contemporary culture increasingly depends on information systems, so that we find virtual reality in the weak sense popping up everywhere, while virtual reality in the strong sense stand behind the scenes as a paradigm or special model for many things (1998: 3).

While Heim's understanding of the concept Virtual Reality (VR) concerns computer-based technologies that create 3D worlds necessitating the use of sophisticated equipment such as simulators, body suits, gloves and so forth, other authors explore this and related concepts on a different level. Ryan (1999), for example, explores the "intellectual climate that favoured the emergence of the WWW-based forms of textuality". Furthermore, she tries to prevent the association of Virtual Reality and cyberspace from being taken for granted. Like others, she is at pains to gain a better understanding of "the significance of the concept of virtuality for theories of textuality" (Ryan, 1999: 78).

Aarseth, commenting on the use of the word "new" that is so often used when referring to these and other associated technologies (i.e. "new media"), states that words such as "interactivity", "hypertext", and "virtuality" are imbued with great promise but with their "full potential somehow still unrealised" (2003: 416).

Part of the problem, it would seem, is the fact that the concept "cyberspace" has become entangled with "virtual reality" in various forms of discourse, such as literature, technological speculation and mass media. Ryan (1999: 78) traces this entanglement back to the first conference on cyberspace that was held in 1990 at the University of Texas at Austin. Of the cited examples, Novak's definition is the

most elaborate. Taken apart, it also highlights the nature of this territory. Novak (1991: 225) draws attention to the spatialized visualisation of information and copresence. (VR developers refer to this as telepresence). While pathways are provided by present and future communication networks as suggested by Sheldon and outlined in Chapter One, it also leads to the interaction of multiple users with input and output from and to the full human sensorium. In a way, it simulates real and virtual realities by providing a full range of intelligent products and environments in real space. Remote data collection and control take place through telepresence, which enables total integration and intercommunication.

The debate among scholars about what constitutes cyberspace and virtuality centres on how to view it. Should we view it as a separate reality that can enhance and even save us from our own real world realities? This is clear when considering what Benedikt (1991: 1-3) considers "cyberspace" to be:

- A separate reality a parallel universe, created and sustained by computers and communication lines and "gigantic" archive – an incubator of knowledge.
- An ever expanding territory, whose frontiers are continually pushed back by the forward momentum of the inquiring mind. In other words, a place of circulation, trading, speculation, and relentless activity. This corresponds with it being a common market of knowledge where knowledge falls into the public domain, and intellectual property dissolves into an unrestricted exchange of ideas. As such, it offers a solution to the degradation of the real world characterised by pollution of all kinds.
- An extension of our need for fiction, joining so many consciousnesses and subconsciousnesses, culturally sanctioned and forbidden activities in the pursuit of another reality: dreams, drug-induced hallucinations, myth, ritual and the arts. As such, it is a "new art medium: the tablet becomes a page becomes a screen becomes a world, a virtual world".

At what point did the concepts "cyberspace" and "virtual reality" became blurred, i.e. Gibson's original concept "cyberspace" gained a virtual reality and a networking component? At first, VR entailing body suits, gloves and helmets drew considerable attention. However, these computer generated three-dimensional presentations had a limited impact, often restricted to work-related simulations such as flight simulators. The Internet, on the other hand, affects the lives of ordinary people to a far greater extent. For this reason, the media has linked the concept "cyberspace" very closely with the Internet to the extent of it becoming a "nickname" for the Internet (Ryan, 1999: 85). As the Internet became the primary referent of cyberspace, the term maintained the connotations inherited from the VR connection. Through these connotations, Ryan claims "the label 'cyberspace' has shaped the public's perception of the Internet experience, favouring the global assimilation of the network to a virtual reality" (1999: 85). According to her, the sense of the virtual nature of the "reality" made accessible by the Internet is intensified by the wide use of the label of "virtual" technologies to refer to the products of the software industry. This use is due to the importance of the concept of virtuality in computer architecture. The term "virtual" has subsequently been extended from the technical vocabulary of computer science to the technology developed by this science, and from the technology to any of its uses (Ryan, 1999: 87).

Poster's views concur with that of Ryan in that the term "virtual reality" quickly spread beyond "computer generated immersive environments (the helmet-glove-computer assemblage) to include

first certain communications facilities on the Internet, such as bulletin boards, MUDs, MOOs, Internet Relay Chat -- and then to the Internet more broadly – including e-mail, databases, newsgroups, and so forth – also known as 'cyberspace (1999: 43-44).

While Ryan (1999: 89-100) explores the term "virtual" to consider its "two faces", i.e. virtual as fake and virtual as potential, Poster (1999: 44) remarks that in some discussions of virtual reality, the term refers not simply to electronically mediated communication but to all reality. In some instances, it so destabilises the "real" that it too is understood as "virtual".

It is necessary to guard against such "discursive maneuvers" which emphasises Ryan's observations that there is no reason to regard the Internet as a virtual reality system. However, here it is necessary to consider the possibility that "the Internet exists for the exchange of information and this exchange can be a way of doing business of the real world" (Ryan, 1999: 85) or engaging in social interactions of all kinds. For Talamo et al (2001: 109), given this range, each activity relies on different cognitive, social and communication strategies depending upon the interaction between the electronic environment features, its context of use, the general aims and the users' identity. In the same way as financial brokers use the Internet to check stock market prices so too do travellers access the Internet in search of information. In neither case does this involve a change of identity, nor a flight into some "other reality". Ryan (1999: 85) quite aptly poses the question:

Do we flee into some other reality when we use on-line services to check the stock market, buy or sell products, find out the amount of new snow at our favourite ski resort, browse the catalogue of some remote library, or retrieve text we need for research purposes?

This point of view does not negate the possibility that the Internet does indeed offer opportunities for social interaction in ways and on a scale hitherto unknown to humankind. Despite the possibility that identities can be fake and information false which affect the nature and characteristics of social relationships in these digital environments, people keep on using such systems. Of course, in a computer-

mediated environment where conversations are largely text-based, the normal communicative cues such as voice intonation, eye-movement and gestures are absent. Does this make the human interaction less real?

The question remains: Does "virtual" as a concept underpin and explain unequivocally what it intends to describe? It has already been suggested in Chapter One that using the term "virtual" might be problematic. In this study, based on the findings of Aarseth, preference is given to the term "digital" or "computer-mediated" instead of "virtual". With reference to Heim's explanation and distinction between the strong and weak meanings of the term virtual reality, the strong meaning of "virtual" is indeed self-contradictory, namely "a reality that is what isn't" (Aarseth, 2003: 430). It is when one ponders what cannot be "virtualized", that conceptual problems surrounding the concept "virtual" and all the other phrases that are often derived from it surface. Aarseth (2003: 430-431) points out that as much as there cannot be a "virtual friendship", "virtual communities" too is problematic. Clearly, the concept "virtual" implies that some of the traditional properties are no longer a part of what the entity it qualified prior to it becoming "virtual" implied. Instead, that property is only virtual which means that it looks, sounds or feels "as if" it was real but is not, reiterating Aarseth's remark outlined above.

For Stolterman et al (ca 2002) a virtual community is first of all a social entity. It is a number of people who relate to one another by the use of a specific technology. In a traditional society communities are seen as something evoked by geographic closeness (village, neighbourhood, town, etc.) or organisational belonging (schools, churches, sports, hobbies, etc.). Authors who subscribe to this understanding of virtual community include Schuler; Rheingold, Smith and Kollock, Jones and Lapachet (Stolterman et al, ca 2002).

The concept "virtual" implies that some of the traditional properties of a community are no longer a part of the "real" world. Instead these properties are only virtual, which means that it seems "as if" it were real but is not (Benedict, 1991).

With reference to Rheingold and the manner in which he advocates the benefits of "virtual communities", Aarseth states:

It seems to me that to use the term 'virtual community' privileges the physical (distance and medium) above the spiritual and therefore belittles the communities one tries to promote. An online community...is just as valuable to its members as any other type of community, and therefore there can be nothing virtual about it (2003: 431).

Aarseth suspects that the word "virtual" is used in this context simply because it is a fashionable synonym for "computerised" and not because the activities in the online communities are only virtually social. In any case, the social capital among members who are part of these "virtual communities" is certainly real. This is reiterated by Stolterman et al (ca2002) who state that virtual communities may be virtual in some sense but they are not something outside our traditional societies. These so-called virtual communities are true parts of society and as such also part of the ongoing change and evolution of society.

While emphasising the Internet as a social network and taking note of the difficulties when assigning "virtual" to the concept "community", it is necessary to consider with a greater amount of detail the definitions assigned to the concept "virtual community". Mindful of Stolterman et al (ca 2002), Riding and Gefen (2004) state that virtual communities have been characterised as follows: First, as people with shared interests or goals for whom electronic communication is a primary form of

interaction. Second, some scholars view virtual communities as groups of people who meet regularly to discuss a subject of interest to all members. Thirdly, some claim virtual communities to be groups of people brought together by shared interests or a geographic bond.

