TRAINING THE MALE STUDENT ACTOR’S PERFORMANCE VOICE FOR OPTIMIZED EXPRESSION OF INTENT AND EMOTION

by

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A dissertation submitted in fulfilment of the requirements for the degree MAGISTER ARTIUM in the Department of Drama FACULTY OF HUMANITIES UNIVERSITY OF PRETORIA

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June 2014
DEDICATION

This study is dedicated to my loving parents, Hester and Attie Steyn and my stalwart grandmother, Maria Ada, who played a significant part in shaping the person that I have become. Thank you very much for continually inspiring me, your voices and love are of a never ending value!

“Namaste!”
ACKNOWLEDGEMENTS

The magnitude of this project at times became almost overwhelming and the culmination hereof would not have been possible were it not for the incredible group of people and institutions that stood by me throughout this process. Without all of them this project would not at all have been possible. I would like to express my gratitude towards the following people:

- Prof Marth Munro, my supervisor, for her continuous and unwavering support, insight and guidance. Specifically, I will not forget her patience, efforts and perseverance over the past two years and I am greatly thankful to have met and work with her!
- Prof Marié-Heleen Coetzee, the head of the Department of Drama, University of Pretoria, for being a constant source of support and guidance.
- The Dean of the Faculty of Humanities, University of Pretoria, Prof Norman Duncan for supporting this research.
- I thank the NRF for providing me with a NRF Masters Innovation Scholarship. I acknowledge that opinions, findings and conclusions or recommendations expressed in this dissertation, partially generated by the NRF support, are my own, and that the NRF accepts no liability whatsoever in this regard.
- I wish to thank the University of Pretoria for granting me the opportunity to be an intern at the Drama Department. It is highly appreciated!
- I extend my gratitude to Prof Allan Munro for his inspiration and guidance with regards to scholarly writing. He has been there since my undergraduate training.
- My parents, for always enquiring about the project. Their numerous gestures of love and hope supported me when times became very tough.
- My grandmother, from whom I have learned some of the greatest lessons and who is an essential part of myself. Namaste! She continues to be a driving force in my life.
- To my late brother, Tasswell, who did not live long enough to see this project to fruition. I am assured that he would have supported me all the way throughout this journey. REST IN PEACE!
• To Adrian I extend my deepest gratitude for always being willing to listen and laugh at my rants! Furthermore, his expressions of concern at times kept me motivated!

• Gavin Matthys I thank for everything, but particularly his friendship and continuous support. He was always ‘there’, and his incredible value is beyond measure!

• Mrs Yvonne Rabie who followed this project with support and bounteous encouragement (and at times expressed a deep concern!) — I value her support.

• Mrs Elsa Schaffner for her willingness to always source research material.

• Elbie Oosthuizen for her support and advice. Thank you very much.

To everybody that expressed an interest in this project, I value all of you.
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ABSTRACT

A significant part of an actor’s craft is creating and presenting characters with substantial credibility in order to stimulate a belief in the character from the point of view of an audience member (McGaw 1975; McGaw et al. 2011). To do this the actor relies on and utilizes his body, voice, imagination, experiences and so forth, for the creation of such characters (Zarrilli 1995; Benedetti 1998:5; Zarrilli 2002). This makes body and voice training within any actor training program pivotal.

As an entry-level voice teacher in the tertiary situation I was confronted with a complex profile of the group of students to be taught. This profile influences or even determines the outcomes of the teaching opportunity. Gender differences were one of the most eminent markers of this complexity. For this project I decided to research the male voice as it possibly requires specific approaches to assist with the attainment of vocal ability.

This study is concerned with the unique precepts of the male student actor in order to gain greater understanding of both the male physiological and anatomical construct, as well as the socio-cultural concept of ‘maleness’ as it refers to voice. Voice, in a cultural and societal paradigm, is subject to and as such influenced or shaped by social identity (Karpf 2006: 121). The actor’s socio-cultural paradigm potentially limits the vocal function and expression of the male voice in performance. This study draws on prior research when documenting unique and substantial structural differences typical of the male voice. It asks the question: What are the attributes that feed into the male student actor’s voice that have to be taken into account by the theatre voice teacher when viewed through anatomical, physiological and socio-cultural lenses?