As mentioned above, traditionally, the word "community" is likened to a geographic area such as a neighborhood (Wellman, 1997), albeit in this case the "virtual" part of the term "virtual community" indicates "without a physical place as a home". The term "virtual" itself means that the primary interaction is electronic or enabled by technology. This type of computer-mediated communication (CMC) allows people to locate and talk to others with similar interests, thereby forming and sustaining virtual communities (Hiltz, 1984) and creating "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Rheingold, 2000: 5).

Ridings et al. (2002, p. 273) offer a comprehensive definition of the term "virtual community" that embraces the attributes discussed above: "groups of people with common interests and practices that communicate regularly and for some duration in an organized way over the Internet through a common location or mechanism."

2.3.2 Trends in the study of the Internet

It is possible to divide present research on cyberculture and virtual communities into some quite distinct categories based on the perspective and purpose used in the studies. The purpose with a categorisation of this research is a way to form an overview of the work done so far, which might be of help to anyone who want to enter the field. Categories can be built on many variables: i.e. a design perspective,

the explorer perspective, the "cultural studies perspective", the activist perspective and the academic perspective (Stolterman et al, ca 2002).

However, after a review of major scholarly works from the last ten years, Silver (2000: 19-30) identifies three stages or generations in literature about cyberculture. Evident of human beings' desire to question, investigate, describe and ultimately understand phenomena, (Mouton and Marais, 1996: 8), these phases are:

- Phase 1: Popular cyberculture is the first stage and is marked by its
 journalistic origins and characterized by its descriptive nature, limited dualism
 and use of the internet-as-frontier metaphor.
- Phase 2: Cyberculture studies represent the second stage. It focuses largely
 on virtual communities and online identities, and benefits from the influx of
 academic scholars.
- Phase 3: The last stage is what Silver calls critical cyberculture studies. It
 represents and expands the notion of cyberculture to include four areas of
 study, namely online interactions, digital discourses, access and denial to the
 Internet, and interface design of cyberspace. In this phase the intersections
 and interdependencies between any and all four the aforementioned domains
 are investigated.

With reference to important empirical studies, the summary below highlights aspects of the three stages mentioned above. The categorisation outlined below in three distinct items makes it possible to locate this study in terms of the empirical landscape and other relevant scholarly developments concerning the study of the Internet.

First, popular cyberculture investigates cyberspace, the Internet and the "Information Superhighway". Stolterman et al (ca 2002) state in this regard that these texts are

often in a language related to postmodernistic philosophy and contemporary ideas in cultural studies. The basic perspective of these authors seems to be a fascination by the new medium – especially by the relation between the real and the virtual, between body and mind and by the escape from the physical into a new virtual world where identity and personality are challenged by the possibility to leave the body. The purpose with these works is to give a cultural interpretation of a new part of society. It is done by writing and sometimes by conducting experiments where cultural events take place in cyberspace or in virtual communities.

Furthermore, something Silver (2000) also notes, these studies are seldom based on real empirical work or on traditional theoretical academic writings. The texts are often demanding to the reader and are also often found together with more artistic interpretations of Cyberspace. The background of these authors may be found in many different fields. It is not a coherent group in the sense that they have the same background or practice, instead a common interest in certain philosophical and psychological ideas combined with a close relation to artistic experiences bring them together.

In concurrence with Stolterman et al (ca 2002), Silver (2000) too notes that works during the so-called popular cyberculture studies phase are generally descriptive with the aim to introduce non-technical readers to a technical pre-WWW version of cyberspace. A dualism is noticeable. First, the Internet was blamed for deteriorating literacy, political and economic alienation and second, new frontier of civilisation; foster democratic participation; bring down big business; end social and economic inequalities. In particular, journalists who used the Internet and early adapters mainly wrote essays, columns and books. Many pieces appear in the technology section of newspapers and magazines such as *Time*, business sections; lifestyle supplements, new media/cyberspace sections of mainstream magazines. Some writers focus on negative and apocalyptic views, for example Birkerts (1994); Sale (1995) and Stoll

(1995); Writers focussing on positive aspects: *technofuturists*: Rossetto, Kelly, Barlow, Kapor (1990); Rheingold; Whittle (1997).

A second phase, called cyberculture studies, focuses on virtual communities and online identities. Rheingold is a principal author of this phase writing about the WELLTM. This is the first pillar of cyberculture studies, namely online communities. Turkle (1995) offers the second pillar, namely online identities. Growing popularity and increased user-friendly interfaces (e.g. Mozilla and Netscape), the WWW helped to foster a less technical interface usable to mainstream society. During this phase, there is also an increase in academic attention and academic institutions embracing this technology.

Corresponding with what Stolterman et al (ca 2002) call the academic perspective, in what Silver (2000) calls popular cyberculture studies, new scholars from everwidening disciplines bring about new methodologies and theories. Solterman et al (ca 2002) remark that the body of research undertaken by researchers mainly originate from the social sciences such as sociology, psychology, anthropology and communication studies. The investigations include: virtual communities as social networks; sociological traditions of interactionism and collective action dilemma theory, anthropology formulating a sub-field called cyborg anthropology; ethnographic studies; linguists; feminist studies; textual analysis. Works and scholars include: *The Village Voice* (Dibbell, 1993); Stone (1991); Rheingold (1993); Turkle (1995); Bruckman (1992).

An aspect not mentioned by Silver (2000) but outlined by Stolterman et al (ca 2002) about works that originate among scholars, is a difference between studies aimed at knowledge that might be used in the future design of cyberspace and of virtual communities, and studies with the goal to explain and critically examine the development of society.

Cited by Silver (2000: 24) are authors with particular approaches, such as ethnography. Scholars include Baym (1995 and 1997), Correll (1995); McLaughlin et al (1997), Collins-Jarvis (1993). In the field of linguistics are authors such as Danet et al (1997) and Herring (1996). Concerning feminist theory, are authors such as Cherny and Weise (1996); Consalvo (1997); Dietrich (1997); Eben and Kramarae (1993); Hall (1996). Work by community activists and scholars exploring the intersection of real and virtual communities in the form of community networks include: Cisler (1993); Cohill and Kavanaugh (1997); Schmitz (1997); Schuler (1994 and 1996); Silver (1996, 1999).

The third phase, critical cyberculture studies, is difficult to distinguish and map. Scholarly works in this phase are more critical and go beyond investigating virtual communities and online identities; overall, it seeks explanations that are more complex. The so-called academic perspective mentioned by Stolterman et al (ca 2002) could also be added to this phase based on Silver's categorisation of scholarly works about cyberculture and virtual communities.

While the three phases listed and described above summarise the findings of Silver with regard to developments in the study of the Internet and cyberculture, the subsections below describe each in more detail by considering the empirical contributions by some of the more notable authors.

2.3.2.1 Phase 1: Popular cyberculture

This phase is characterised by the collection of essays, columns and books written for the most part by journalists and what Silver calls, "early adapters". Initially, stories appeared in newspapers and magazines. Occasional columns soon developed into feature articles, or technology supplements. Apart from cover articles in magazines such as *Time* and *Newsweek*, so-called how-to books aimed at introducing the public to the Internet.

By being descriptive, early writings aimed at educating the reading public about these new technologies. After all, the Internet and Web are rather technical, and accordingly, much of the work included lengthy descriptions, explanations and applications.

As noted above, this early stage in the development of cyberculture studies is characterised by a certain dualism: on the one hand, these technologies were blamed for deteriorating literacy, political and economic alienation and social fragmentation. Others, on the other hand, considered cyberspace as a new frontier with innumerable opportunities. Understandably, this notion also became a metaphor that stuck, namely the Internet as frontier. As such, with a colonial past and visions of pioneers settling on virgin land, a writer like Whittle as cited by Silver (2000: 21) poetically contemplated the future of the Internet:

The pioneers, settlers and squatters of the virgin territories of cyberspace have divided some of that land into plots of social order and plowed it into furrows of discipline – for the simple reason that ... natural resources can only be found in the mind and have great value if shared.

2.3.2.2 Phase 2: Cyberculture studies

Considering the newness of the Internet and its impact, Internet studies would seem to be an acceptable term under which many scholars could huddle. Understandably, scholars are drawn from various fields, and certainly older research streams, such as hyper/cybertext theory, human-computer interaction, computer-supported cooperative work, and computers and composition. Lately, tracing the development of what could be called a meta-field of study, under the label Internet studies are

included studies of cyberculture, digital culture, information society or new media. Silver is noted for his work in tracing the history of so-called Internet studies and states that:

The meta-field's development and directions, coupled with attention towards the affiliations that its members do and do not make, constitute an important and interesting site of intellectual, academic and political work (2004: 55).

Following the initial phase in which people were introduced to a new phenomenon such as the Internet with all its jargon and technicalities, a significant portion of cyberculture scholarship during the second phase is characterised by its descriptive nature, binary dualism and frontier metaphors. Some of the journalists who made important explorations into and observations about cyberspace gained membership into this second generation of cyberculture scholarship. As such, this is an important point in the history of the development of the meta-field of study. Stone's definition of cyberspace also characterises the approaches and foci of second-generation scholars; cyberspace is "incontrovertibly social spaces" in which people still meet face-to-face, but under new definitions of both "meet" and "face". Subsequently, this suggests that cyberspace offers users very real opportunities for collective communities and individual identities. These two aspects are also the two pillars, according to Silver, upon which second generation cyberculture studies rest (2000: 22).