In order to answer the investigative question chapter two of this study consults scholarly materials concerning the various anatomical and physiological attributes of voice production (that is, its functional aspects) with specific reference to the male voice. It is argued that this can be seen as a description of voice production as object. Chapter three concerns itself with the impact of various socio-cultural influences on the voice with specific reference to the male voice. In this sense, the potentially subjective and image-defining concerns of the male voice that might impinge on vocal explorations are considered. Chapter four provides example
explorations that may be used in a theatre voice class to indicate how the knowledge gained in chapters two and three will influence the facilitation of these explorations. It argues that it is an in-depth knowledge of voice, where voice materialises simultaneously both as object and as subject, that prepares the entry-level voice teacher to facilitate the development of the male student actor’s voice in a holistic manner.

This dissertation concludes that, within the theatre voice training class, it is imperative that the voice teacher acknowledges and respects the sex-gender conflation of the male student actor and encourages him to explore and build a ‘voice’ that is capable of optimal expression in lieu its functional capabilities.

KEYWORDS

- Theatre voice training
- Entry-level voice teacher
- Voice production
- Male student actor
- Anatomy
- Physiology
- Socio-cultural
- Identity
- Self
- Hegemonic masculinity
- Alternative masculinity
CHAPTER ONE
INTRODUCTION

1.1 CONTEXTUALISING THE STUDY

A significant part of an actor’s craft is creating and presenting characters with substantial credibility in order to stimulate a belief in the character from the point of view of an audience member (McGaw 1975; McGaw et al. 2011). To do this the actor relies on and utilizes his body, voice, imagination, experiences and so forth, for the creation of such characters (Zarrilli 1995:11; Benedetti 1998:5; Zarrilli 2002). In essence, in the glare of the performance, the actor only has his body and his voice as physical resources to display, depict, and express the intent and emotion as applicable to a specific character. This makes body and voice training within any actor training program pivotal.

The human capacity for self-expression is constituted by physiological, psychological, emotional, and anatomical uniqueness. The causal relationships between these distinctive functional and expressive attributes differentiate human beings from one another and result in individuals having distinctive and unique abilities, for example (Titze 1994; Hackney 2002). If an actor gains perspective of, and insight into, his own physical resources, it would enable him to cultivate those abilities necessary to embody and envoice character(s) (see Gordon 2006; Linklater 1997). To this end, actors receive specialised training in the individual uses of their bodies and their voices (Zarrilli 2002; Berry 1973; Lessac 1981; 1996; Hackney 2002), as well as the integration of the body/voice (Lessac 1981; McGaw et al. 2011).

As an entry-level voice teacher in the tertiary situation I was confronted with a reality I was not necessarily prepared for during training. In any theatre voice training situation a complex profile of the group of students to be taught influences or even determines the outcomes of the teaching opportunity. The most obvious marker of such complexity is the gender difference as it appears in the class set-up. From this I

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1 This dissertation concerns itself with the male student actor. As such, use of gender specific pronouns will only be used, as they apply to the situation under discussion. Therefore, the male pronouns will be used, unless female pronouns are required in context.
2 For the purposes of this study, the ‘anatomical’ refers to the physical mechanism of the body, and the ‘physiological’ refers to the way the anatomical mechanism functions.
assumed that the male voice requires different approaches to assist with the attainment of a deliberately enabled vocal ability or flexibility. It is in trying to grapple with the complex profile of the group of students that I decided to specifically investigate the unique precepts of the male student actor in order to gain greater understanding of both the male physiological and anatomical construct, but also what constitutes ‘maleness’ (and how these two constructs might or might not influence each other) so that I might better be able to facilitate the development of the male student actor’s voice in a holistic manner.

As such, this study focuses on the male student actor’s performance voice. The aim of the study is to delineate the specific attributes of the male voice with particular reference to the distinctive functional and expressive potentials and/or limitations of the male student actor’s voice. An understanding of the unique attributes of the male voice will serve as a baseline to explore training strategies that will potentially optimize theatre voice training in and for the male student actor, in preparation for the creation of multiple stage characters, within a theatrical performance context.