Rheingold, categorised as a second-generation writer based on his virtual communities ideas, is well-known for his research about virtual communities of which his first work appeared in 1993, entitled *The Virtual Community:*Homesteading on the Electronic Frontier. Reprinted in 2000 with a number of

revisions and additions, he is known for his enthusiasm about virtual communities but also for the way in which he intertwines real life and virtual life:

Not only do I inhabit my virtual communities; to the degree that I carry around their conversations in my head and begin to mix it up with them in real life, my virtual communities also inhabit my life. I've been colonized; my sense of family at the most fundamental level has been virtualized (2000: xxv).

According to him, computer-mediated communication has the potential to change lives on three different, "but strongly interinfluential levels." These are:

- As individual human beings, we have perceptions, thoughts and personalities (already shaped by other communications technologies) that are affected by the ways we use the medium and the ways it uses us.
- On the level of person-to-person interaction where relationships, friendships, and communities happen, the many-to-many capabilities of computermediated communication challenge us to consider whether it is possible to build some kind of community together.
- Possible change in our lives can occur on the political level since politics is always a combination of communications and physical power, and the role of communications media among the citizenry is particularly important in the politics of democratic societies. The political significance of computermediated communication lies in its capacity to challenge the existing political hierarchy's monopoly on powerful communications media. (Rheingold, 2000: xxix).

In the revised edition, Rheingold acknowledges that considerable changes have taken place since the first edition of *The Virtual Community*. Furthermore, he

emphasises that "we must ask the right questions today about what kind of people, what kind of societies might merge from cyberspaces tomorrow" (2000: 323). *The Virtual Community* is largely about the WELL™, an online community. Numerous examples and anecdotes are taken from interactions -- both online and in real life – among its members. However, certain statements made by Rheingold raise questions about the critical nature of his views and the basis of his research. Statements include "[t]he first time I saw the Web, I wanted to create communities there", while an acknowledgement such as the one below raises serious questions about intent:

Although I seek to apply standards of objective truth-seeking to my investigations of online social phenomena, I have come to understand that much of my participation in this new medium has been driven by my own personal longings for that participation. Lusting after tools that don't quite exist yet but that are clearly possible has motivated much of the effort that created the Web as we know it today (2000: 334).

Rheingold's lack of considering "community" itself lies at the heart of criticism directed towards his work and that of some of the earlier scholars investigating online communities. In his study of the Internet and its social impact, Slevin remarks that debates about online communities are "often carried on with little reference to the context in which the Internet is used, or that such contexts are somewhat cancelled out" (2000: ix).

Like Rheingold, Turkle's approach to cyberspace is also enthusiastic. Where Rheingold focusses on virtual communities, Turkle explores identities. This she does by investigating ethnographically a number of virtual environments, including Multi-user Dungeons (MUDs). According to Silver (2000: 23), she finds that some users repress an otherwise less-than-functional "real" or offline life; others explore multiple

identities. In conjunction with this, Bruckman uses the concept "identity workshop" to refer to users' freedom to experiment with different genders, sexualities and personalities.

By the mid-1990s, cyberculture studies were well under way. Because of the enthusiasm found in the work of Rheingold and Turkle, cyberculture was often articulated as a site of empowerment, an online space reserved for construction, creativity and community. During the time that Rheingold and Turkle contribute to cyberculture studies, developments such as the launch of Netscape's web browser in 1995 led to what could be called a great Internet rush. Subsequently, academic interest could rely on the financial backing of the business community and was supported by various institutions, including government agencies.

As could be expected, new scholars brought new methods and theories. Silver lists some, including sociologists that employ a network approach. Others are: interactionism and collective action dilemma theory. Within anthropology, scholars began formulating a new sub-field, namely cyborg anthropology. This field is devoted to exploring the intersections between individuals, society and networked computers. From ethnography, researchers followed Turkle and began to study what users do within diverse online environments. Linguists too, began to study the writing styles, netiquettes and textual codes used within online environments. Women's studies too, employ textual analysis and feminist theory to locate, construct and deconstruct gender within cyberspace. Community networks too became the focus of study for a collection of community activists and some scholars, like Cisler, Cohill and Kavanaugh, Schitz, Schuler and Silver (Silver, 2000: 24).

2.3.2.3 Phase 3: Critical cyberculture studies

With an increase in academic interest, by the second half of the 1990s many academic and popular presses published large numbers of monographs, edited volumes and anthologies devoted to the growing field of so-called cyberculture. Reflecting this growth, recent scholars take a broader view of what constitutes cyberculture. In this phase, studies start to explore more than just virtual communities and online identities as was initially done by scholars such as Rheingold and Turkle.

Characteristics of emerging fields of study are difficult to map and categorise. The biggest difference between this and previous phases is instead of approaching cyberspace as an entity to describe, contemporary scholars view it as a place to contextualise and thereby seek to offer more complex empirical findings.

Four dominant areas of focus have emerged, which form the foundation for empirical studies regarding cyberculture. These are:

- Explores the social, cultural and economic interactions.
- Unfolds and examines the stories we tell about the interactions mentioned above.
- Analyses a range of social, cultural, political and economic considerations that encourage, make possible and/or thwart individual and group access to such interactions.
- Assesses the deliberate, accidental and alternative technological decisionand design-processes; when implemented, forms an interface between the network and its users.

Each of the four focus areas mentioned above is briefly discussed below under separate headings.

2.3.2.3.1 Contextualising online interactions

Although scholarly works have started to go beyond the study of virtual communities and online identities, it is the contextualisation of these that is making a difference in our understanding of cyberculture. While Stolterman et al (ca 2002) refers to "many pictures of how we can understand cyberspace and virtual communities", Jones is taking the lead in what Silver calls the social construction of online reality. While some play along the lines of considering their topic as a "brave new world", Jones contextualises cyberspace within the more traditional paradigms of communication and community studies. This is extended by Carey's work on the electronic sublime, Beniger's notions of pseudo-communities and Harvey's theories of postmodern geographies. Silver (2000: 25) remarks that Jones continued with this necessary process of contextualisation by "problematizing some of the key definitions and directions of cyberculture studies." In this, he draws on the work of Anderson, Sennet and Carey, thus enabling him to historically locate popular rhetoric "heralding the net's potential to transcend time and space". Jones, for example, questions Rheingold's unproblematised view of virtual communities, which bodes well with other authors who take a critical stance towards cyberculture and the community. In a final remark about Jones' contribution to the critical study of cyberculture, he notes that the "internet is another in a line of modern technologies that undermine traditional notions of civil society that require unity and shun multiplicity while giving impressions that they in fact re-create such a society (Jones, 1997: 25).

Like other authors who also go beyond merely recanting the findings of Rheingold and Turkle to make critical explorations and discoveries of their own, McLaughlin et al (1995) attempt to establish general, online codes of conduct by collecting all messages posted to five newsgroups within a three-week period and analysing them from normative discourse. From this, they deduce seven categories of reproachable behaviour. Silver (2000: 25) notes that these authors also trace the intricate parameters and factors that help to support the relative success or failure of online

communities. Others, like Kollock and Smith, MacKinnon and Phillips focus on the parameters and punishments that serve to establish acceptable and unacceptable behaviour within online environments.

Baym too attempts to contextualise online interactions by using ethnographic methods to better understand the nature of virtual communities. Baym suggests that online communities emerge out of a complex intersection between five factors: external contexts, temporal structures, system infrastructure, group purposes and participant characteristics (Silver, 2000: 26).

2.3.2.3.2 Discoursing cyberspace

Cyberspace is not only a site for communication and community, but also a generator of discourse, a very real and very imagined place. Silver remarks that as many of these third generation cyberculture studies' scholars have noted, two "disturbing discourses of cyberspace have emerged: the net as frontier and cyberspace as boystown" (2000: 26).

2.3.2.3.3 Online access and barriers

Not everyone has access to the Internet. There is increasing evidence of online marginality where issues of race, ethnicity and sexuality need attention. The National Telecommunications and Information Administration (NITA) examines what it calls the "digital divide". This so-called digital divide refers to a growing gap between information haves and have-nots and the factors contributing to this. Difference in accessibility has been noted involving race, gender, class and level of education (Dance, 2003: 171-182).

Impacting on social capital and the flow of information, barriers are not confined to race or gender, but Bailey as cited by Silver (2000: 27) notes that shared customs, netiquette and acronyms work together to exclude newcomers in a kind of "newbie snobbery". Interestingly enough, traditionally marginalized cultural groups have started to use the Internet as a means for communication, community and empowerment. Some authors have started to explore marginalized cultural groups' attempts to establish self-defined, self-determined virtual spaces. Silver refers to the work of Mitra, Shaw, Correll and Camp. While Mitra investigates the Usenet newsgroup *soc.culture.Indian*, Shaw and Correll investigate gay and lesbian online communities. Camp researches female users and the ways in which they use the Internet for their own benefits.

2.3.2.3.4 Digital design

Literary scholars consider the ways in which the digital design of online spaces informs the types of interactions made possible. The hypertext scholars such as Bolter and Landow compare the new media to contemporary critical theory and consider ways in which hypertext reconfigures the text, writer and reader.