The conceptualisation of a character suggests that the actor is required to shape, in conjunction with his own cultural and ideological paradigms, the mind (or at least the intentions), body and the voice of a specific character (Zarrilli 2002: 85-95; McGaw et al. 2011) and often demarcate his paradigms from the character’s. Inevitably, an actor would employ his anatomical and physiological framework (the body) to fulfil this purpose. This suggests the important synchronisation between the body, mind and voice in the act of performance. However (and critically for this study), if the body of the actor is culturally shaped (see Noland 2009; Merleau-Ponty 1962; Johnson 1987) then the relationship between the functional and expressive qualities of the actor’s voice must, inevitably, also be culturally shaped.

If the actor works towards and/or explores a process of the physical manifestation of sound within his own body (which is both anatomical and physiological, and bound to his own paradigm), the actor engages in a process that is preparatory for the revelation of the character’s thoughts, emotions and, consequently, actions. The overriding purpose of voice is to express thoughts and feelings. According to Linklater (1976: 101) and Rodenburg (1997), the ability of human beings to envoice

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3 This source was directly cited from a kindle; page numbers could not be provided due to the constant change in location; instead the chapter was provided as a reference.
the interrelationship of thoughts and emotions often traces back to a process of familiarization with oneself. Voice as a ‘gestural routine’ as such, starts to reveal aurally the uniqueness of the individual actor’s voice (which, in turn may or may not influence the creation and perception of the character’s voice). The notion of a ‘gestural routine’ forms one of the basic tenets of this study. According to Noland (2009)

… gestures are a type of inscription, a parsing of the body into signifying or operational units; they can thereby be seen to reveal the submission of a shared human anatomy to a set of bodily practices specific to one culture. At the same time gestures, clearly belong to the domain of movement; they provide kinesthetic sensations that remain in excess of what the gestures themselves might signify or accomplish within that culture.

Cavarero (2005: 5) asserts that “voice… communicates. What it communicates is precisely true, vital, and perceptible uniqueness of the one who emits it.” Working on the actor’s voice implies that the actor works on (1) retaining, training and expanding the potential of his functional and expressive physiological voice sound, after which (2) he works on cultivating a perspective of optimizing self-expression abilities in preparation (3) to vocally express a character’s intent, thought and emotion with an audience. Critically, this dissertation argues that the physiological voice cannot be treated as a generic, humanly shared mechanism or construct only, as it is shaped, enhanced, censored and consequently developed by the socio-cultural paradigmatic expectations of the individual actor. Such socio-cultural paradigms significantly include concepts of ‘maleness.’

1.1.1 Anatomy and physiology – voice as object/instrument/mechanism

As the male and the female voice have significant generic differences physiologically, it is implied that the male and the female voice have different challenges. However, the manifestation of voice sound, according to Kent (1997: 134), signifies that voice and speech, in concordance with their anatomical and physiological functioning, fulfil both a ‘public’ and ‘individualistic’ aspect.

The questions that arise are: what if the male student actor’s voice is not able to effectively and credibly express the intent and the emotion of a specific character? What if the male student actor is able to characterize and state (cognitively, for example) the character’s intent, his objectives or problems and super-objectives accordingly, but fails to successfully envoice the character’s thoughts and feelings in
these contexts and in performance? Confrontations, encumbrances or interferences with the vocal expressive unit, as a consequence of the inner and the outer worlds of the actor (and, in time, therefore, the character in performance), may be viewed as limitations placed on the potential vocally expressive modality of an individual.

The argument might be presented in another way. The male student actor’s own voice usage is shaped by his own anatomical/physiological uniqueness and therefore, by extension, his own socio-cultural expectations. If he were called upon to perform a character which assumes a different emotional and socio-cultural background, it is cardinal to have the capabilities to meet the demands of that portrayal (as far as this is humanly possible). If the voice as a physiological construct is optimally developed for that particular actor, he will be able to envoice the dynamics of a character distinct from his own socio-cultural background and/or emotional profile.