Another aspect investigated too concerns human-computer interaction (HCI). For works with this focus, the interface is a critical site for interaction, explaining the importance given to design studies and semiotics. Authors worth mentioning include Kollock, Baecker and Kim. Research institutes like the Graphics, Visualisation and Usability Centre at the Georgia Institute of Technology, the Human-Computer Interaction Lab and the Knowledge Media Design Institute are developing models for discussing and assessing online interfaces (Silver, 2000: 29). Another interesting development worth mentioning concerning design is the relatively new field called participatory design. In this, the users play an important role in the design of

systems. Pioneered in Scandinavia by Schuler and Namioka it is also starting to influence developments elsewhere, for example the United States.

The above sub-section considers the contributions of notable scholars. Categorisation is based on three phases identified by Silver (2000). Notably, one of the most confusing aspects of doing research about the Web, as with other forms of mass media, is that it can be understood at many levels. This is evident when considering the myriad topics and approaches to cyberculture studies outlined above. Clearly, as noted by Wakeford (2000: 31), there is no standard technique, in communication studies or in allied social disciplines, for studying the Web. While Chandler has devised a framework for the analysis of homepages, this kind of semiotic methodological strategy does not deploy the networked features of web documents. Increasingly, attention is given to projects that enable the visualisation of parts of networks either by tracking users or the text they contribute to a discussion (Wakeford, 2000: 36). In the case of this study which uses social network analysis as a research technique, the section below describes and positions it in terms of the empirical landscape.

3. The Internet as social network

Since the mid 1990s the growth in Internet use has led authors in a wide range of fields to study the economic, social and cultural impacts of this so-called "new media" technology. Examples of works include Jones et al (1997), Kitchen (1998), Shaw (1997) and Smith and Kollock (1999) apart from other authors mentioned in the sub-section above.

While many questions remain unanswered, leaving room for more critical scholarship to investigate the long-term influence of the Internet and cyberculture on

society, specific methodologies carry with them the promise of new empirical findings. The Internet, being a network of computers without any central control spanning the globe, has not only revived an interest in network theory but also research techniques and methodologies such as network analysis. Since online communities are also social networks in which particular exchanges take place, network analysis is a useful technique that could shed light on matters pertaining to social capital too.

Scholars and researchers apply network analysis as an acceptable social sciences research method to reach conclusions that are epistemologically sound, while offering an alternative view from those undertaking non-network studies such as ethnographic studies, textual analysis or quantitative studies, amongst others. From a sociological point of view, exchange theory, rational choice theory and network theory are related. With contributions such as Castells (1996) exploring aspects of the networked society, it is understandable that recently exchange theorists have been devoting more attention to networks of social relationships, which in turn connect them with network theory itself (Ritzer, 2000: 407). Not losing sight, however, of broader developments of what is termed postmodern social theory the contribution of a structural approach in network analytical terms cannot be dismissed as unimportant (Ritzer, 2000: 583; 587). Notably, one of the most recent contributions to modern social theory is the trilogy authored by Castells with the overarching title, *The Information Age: Economy, Society and Culture* (Castells, 1996).

By viewing and studying computer-mediated social networks and online communities as social networks, the question arises: What can be revealed that is different if compared to other approaches or foci in the study of the Internet and cyberculture? Based on network theory in sociology (Ritzer, 2000: 429-432), the answer lies largely in the fact that social network analysis focuses on patterns or relations between and among actors. (Actors can be people, organisations, states,

nations and so forth.) Network analysts seek to describe networks of relations as fully as possible, "tease out the prominent patterns in such networks, trace the flow of information (and other resources) through them, and discover what effects these relations and networks have" (Garton, Haythornthwaite and Wellman, 1999: 76). As a sociological theory, network theory is relatively new and undeveloped according to Ritzer (2000: 430) although Knipscheer (1990: i) states:

In comparison to the hesitating and cautious introduction of the social network metaphor to the social sciences in the fifties the notion of social network has soared in popularity and strength through the seventies and the eighties...Its scientific status is now well established.

Nevertheless, taking into consideration the unprecedented spread of computer-mediated communication as a means to connect people, Garton et al (1999: 77-78) draw a comparison with other approaches to the study of computer-mediated communication and point out that much research concentrates on "how the technical attributes of different communication media might affect what can be conveyed via each medium". Characteristics include the richness of cues that a medium conveys, the visibility and anonymity of participants and the timing of exchanges. Although studies of group communication are closer to the social network approach because they recognise that the use of computer-mediated communication (CMC) is subject to group and organisational influences, it leads analysis away from some of the "most powerful social implications of CMC in computer networks", namely the potential to support interaction in unbounded, sparsely knit social networks (Garton et al, 1999: 77).

Methodological aspects about social network analysis are outlined in Chapter Three. However, it is necessary at this point to name a few of the important features of this approach to understand its usefulness to the study of the Internet and online communities. These features include some of the following factors:

- Social network analysts look beyond the specific attributes of individuals to consider relations and exchanges among social actors.
- Analysts ask about exchanges that create and sustain work in social relations.
- The types of resources can be many and varied, tangible or intangible. In a
 computer-mediated communication context, the resources are those that can
 be communicated, e.g. sharing information, discussing work, giving emotional
 support or providing companionship (Garton et al, 1999: 78).

Garton et al (1999: 86) use the concept computer supported social networks to refer to online groups (or communities). However, from a social network perspective, considering computer assisted social networks, recognition is given to the possibility that members of a network can (and indeed do) use more than one medium to sustain social relations and ties (Garton et al, 1999: 88). This bodes well with the real world uses of the Internet, for example, real world travellers who exchange information about their real world experiences in a digital domain and in all probability relate what they have learnt while browsing websites to other real world travellers in face-to-face interactions.

Since social network analysis can study whole networks, as opposed to ego-centred networks, this research technique opens up interesting questions for CMC research. These include questions about:

- the multiplexity of computer supported social networks.
- overlap of membership in specialised computer supported social networks.

- how co-membership affects the resources flowing into and out of specialised computer supported social networks.
- how computer supported social networks link people within organisations and in society in general.

Network characteristics can be related to a social network reliant on computermediated communication. The description below summarises the implications of six characteristics of social networks for a better understanding of social relationships and social organisation, i.e. focus on structure. These are density, boundedness, range, exclusivity, social control and tie strength.

Network density describes the proportion of all possible ties between network members that actually exist, ranging from 0.00 to 1.00. A very densely knit network (density = 1.00 or so) would have a connector line between all nodes. There is no standard definition of the point at which a network becomes densely knit, but researchers generally consider a density of at least 0.67 (two thirds of possible ties actually exist) as an indication of denseness.

Sparsely-knit networks are on the other end of the continuum where few ties connect network members, signifying harder work to maintain relationships (depending on the type of network under question), or lack of communication. Computer-mediated communication networks can be dense, closely-knit, or sparse, unbounded networks. Dense groups are supported when all participants in a computer-mediated conference for example read and respond to all communications and so are directly connected to each other online. Examples include: Focussed task groups, role-playing MUDs, and some newsgroups resembling village-like structures when they capture their participants' attention.

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A Social Network Analysis of the *Thorn Tree*

Chapter 2 Literature Review

Considering aspects related to social capital, motivators for providing assistance on a computer network are practically founded on norms of generalised reciprocity and group citizenship. People who have a strong attachment to the online group will be more likely to participate and assist others, even total strangers (Wellman, 1997: 187).

Boundedness refers to the proportion of network members' ties that stay within the boundaries of the social network. All networks are defined within a population. Examples of populations include the workplace and a neighbourhood in an urban area.

Networks can be bounded groups or permeable ramifying networks in which people can reach out widely to connect with others. In tightly bounded networks (almost) all of the relationships remain within the population. Those that cross the population's boundaries are relationships that are maintained by a few gatekeepers. Tightly bounded groups have important implications for the flow of information, disease and social resources.

Members of loosely bounded (unbounded) networks have many ties with people who are not members of a particular network. Because many ties go outside the network, it is likely that the network will be sparsely-knit. Local and wide area networks can support dense bounded groups through computerised conferencing and distribution lists. Many computer networks, including the Internet, support unbounded social networks because features such as email, newsgroups and online bulletin boards make it easy and inexpensive to maintain connections with other people using the same system no matter where they might be geographically located. This is a feature of the space-time aspect of communication in the era of globalisation (Giddens, 2001: 98-99).

The lower social presence of computer-mediated communication, as compared to face-to-face interactions often means that total strangers are willing to assist (e.g. giving information) than would otherwise have been the case. Analogously, online requests for assistance are read by people alone at their screens.

The Internet is an extreme example of an unbounded network. Its population boundary approaches infinity and is so in flux that it cannot be analysed at any one time. Although it is inherently impossible to map all Internet relationships, egocentred analyses can trace the nature of the connections of a sample of Internet users. Another way to study the Internet and other unbounded networks is to trace flows of resources (Wellman, 1997: 190).

The range of a network describes how large and diverse is the population within its boundaries. With larger size comes the population basis for more heterogeneity in the social characteristics of network members and more complexity in the structural patterning of ties in networks. Dense, bounded networks almost always have a small range because a large network becomes unbounded relatively quickly. As the number of network members increases the population basis for more diversity increases. Dense, tight networks with a small range are good for conserving existing resources; sparse, unbounded networks with a large range are good for obtaining additional resources.

Computer networks of all kinds, moreover those linked to the Internet, increase the range of social networks, facilitating more and a wider range of relationships.

Communication can take place with many others across different time zones, while distance and geographical dispersal are not limiting factors in computer-mediated communication.

Despite the relative lack of social presence, online communication fosters relationships with people who have more diverse social characteristics than might

normally be encountered in person. Shared interests, more than anything else, become the basis for network membership. The structuring of communication from the onset onset by differences, such as social status, is obviated in the case of online communication (Wellman, 1997: 191-192).

The control that members have over access to each other can vary between little control/high access in dense bounded groups, to high control/low access in sparse, unbounded networks. In addition to variation in discretion over contact with network members, there can also be variation in the circumstances under which people can be interrupted or others can access. Dense, bounded groups tend to be in situations where there is relatively little choice of network members, and little control over their interactions. Sparse, unbounded networks afford people more discretion in the persons, places, and times of their interactions. Such networks frequently have more physical barriers that impede access and interaction. Computer networks support either dense, bounded groups or sparse, unbounded social networks.

Depending on the way in which a system is designed or managed, users can more often than not control access to them. This is true in the case of systems like ICQ and IRC. In the case of email, filters can be applied. Users of Internet-based electronic discussion boards have the choice whether to reply to messages. In this case, all members can read all messages, just as when a group talks in a café or an open office. The difference is that in real life, many social rules govern participation, thus governing levels of exclusivity. In an electronic environment, groups of people can communicate more casually (Wellman, 1997: 193).

With regard to social control, the main concern is: How do external sources create, constrain and manage a person's contacts and exchanges? In dense, bounded networks, controls for managing normative social behaviour are usually enforced by group pressure, managers and community influentials to ensure that participants work together for clearly defined collective goals. In sparse, unbounded networks,

there is less control because of their weak interconnectivity. The greater fragmentation of these networks means that people can avoid portions of the network where they are unwanted. The Internet is a sparse, unbounded network and as a result, people who are unhappy with one interaction can manoeuvre between different digital domains, forums and so forth.

The possibility of multiple persona or online identities means even greater flexibility. By belonging to multiple social networks, no one network has exclusive control over its members. The strength of relationships is a multidimensional construct encompassing the usually correlated variables of a relationship's social closeness, voluntariness, "multiplexity", and to a lesser extent, frequency of contact (Wellman, 1997: 195).

Strong ties tend to provide more social support than weak ties. They also provide a wider variety of social resources. Importantly, weak ties are not useless and often allow for connecting people who are dissimilar. Subsequently, weak ties tend to link people to other social worlds, providing new sources of information and other resources (Granovetter, 1973).

In dense, bounded groups, relationships tend somewhat paradoxically, to be both involuntary and socially close. In sparse, unbounded networks, relationships are more likely to be entered into voluntarily since participants have come together on the basis of a common interest or mutual advantage. Most friendship relationships are like this, also, some types of work relationships. Despite the more limited social presence of computer-mediated communication, online relationships are often strong with frequent supportive and companionable contact.

The ease and placelessness of electronic communication facilitates frequent and long-term contact, without the loss of the tie that often accompanies geographical mobility. Although computer-supported social networks sustain broadly multiplex

relationships, they are particularly suited for fostering specialised relationships. Through the Internet with its global reach, people can belong to any number of specialised groups based on interest without moving from the comfort of their homes. Contact made initially on the Internet can be sustained and expanded to later include other media, such as telephone and fax. The possibility of face-to-face interactions is not excluded. Perhaps the limited social presence and asynchronicity of computer-mediated communication only slows the development of strong ties, with online interaction eventually developing to be sociable and intimate as in personal ties (Wellman, 1997: 198).

The sub-section above plots the implications of characteristics of social networks for understanding social relationships and social organisation in an online environment. This section also considers the contribution social network analysis makes to the study of online networks. This analysis paves the way for the sub-sections below that consider social capital and empirical findings with regard to travel information exchange respectively. Social capital is relevant to the study of the Internet but also to leisure studies. In the case of travel and tourism as a component of leisure studies, the growing emphasis and importance of social capital are signified in a roundtable discussion scheduled later for 17 May 2005 in Nanaimo, British Columbia before the opening of the Canadian Congress on Leisure Research. Notably, researchers have also been invited to submit articles for a special issue of *Journal of Leisure Research* to be published in the fourth quarter of 2005 with a focus on social capital.

4. Social capital

The great explosion of research on social capital following Putnam (1993) has produced an impressive body of results confirming the importance of social capital in many different domains (Glaeser, 2001). Although initially used as a metaphor to

describe social ties, social capital is closely associated with networks. While the manner in which people communicate and form bonds often takes the form of face-to-face communications, relations can nowadays also be forged across the Internet. Whether in real life or set within cyberspace, relations are a resource. The initial metaphor of capital implies that connections can be profitable. As such, relations and the spinoffs are at the heart of social capital and like any other form of capital, people can invest in it and expect returns on it (Field, 2003: 12). The idea of social capital goes back to Hobbes who in 1651 claimed "to have friends is power" (Degenne and Forsé, 1999: 115). Not everybody knows powerful or influential people and in the face of all kinds of other realities, inequalities transcend social classes, racial groups, age groups and so forth. Numerous examples are available to outline the statements Weber for example makes with regard to such social inequalities.

In order to draw on the social capital of others, social ties connect people and bind them into networks. Field remarks (2003: 1) that people in such networks tend to share common values with other members. The Internet has, as noted earlier in this chapter, given rise to networks drawing people from across the globe. In the case of the Internet, such networks are based on interest and other commonalities and are no longer determined by time and location as used to be the case before the Internet. This point has been noted in an earlier section in this chapter. A question raised earlier with regard to the development of the Internet on social capital can partially be answered: the number of members can be very numerous while networks are mostly sparse.

Field (2003: 101) remarks that online interactions have expanded at a remarkable rate in recent years – as has been noted in the section above dealing with the Internet and associated concepts. Given the sheer surge in the number of people using online communications and the rapid spread of uses to which it may be put, it would be surprising if it had no impact on people's social capital. As suggested at

the outset of this study, travellers surely make use of the social capital gained from participation in online discussion forums like the *Thorn Tree*. Likewise, other interest groups form around sport, hobbies and careers, i.e. swimming, historical reenactments, the medical profession, aviation, nutrition and health, and so forth.

Although none of the scholars who investigate the Internet and undertake cyberculture studies concentrate on social capital or even use the concept, it is necessary to note that Degenne and Forsé (1999) mention social capital in their study of social networks. More importantly, only one of the three most important theorists regarding social capital pay attention to the Internet. Putnam, who can plausibly claim much of the credit for popularising what had previously been a rather obscure terminology, accepts that the Internet removes many of the barriers to communication and thus facilitates new networks. However, he remains somewhat sceptical about its influence.

First, there is according to Putnam, an increasing digital divide between those who are connected and those who lack the skills and equipment to become part of cyberspace. Second, because online communication is casual and lacks the instant feedback of face-to-face encounters, it discourages reciprocity and facilitates cheating. Third, Putnam argues that people who go online tend to mix only with small groups of others who share the same interests and views as themselves and they are intolerant of anyone who thinks otherwise. Finally, the Internet offers abundant opportunities for private and passive entertainment. Putnam, as cited by Field (2003: 102) also warns that the ideals of online citizenship face serious challenges.

Fukuyama, as cited by Field (2003) is one of the most celebrated prophets of postmodernity who believes that the Internet erodes established relationships. Castells also believes that digital technologies have helped demolish the rigid identities of industrial modernism, based on class and nations, so that we now live in

a network society where all kinds of contacts and values can be built into our sense of who we are. Castells' (1996) views regarding computer-mediated communication are therefore notable:

- Computer-mediated communication is not a general medium of communication and will not be so in the near future.
- Despite attempts at simplifying the use of interactive communication, computer-mediated communication will remain the domain of an educated segment of the population of the most advanced countries.
- Computer-mediated communication will be critical in shaping future culture, and increasingly the elites who have shaped its format will be structurally advantaged in the emerging society.
- Computer-mediated communication opens avenues for lower-status workers and women to express themselves, offering chances to reverse traditional power games in the communication process.
- The convergence of experience in the same medium blurs somewhat the institutional separation of domains of activity and confuses codes of behaviour.
- Computer-mediated communication fosters the creation and phenomenal growth of virtual communities. Such communities consist of predominantly two populations: a tiny minority of "electronic villagers" and a transient crowd for whom their casual incursions into various networks is tantamount to exploring several existences under the mode of the ephemeral.