1.1.2 Voice as marker of identity, self, and a socio-culturally determined entity

Socio-cultural expectations shape the functional and expressive vocal capabilities of the male student actor’s performance voice as a distinctive apparatus. The voice is a product of the physiological and anatomical (that is to say ‘bodily’) processes. As such the relationship between the functional and expressive qualities of the actor’s voice is also culturally shaped. This suggests a significant synchronisation between the body, mind and voice of the actor in performance.

Voice, owing to cultural and societal expectations, reflects a normative notion of appropriateness of vocal sound and usage within a specific paradigm. This paradigm includes socio-cultural norms as well as personal uniqueness. Voice, in a cultural and societal paradigm, is thus both subject and connected to a social identity (Karpf 2006: 121). Accordingly, social roles are adapted, and these roles are inevitably ‘imposed upon’ most individuals within a specific cultural paradigm. This often leads to a ‘masculine’ versus a ‘feminine’ usage of the voice (Caverero 2005: 6-7; Connell 1995). Consequently males and females are categorized into an expectation to feel, emote, embody, and essentially verbalize expression in a socio-culturally appropriate manner. One can therefore argue that males, in comparison to females, are subjected to potentially experience the inner and outer worlds in a structure of patriarchy, of socio-cultural appropriateness (Ruth 1995; Connell 1995; 2002).
The inclination to conform to a societal normative could potentially be viewed as a simple, yet defining factor that impacts on individual perception and identity (Karpf 2006: 119-121). Identity, according to Calvino (as cited in Cavarero 2005: 2), frequently reflects in and on the uniqueness of the voice. The voice becomes a pivotal reflection of the human being’s identity and persona.

Anatomy and physiology are subsumed and submerged into an almost ‘codified entity’, in which case optimal physiological function and expression possibilities may be limited. For the male student actor, these provisional considerations within a socio-cultural paradigm pose remarkable challenges, as the nature of performing arts necessitates the shaping and portraying of multiple embodied and envoiced characters as a rudimentary facet of an actor’s craft. It can be argued that the socio-cultural voice possibly uses only a limited part of what the voice as physical entity can accomplish.

1.1.3 Linking anatomy/physiology and the socio-cultural identity

The elemental sonorous uniqueness of an individual’s voice could be inhibited or impeded through socio-cultural demands. The “primacy of the acoustic sphere” (Caverero 2005: 19) as potential of the physiological voice is conditioned and hampered insofar as the expression of a character’s thoughts and feelings may pose challenges for the actor as an individual, and, consequently, within the task of characterisation.

Owing to anatomy and physiology, every individual — irrespective of sex⁴ differences — possesses a uniquely ‘tuned’ vocal apparatus which offers distinct and dynamic acoustic qualities which often remain unfamiliar, due to social patterning (also see Caverero 2005: 8-9). Noland (2009: Chapter 2) asserts that an “individual’s motor repertory is not limitless, but it is certainly richer than any culture can encode. We are each of a self-disclosing motility, the parameters of which undoubtedly exist but remain unknown.” The functional and expressive possibilities of the physiological body and therefore the voice are thus substantive, as the possibilities for optimizing potential is embedded within the physiological processes.

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⁴ The defined differences between ‘sex’ and ‘gender’ will become crucial in Chapter 3 and will be engaged with comprehensively there. At this juncture, ‘sex’ refers to the anatomy and physiology of the body, and ‘gender’ will refer to the socio-cultural ‘conditioning’ of that body.
1.2 Existing approaches

A preliminary investigation of the major and currently existing Western theatre voice approaches (Berry [1973; 1997; 2007], Fitzmaurice [1997; Morrison 2009], Hart [Pikes 1999], Linklater [1976; 1997; 2006], Lessac [1997; 1997 1981] and Rodenburg [1992; 1997; 2008]), indicates that these approaches tangentially, and in varying degrees, acknowledges the socio-cultural paradigms, but none of them addresses the unique attributes of the physiological male voice specifically. The investigation clearly indicated that there is not sufficient differentiation between the male and the female voice in theatre training approaches which attend to the potential of the male student actor’s voice for the expression of a dimensional vocal range as far as functionality, intent and emotion are concerned — in preparation for the portrayal of a character. Nevertheless, I contend that the entry-level voice teacher has to be familiar with these differences in order to facilitate the development of the male student actor’s voice in preparation for expression of emotion and intent.