In the last point above, Castells aligns his description of virtual communities with Rheingold's argument, namely that a virtual community is "a self-defined electronic network of interactive communication organised around a shared interest or purpose, although sometimes communication becomes the goal in itself" (Castells, 1996: 362). In this study, the social capital relevant to and produced by travellers

point at the relationship between social capital and online connectivity. The findings of Pew Internet & American Life Project are important. In a report outlining future trends for 2005 it is stated:

The internet is more than a bonding agent; it is also a bridging agent for creating and sustaining community. Some 84% of internet users, or close to 100 million people, belong to groups that have an online presence. More than half have joined those groups since getting internet access; those who were group members before getting access say their use of the internet has bound them closer to the group. Members of online groups also say the internet increases the chances that they will interact with people outside their social class, racial group or generational cohort (2004: 64).

This does not exclude the possibility that communication takes place for the sake of communication or merely because of the thrill of being connected. Yet, as Field remarks (2003: 102), evidence and extensive research regarding the relationship between social capital and online connectivity are hard to come by. There are, however, a number of studies that examine both Putnam's hypothesis and those of Castells and Fukuyama. Field (2003: 102) cites Wellman who is of the opinion that:

[T]hey seem to suggest that those who develop connections through the Internet are neither devious individualists nor the shock troops of hypermodernity. Most survey-based evidence shows that those who are most active online tend to be people who already have plenty of face-to-face connections and they complement rather than replace these interactions in cyberspace.

Given the importance of social capital in the social sciences, but moreover with regard to the impact of the Internet, it is necessary to give particular attention to this concept. Against the background of what has been noted above, the section below explores the main components of social capital. It is divided into sub-sections, namely background information to the development of the concept, certain complexities and further developments and social capital in a post-modern world. The last sub-section considers travel information exchange within a digital domain as an example of social capital and the manner in which the Internet facilitates this.

4.1 Developing a new concept

Social capital has been widely discussed across the social sciences in recent years. Field (2003: 3) notes an increase in the number of journal articles listing social capital as a key word. As mentioned above, Putnam is largely responsible for popularising the concept and as Field puts it, "rescuing it from the abstraction of social and economic theory" (2003: 4).

Putnam draws on well-established notions of associations, relations and interactions as treated by various scholars. Notable are scholars such as de Tocqueville, Durkheim, Tönnies and Marx. It is not strange that a preoccupation with the quality of relationships and their association with shared values pervaded classical sociological theory. After all, sociology as a discipline emerged as an attempt to explain the origins and nature of social order. Classical writers such as those noted above were concerned with understanding how humans created stable social structures and patterns of behaviour in a world where urbanisation, industrialisation and scientific rationality had eroded the traditional bases of order (Field, 2003: 6-7). It is Durkheim in particular who has been interested in the way that people's social ties serve as the thread from which a wider society weaves itself together.

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Field draws attention to the fact that in general, however, classical social theory was not particularly concerned with the areas that are denoted by the concept of social capital. Nevertheless, the idea of social ties as contributing to the wider functioning of the community was well established long before the present debate surrounding social capital. Although interaction might be treated as an element in social order or as part of a wider social structure, the questions addressed by the classical theorists are "rather different from those tackled by today's social capital researchers". It might be possible to fit theories of social capital into a broadly Marxist, Durkheimian or Weberian perspective on social order, although the concept brings a new focus and introduces new questions. Field (2003: 7) mentions the links between the microlevel of individual experiences and everyday activity and the meso-level of institutions, associations and community as new foci. Attention is also drawn to the implications of defining connections as a form of capital.

Social contacts are not easily reduced to a simple set of common denominators, and much of the debate has taken place outside the discipline of economics, among social thinkers, political scientists, educationalists and historians. Four theorists, according to Field (2003: 13), have made seminal contributions: Bourdieu, Putnam, Coleman and Fukuyama. Below, brief notes explore the views of each.

Social capital is an elusive concept, as reflected in the fact that its definition differs across studies. According to Durlauf (2002), Portes has developed a strong critique of the social capital literature because of this definitional ambiguity. Although each of the prominent scholars such as Putnam, Coleman and Bourdieu offers definitions, Schuller (2001) notes that the definition of social capital is itself problematic. As outlined in this sub-section, it owes its prominence mainly to the work of Putnam in political science (1993, 1996), Coleman in educational sociology (1988), and Fukuyama in economic history and sociology (1996), as well as to the active patronage of the World Bank. Also, as mentioned earlier, its origins go back well beyond these contemporary scholars, however, clear lines of descent have been

traced back to classic authors such as Adam Smith and Montesquieu. For the majority of writers, social capital is defined in terms of networks, norms, and trust and the way these allow agents and institutions to be more effective in achieving common objectives.

Bourdieu is known for reflexive sociology (Ritzer, 2000: 627). Apart from this, working on Algerian tribes in the 1960s, Field claims that Bourdieu came slowly to the concept of social capital. He described the dynamic development of structured sets of values and ways of thinking as forming "the habitus". This provided a bridge between subjective agency and objective position. Emphasising cultural symbols as marks of distinction, he gave force to his views by using the metaphor of "cultural capital". This means that Bourdieu's early writing on social capital was part of a wider analysis of the diverse foundations of social order. After some refinements, Field (2003: 15) notes that Bourdieu later defined social capital as:

the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalised relationships of mutual acquaintances and recognition.

Coleman's impact on the development of the concept of social capital has been farreaching; notably too, his influence has been wider than that of Bourdieu. Influenced
by Becker's work on human capital, Coleman used the framework of rational choice
theory (Ritzer, 2000: 432-433). This is important to note, since rational choice theory
shares with classical economics the belief that all behaviour results from individuals
pursuing their own interests. Social interaction is thus seen as a form of exchange.
From rational choice theory Coleman developed a broad view of society as an
aggregation of social systems of individual behaviour. An interest in social capital
emerged from attempts to explain relationships between social inequalities and
academic achievements at schools. After a major survey of educational achievement

and opportunity among six ethnic groups, Coleman concluded that communities were a source of social capital that could offset some of the impact of social and economic disadvantage within the family. Field (2003: 23) cites Baron et al who claims that Coleman introduced social capital as a post hoc concept, which he had developed partly in order to explain findings that appeared to fit badly into the existing theoretical model. Social capital, according to Coleman, is a useful resource available to an actor through social relationships. It comprises a variety of entities that all consist of some aspect of social structures and they facilitate certain actions of actors within the structure (Field, 2003: 23).

The most extensive definition of social capital is offered as part of a broader attempt at outlining a general theory of rational choice sociology. In this, social capital is defined as

the set of resources that inhere in family relations and in community social organisation and that are useful for the cognitive or social development of a child or young person. The resources differ for different persons and can constitute an important advantage for children and adolescents in the development of their human capital (Field, 2003: 25).

Putnam, more than any of the other theorists mentioned before, stands out as the most widely recognised proponent of social capital. Unlike Coleman and Bourdieu whose work has stayed more or less within the boundaries of sociological theory, Putnam's contribution reaches a far wider public. Furthermore, unlike the two abovementioned theorists, Putnam's ideas about social capital are based in political science. His first contribution came towards the end of a study of regional government in Italy in 1993, but he defined the term only after presenting a detailed

discussion of his evidence of relative institutional performance and levels of civic engagement:

Social capital here refers to features of social organisation, such as trusts, norms and networks, that can improve the efficiency of society by facilitating coordinated actions (Field, 2004: 31).

This definition is not much different from one offered later in the 1990s. In 1996, he stated that with social capital he means features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives. The only difference here is changing "society" to "participants" as the beneficiaries of social capital. Notably then, Putnam argues that the core idea of social theory is that social networks have value. Moreover, social contacts affect the productivity of individuals and groups.

An element noted by Putnam that is of particular interest to online communities set within digital domains is trust. Trustworthiness in a digital domain is more difficult to ascertain due to the absence of many of the usual cues present in human interaction. Trustworthiness goes hand in hand with reciprocity as an essential element of the norms that arise from social networks (Field, 2003: 32).

At this point, it is necessary to note how these definitions and other definitions mix a number of disparate ideas. One such combination is the mixing of functional and causal conceptions of social capital. When social capital is defined as a set of norms or values that facilitate cooperation and efficiency, this is a functional notion. In contrast, when it is argued that the cooperative behaviour of others leads to expectations under which cooperation is individually rational, this is a causal notion. It seems self evident that causal definitions of social capital are necessary for successful empirical analysis, so the extent to which studies are careful about this

distinction is important. Standard social capital definitions also mix very different notions of individual motivation. The roles of altruism and fairness in motivating individual decisions are not always recognised. Yet, other analyses accept the standard model of preferences.

4.2 Complexities and main issues

Without a question, the twentieth century has been widely described as one of ever-increasing change. Scholars have focussed on the impact of constant change on human interaction and subsequently on social capital. Field (2003: 92) cites Schuller et al. who claims that social capital also matches the spirit of an uncertain or so-called "questioning age". However, in the Information Age characterised by computer-mediated communication, Castells for example does not consider it to be a general medium of communication in the near future since it is limited mainly to an educated segment of the population of the most advanced countries. This view could soon be offset, as an increase in bandwith and a decrease in cost make permanent fast connections a reality for many – at least in America and parts of Europe. However, information technology, in particular, and scientific advance in general have brought enormous growth in humanity's capacity for control over its destiny. The views of sociologists regarding what has come to be called the postmodern world cannot be ignored, for example Giddens.

For Giddens (1990), the reflexive project of the self is an inescapable fate involving a continuous refashioning of social life. Weber, although writing at the turn of the last century, contrasts premodern society's reliance on direct interpersonal connections as a source of social solidarity and order with modernity's distinctive reliance on impersonal regulation and bureaucratic organisations. As Field notes, (2003: 93) Weber might have underestimated the extent to which formal ties survived modernity and enabled people to do things despite the numerous rules and elaborate

hierarchies that surrounded people's lives at the time. Organised routine, however, has been replaced by "disorganised capitalism" or "postmodernity". Understandably, against the background of these and other developments such as the expansion of the Internet, it is relevant to question the role of social capital in a so-called postmodern world.

Outlined in Chapter Four of this study, a network analysis of a computer-mediates social network visualise the extent of connectivity among people who forge social ties within a digital domain. In this instance, the so-called new technologies are agents within the postmodern world which influence social capital by allowing people to develop new types of connections alongside their existing networks. In this regard, travellers who exchange information and socialise using an electronic discussion board is in many ways similar to travellers sitting in an airport terminal and interacting; the exchanges are real. Hampton and Wellman (2003) ask: What is the Internet doing to local community? According to these two authors, analysts have debated whether the Internet is weakening community by leading people away from meaningful in-person contact; transforming community by creating new forms of community online, or enhancing community by adding new means of connecting with existing relationships.

While new technologies influence socialisation and impact on groups, another aspect that transpires considering the wide-ranging impact of the Internet and its global reach is globalisation. Giddens (2001: 51) states that the term is used to refer to those processes which are intensifying world-wide social relations and interdependence. It is a social phenomenon with vast implications. While there are different dimensions of globalisation, a factor of note that contributes to this process is global communication. While the telephone, radio and television play their respective roles in facilitating mass communication, the Internet has been heralded as the fastest-growing communication tool ever developed (Giddens, 2001: 53).

4.2.1 Reciprocity and trust

According to Schuller (2001) social capital focuses on networks: the relationships within and between them, and the norms which govern these relationships. Although this does not necessarily entail a specific value position on the part of those who use it as an analytic device, it has strong normative connotations, implying that trusting relationships are good for social cohesion and for economic success. However, strong ties can also be dysfunctional, excluding information and reducing the capacity for innovation. There can be negative normative associations as well as positive ones – so that some networks embody the "dark side" of social capital, to the detriment of the wider society and even of its own members.

This focus on relationships underpins the relevance of social capital to the issue of social cohesion. The more positive normative approaches stress the social benefits, sometimes in a simplistic fashion. Social capital is both a consequence of and a producer of social cohesion, though not necessarily in the static sense that this might appear to imply. Putnam in particular argues that at the level of community, enterprise or nation, the quality of life (even of the more affluent) will be higher if membership of the community brings with it active participation. This should encourage us to build social capital directly. Where there is a dark side, this should alert us to the way networks can act against social cohesion.

Analytically, therefore, social capital has a close relationship to the debate on social cohesion. It has been noted earlier that being connected is considered a resource in itself in as far as socialising with others is a rewarding experience in its own right. It is a known fact, however, that people also make use of their connections to obtain other benefits. Field notes in this regard that there is enough evidence in recent research about social capital to suggest that strong positive links exist between social capital and educational attainment, economic success, health and freedom from crime. Field rightfully remarks that social capital alone cannot be responsible

for such positive spinoffs and that much more needs to be known about the variety of ways in which social ties work to engender such significant effects as those outlined above (2003: 62).

There is enough evidence to suggest that in order for people to cooperate, they need to have some previous knowledge of one another, they need to trust one another, and expect that if they cooperate then they will not be exploited or defrauded but can expect to benefit similarly in return. Above, Giddens is mentioned as a notable author regarding views on the postmodern world. Giddens also expresses particular views regarding the importance of trust in modern societies that are dominated by abstract systems and great time-space distanciation. Giddens defines trust as:

confidence in the reliability of a person or systems, regarding a given set of outcomes and events, where that confidence expresses a faith in the probity or love of another, or is the correctness of abstract principles (technical knowledge) (1990: 34).

The need for trust is related to this distanciation. According to Giddens (1990: 19), there is little need to trust someone who is constantly in view and whose activities can be directly monitored. However, with an increase in distanctiation, people no longer have full information about social phenomena.

4.2.2 Different forms: bonding and bridging

Considering trust within the context of social capital, it reveals certain complexities in the concept. As Field remarks regarding initial uses of the term, it has "inevitably been rather perfunctory and even sloganistic in nature" (2003: 65). Coleman for

example has tended to represent close and direct interpersonal ties while Putnam tends to express particular positive views about community. Bourdieu on the other hand consider connections as a buttress of privilege.

However, Putnam is the one particular author of the three most important ones working on social capital that has gone the furthest in embracing a differentiated approach to social capital. Putnam too distinguishes between bonding and bridging as forms of social capital. The meanings are explored below:

- Bonding: Exclusive social capital is based around family, close friends and other near kin. It is inward-looking and binds people from a similar sociological niche. It tends to reinforce exclusive identities and homogenous groups. This is good enough for getting by.
- Bridging: Inclusive social capital links people to more distant acquaintances
 who move in different circles from their own. It tends to generate broader
 identities and wider reciprocity rather than reinforcing a narrow grouping. This
 is crucial for getting ahead.

Linking capital is crucial to leverage resources, ideas and information from contacts outside one's own social milieu. While Field mentions the impact this can have on community development policies and other anti-poverty strategies, linking capital can surely influence social capital formation on a much smaller level such as tourists exchanging information about a spectacular site or the best means of transport or backpackers contemplating whether to travel together to the next resort.

As explained in more detail in Chapter Three and integrated into Chapter Four, bridging and bonding capital relates closely to the strength of ties as applied in social network terms. Granovetter (1973) was the first scholar to investigate the influence of weak ties in social analytical terms as applied to jobseekers. Working along these

lines, Lin considers the influence of strong and weak ties in terms of social capital. For Lin as mentioned by Field (2003: 66), strong ties are those which follow the principle of "homophily" binding people with others similar to themselves. Weak ties bring people together from different social and cultural backgrounds. Moreover, Lin also contrasts the kinds of resources and purposes which different types of social capital deliver.

As outlined in more detail in Chapter Four, weak ties may be better at serving instrumental goals as they can provide access to new types of resources but rely less on strongly shared values.

4.3 Travel information as a resource

Literature covering travel and travel information exchange include those studies that reflect on travel information exchange within a network lending impetus to a structural approach to the leisure studies. Relevant studies in this regard are limited. This concurs with Murphy's (2001: 66) findings about information exchange among backpackers that further investigation is needed to understand how information is passed on to and received by others once they return home. Moreover, the majority of works in this area have been concluded before the popularisation of the Internet and integration of the WWW into everyday society. Pew Internet & American Life Project found in 2002 that 11% of American Internet users went online to make holiday travel plans and reservations. It is subsequently noteworthy that the importance of understanding the role of the Internet as a channel for travel information exchange is not researched with greater vigour.

There are however a number of relevant studies considering travel information exchanges. Frew (2000) explores the research corpus emerging through the application and interaction of information and communications technologies (ICT)

with tourism. Pyo and Chang (2002) consider knowledge discovery in databases a useful tool for destination management. According to them, destination knowledge management requires a multidisciplinary approach and an understanding of tourism.

Breiter and Feng (2004) examine the relationships between tourists' purchase decision involvement and their information search behaviours. The behaviours include their information preferences as measured by perceived value of different types of information contents, and their use of the Internet as an information channel. They present the relationships in a proposed conceptual framework of the tourist information search process and test it through two hypotheses using a survey sample. According to them findings reveal that tourist information preferences significantly differed from one level of purchase decision involvement to another in seven out of thirteen instances. These authors also found that there are significant differences in using the Internet as a destination information channel from one level of purchase decision involvement to another.

It is however, the study of Wang and Fesenmaier (2004) that contributes most to the understanding of online travel communities. In their study, they achieve this by extending and empirically testing a conceptual framework of online travel community member needs. The relationships between member needs and their level of participation in an online travel community are examined and in addition the effects of duration of membership on levels of participation and the role of demographic differences in terms of member needs and participation are explored. Given the importance as empirical study, reference to their findings is included in Chapter Four, while similarities in their conclusions with the conclusions reached in this study are outlined in Chapter Five. Together with Stokowski's work (1988) on structure and travel information exchange, this represents the most important empirical work relevant to this study.

However, employing a structural approach in network analytical terms to travel information is limited as mentioned below. The development of this approach is outlined below. While cyberculture studies and studies about the Internet enquire into the social significance of the social interaction in computer-mediated environments, the social network perspective is also extended to leisure studies. In this regard, questions revolve around the social significance of leisure and recreation. The social groups model, first put forward in 1962 by the Outdoor Recreation Resources Review Commission (ORRRC), suggests that people visit recreation places primarily with others, rather than alone and that the others usually constitute a recognisable social group.