In order to determine the functionality of the current major vocal approaches used perhaps universally but particularly in the Western-influenced training regimes, it is vital to provide an overview of the systematic outlines of each of the various theatre vocal approaches and their deployment towards training the male voice.

1.2.1 Arthur Lessac

The Lessac Kinesensics vocal approach firmly centres its pedagogy on the notion of promoting an awareness of sensory images and kinaesthetic feedback (physical sensation) towards physical manipulation of the vocal tract, as a means to encourage a process of habitual awareness and “active relaxation” (Lessac 1997: 46; Raphael 1997: 209). Lessac furthermore centres his work on the concept of ‘Body Wisdom’. ‘Body Wisdom’ fundamentally explores the premise of body functionality — i.e. the body’s functionality when liberated from adverse conditioning (Lessac 1981: vi-30; Lessac 1997: 13). ‘Body Wisdom’ empowers an ability to reconstruct an awareness of bodily knowledge which in turn cultivates a “complex source of our self-image making” (Lessac 1997: 15). Lessac posits that Body Wisdom encompasses vocal functioning (Lessac 1981; Lessac 1997: 16-17). Fundamentally, Lessac employs three vocal actions or NRG’s (Neurological Regenerative Growth) for organic voice training. These include the Kinaesthetic
Structural NRG, Tonal Resonance NRG, and Consonant Instrumental NRG. Structural NRG involves the shaping of the vocal tract to free excessive tension in the oral cavity, in order to encourage a ‘free’ voice through subjectively sensing the shaping (Lessac 1996: 160). Tonal NRG promotes the physical sensation of vibrations through bone conduction to create vocal sound that projects effortlessly without the likelihood of injury (Lessac 1996: 122). Consonant NRG metaphorically attributes a musical instrument in conjunction with its vibratory characteristic to each consonant sound (Lessac, 1996: 63-119; Raphael, 1997: 209). According to Barton and Dal Vera (2011: 365) Lessac’s work is the best guide to the production of a “beautiful tone”. This is due to the Tonal NRG facilitating the optimal acoustic output of the voice (Munro, Leino & Wissing 1996; Barrichelo-Lindström & Behlau 2009). Critically, therefore, Lessac Kinesensics engages with the anatomical and physiological functioning of the voice, acknowledges the move from this functioning to the performance of voice, accepts that there are potential obstacles to the optimal functioning of the voice due to personal holding patterns. Lessac Kinesensics does not declare specifically that these holding patterns might be due to socio-cultural routines. It does note that personally unique holding patterns impinge on optimal vocal production. At no time does Lessac Kinesnesics clearly differentiate between the differing demands of sex and gender/the socio-cultural.

1.2.2 Catherine Fitzmaurice

Fitzmaurice’s vocal approach fundamentally concerns the relationship between breath and its effect upon vocal emission (Fitzmaurice 1997: 248; Saklad 2009: 46). Drawing from bioenergetics, yoga and shiatsu, Fitzmaurice fundamentally employs ‘Destructuring’ and ‘Restructuring’ (these are Fitzmaurice’s terms) as strategies to assist the actor in embracing and exploring a full-bodied tonal quality (Fitzmaurice 1997: 248-249; Saklad 2009: 46). ‘Destructuring’ engages with and encourages the liberation of superfluous tension held in muscle tissue that affects breathing (Fitzmaurice, 1997: 249). ‘Restructuring’, as a counterpart of ‘Destructuring’, maintains adequate support through organising the body for enhanced vocal tonality for a variety of delivery choices in pitch, rate, volume, and tone, to promote spontaneity and connection to impulse for optimal artistic expression (Fitzmaurice 1997: 250). Fitzmaurice seems to work on an epistemological level. One can assume that Fitzmaurice’s primary focus is the removal of holding patterns, and as
such she addresses the notion of self. This approach does not recognise particular differences between male and female voices, nor the particular socio-cultural ‘impediments’ that might be in play (but she does acknowledge that there are impediments), nor, in her work, does she clearly demonstrate how the approach suits, or works with, the anatomy and physiology of the vocal apparatus.