Stokowski (1990: 251-252) outlines the contributions of Burch who proposes that personal communities are the basis for recreation involvement. Evidently, the nature of the intimate social circles which surround the individual may be the determinant of variation in leisure behaviour. The personal communities hypothesis suggests that different people select different recreation activities and styles throughout life on the basis of the influence of family, friends and workmates. Based on this, socialisation into recreation occurs because of personal influence, communication and involvement with primary group members and significant others. Reasons Stokowski (1990: 252) gives why the social groups model has fallen short of expectations in the study of leisure include:

- In operation, social groups studies sometimes disintegrate into mere taxonomies of groups.
- The associated socialization processes and interaction features within and between groups remain incompletely analysed.
- In structural terms, the groups model is an over-simplified explanation of recreation behaviour.
- The narrow focus of studying social groups on site ignores the broader community implications of Burch's personal communities theory.

Resultantly, Stokowski (1988) offers an alternative paradigm, namely social network analysis but points out that a few sociologists have employed some limited measures of leisure and recreation behaviours in their social network analyses. She cites the works of Bott (1955) and Fisher (1982). Similarly, few leisure and recreation investigators have applied network analytic techniques in their work. She cites four, including her own work, namely:

- Allen (1980) studied the network ties among several hundred children who attended environmental education programs at nature camps.
- Eckstein (1983) surveyed visitor groups at several Michigan campgrounds and resorts to determine how tourists obtained information about travel destinations.
- Cobb (1988) examined network structures of influence and referral among business leaders in four Michigan resort communities.
- Stokowski (1988) analysed and compared the community networks of sociability with the recreation of networks of a sample of residents in a rural Washington state town.

Brought into the realm of cyberculture studies and this study in particular, a network perspective enables a greater understanding of information exchanges among travellers and how computer-mediated social networks facilitate such exchanges. Moreover, social capital rests upon the notion of networks and social ties – both concepts being relevant to online discussion groups such as the one investigated by this study.

As suggested earlier in this chapter, social capital is a sociological construct that is increasingly gaining currency within a variety of social scientific fields, including leisure studies. However, as noted by Glaeser (2001) we are only at the beginning of research on this topic, and social scientists have already made a strong case that

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social capital is extraordinarily important in many domains. In this study, social capital is explored within the context of travel information exchanges.

Like other forms of capital, social capital rests upon the notion that an investment in social relations will result in a return that will benefit the individual. Unlike other forms of capital, however, its maintenance and reproduction manifests themselves through the social interactions of members and their continued investment in social relationships. By drawing on the social capital made possible by relationships, individuals can further their own goals through their social ties. Subsequently, certain aims can be achieved that cannot be realised by unconnected individuals. As suggested by this study, sharing travel information could be beneficial in all kinds of ways to the travelling fraternity but also to hosts.

Hemingway (2005) is of the opinion that the initial burst of enthusiasm over social capital is now being tempered by increasing criticism. There are, however, some exceptions but these are not reflected in discussions of leisure and social capital. Instead, these remain dominated by Putnam's early formulation of social capital as a combination of social networks, cultural norms, and generalized trust, grounded in historically persistent social structures and patterns of associational activity. Hemingway (2005) remarks that after undergoing what might be called a "psychological turn" followed by a "cultural turn," it is unsurprising that leisure research emphasizes norms and trust over social structure as social capital's constituent elements of social capital while almost entirely ignoring its historical dimensions.

Hemingway (2005) furthermore notes that few leisure researchers have noted that Putnam shifted his ground in later accounts, now finding social capital's sources in social structures rather than cultural norms and redefining trust as an outcome, not a source of social capital. These shifts mirror central themes in recent debates: Is social capital conceptually coherent? Can it be satisfactorily operationalised for

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empirical research? Are its sources structural or cultural? Is it a functional artefact or the product of intentional activity by discrete social agents?

Addressing these questions Hemingway (2005) is of the opinion that researchers will be unable to clarify leisure's relationships to social capital and how these affect community development. For the moment, social capital's primary value in leisure research is heuristic rather than substantive. Social capital illustrates the field's need for explicitly conceptual and theoretical analysis, redirects attention to the significance of social structures, and raises questions about the purposes of leisure research, including its relationship to social policy and action. Ultimately, it challenges the field to engage in truly transdisciplinary inquiry, as an excursion into the relationships among leisure, social capital, a resource model of citizenship, and civic competence is intended to illustrate.

In concurrence with Glaeser (2001), it must be pointed out however, that the weakness regarding research in social capital is not in either the theory or the empirical work on the effects of social capital. Instead, the real weakness is the lack of both theory and empirical work focussing on the causes of social capital. If scholars are going to change the level of social capital, they must have a coherent model of the formation of social capital and a body of empirical work that they trust about the formation of norms and networks. Clearly, this is not to suggest that Putnam and others such as Coleman have not done important work in this area, but rather that such work is subordinate to research documenting social capital's effects.

5. Conclusion

An overview of important empirical studies relevant to the various aspects of this study has been outlined above. Attention has been given to the Internet and cyberculture studies, while those scholarly contributions exploring a network approach have also been demarcated, but more specifically a network approach to a greater understanding of leisure choices in as far as it manifest in travel and tourism. Stokowski (1988) points out that leisure choices depend on information and that sources of information such as family and friends can play a pivotal role in leisure choices. Although the Internet with its many-to-many capabilities via computer-mediated communication plays an important role in connecting people, its place within the tourism industry is also highlighted.

Gauntlett (2000: 3) claims that much has been written about communities on the Internet since Rheingold first published *The Virtual Community* in 1993. However, not long before that, Castells (1996) remarked that computer-mediated communication was at the time too recent and has been "too narrowly experienced to have been the object of rigorous, reliable research." He states that

[m]ost of the often-cited evidence is anecdotal and some of the most accurate sources come in fact from journalists' reports. Furthermore, changes in technology are so fast and the diffusion of CMC is so rapid that most of the available research from the 1980s is hardly applicable to social trends in the 1990s, precisely the historic moment when the new communication culture is taking shape (1996: 358).

Castells (1996) does outline some views on computer-mediated communication, based on a "non-exhausted review of social sciences literature on CMC". In these

views, he suggests some tentative lines of interpretation that consider the relationship between communication and society in as far as it employs computer-based interactive technology. He claims:

[i]t is methodologically useful to discuss the social implications of new communication processes within the constraints of reported evidence (1996: 358).

Costigan (1999: xxii) claims that community as a construct is "perhaps the most interesting aspect of the Internet". Community online is fluid -- perhaps because persona and identity are different, perhaps because structure and time are different, perhaps because the channels are different. Unlike offline, online communities are often constructed and destroyed not because they have challenges with structure, as Carey suggests, but because the connection is not time sensitive. Messages are not necessarily sent in real time and can often remain on listservs or in digests for months or years. If one believes that the community exists as long as people are reading and participating with and through these messages, then the community may come and go as people discover the messages.

Community relationships formed online allow access and intimacy not transferred to other situations. Online messages can be sent at any time and to anyone and can be responded to when time is available. This level of access does not transfer to face-to-face situations where different social, personal, and community rules exist (Jones, 1999: xxii).

Mitra and Cohen (1999: 192) ask about analysing the WWW, where to begin, given the large volume of WWW texts and that these texts are intertextually connected to each other. Although the use of metaphors and concepts are used to ease our understanding of the Internet, when the focus shifts to the Internet as fostering

community, a necessary question has often been left unanswered: When is a community a community? Is it perhaps when people communicate and there is discussion and exchanges of all sorts? Considering the use of "virtual" as a concept to distinguish the digital domains from the real world, problems soon arise. Certain things cannot be virtualised, such as friendship despite the possibility that it might only be based in cyberspace. While cognisance is taken of Holmes (1997) and views about how technologies influence community, in this study, the concept "virtual community" is considered misleading if not impossible.

This view is substantiate on the findings of Erickson and Fernback as cited by Ridings and Gefen (2004) who state that although the connection to others through the Internet is key to a virtual community, the notion of a community is not applicable to all sites of on-line discourse. Some discussion groups and chat rooms, for example, are just places for people to meet without any sense of permanence or consistency among the members. For example, chat rooms exist that cater to single people looking to meet other single people, each room having a different mix of people each day, none returning on a regular basis. Such chat rooms, because they lack a regular basis of participation by their patrons, do not qualify as a virtual community.

Frequency of participation is another factor that influenced the decision to apply the concept virtual community in this study or not. Typically, members become attached to their communities and visit them often, sometimes becoming so dependent upon the community that they can be described as addicted (Hiltz, 1984). Although the literature does not specify what particular visit frequency makes a member an active one, a virtual community is generally understood to consist of persistently interacting members (Smith, 1999). Likewise, Figallo (1998) suggests that virtual communities are those where members feel part of a larger social group, sense an interwoven web of relationships with other members, have ongoing exchanges with other members of commonly valued things (such as information about a common hobby),

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and have lasting relationships with others. However, without any conclusiveness about the concept virtual community, in this study preference is given to "computer-mediated social community" or "computer-mediated social network".

Apart from exploring theoretical aspects surrounding the Internet, cyberculture and computer-mediated communities, the concept of social capital is covered too. While social capital is closely associated with networks, it also employs network analysis as a research technique to investigate social capital. Moreover, the exchange of travel information studied from a network perspective considers such information exchanges as a form of social capital present among travellers.