1.2.3 Cecily Berry

The core of Cecily Berry’s vocal approach places direct emphasis on text and language (see Berry 2007; 40-53; Berry 1997). Berry’s approach grounds itself in the notion that thought processes behind the voice are of greater significance than rigorous training regimes (Berry 1973). Thus, Berry’s pedagogical strategy focuses on text, and how all its intentions for voice usage, such as rhythm, tone and style of delivery, are embedded within the text itself (Berry 1997: 24-25; Barton & Dal Vera 2011: 367). Berry’s deep connection with the text highlights that Berry does not intend a merely intellectual comprehension of the text’s intention, but a “feel for the rhythms of words, their organic structure, and dynamic need to be expressed” (Barton and Dal Vera 1995: 288). It should be noted that Berry (1973) does make tangential reference to the exploration of non-verbal, which explore properties of the vocal mechanism.

1.2.4 Kristin Linklater

Linklater’s vocal approach centres around an instructional and imagistic pedagogical notion intended to liberate the voice (Linklater 1976; Linklater 2006). The Linklater approach intends to eliminate physical and psychologically inhibiting patterns that may influence the optimal functional and expressive capabilities of a voice (Linklater 1976; Linklater 1997: 7). Linklater’s voice work predominantly fosters a connection to breath as the stimulus for power to initiate a vital impulse to speak (Linklater 2006). In essence, Linklater’s approach towards ‘freeing the natural voice’ purports that all human voices, once ‘freed’, engender a natural ‘beauty’ and ability to respond to any given circumstances (Linklater 1976; see also Barton & Dal Vera 2011: 369; Martin 1991: 171-179). Thus, it appears that Linklater assumes that the universal construct of breath will, if practised properly, seemingly inevitably remove any socio-cultural ‘blockages’ that might arise through identity (and therefore, by extension,
‘maleness’). In Linklater’s 2006 book an addendum as an extended reference to the anatomical and physiological construct of the voice is provided.

1.2.5 Patsy Rodenburg

Rodenburg’s emphasis on vocal exploration is significantly structured around the psychological aspects of voice work, with an inclination to explore the voice holistically. Rodenburg was a student of Berry’s and her work translates as somewhat akin to Berry’s and Linklater’s, aiming to dispel habits and tensions which affect the actor’s ability to express him/herself. Rodenburg, therefore, works predominantly with language and text as mechanisms to liberate the voice (Rodenburg 2008). Rodenburg (1997: 41) asserts that in a process of working “organically” with an actor on his/her voice, the ability to synthesize voice to text allows the actor not only simply to discover and connect with his/her own voice, but also with the “text’s true voice” (also see Barton & Dal Vera 2011: 372). Rodenburg’s approach, therefore, suggests the importance of the organic nature of the anatomy and physiology of the vocal mechanism, and acknowledges that language, as a socio-cultural construct, is necessary (inevitably) for performance. Rodenburg (1992: 45-49) does tangentially indicate physical differences between male and female voices but her approach predominantly focuses on exploring language and text as a way of addressing socio-cultural obstacles in the optimal use of the mechanism.

1.2.6 Roy Hart

The Roy Hart vocal approach, influenced by Alfred Wolfsohn, is an experientially body-oriented explorative process focused on the “totality of the self” (Kalo et al. 1997: 186, 192; Pikes 1999). Hart cultivated a belief that the human voice, liberated from adverse conditioning with specific emphasis on the psychological, could extend beyond documented singing concepts (Kalo et al. 1997: 188-191; Barton & Dal Vera 1995: 309). As such, Hart focused on exploring human experiences as a means of transforming psychological affections, as a strategy to restore vitality to an individual and to the expression of artistic freedom (Pikes 1999). As the approach has no formal documentation of its exploration towards vocal life, the work involves and renders itself improvisational and intuitive (Kalo et al 1997: 186; Pikes 1999). The Roy Hart approach emphasizes the discovery of the uniqueness of each individual
voice that also promotes singing and speaking the totality of the self (Kalo et al 1997: 186, also see Pikes 1999).

As explored above, there appears to be a consensus amongst the vocal instructional approaches that the body forms the foundation for vocal development. It is evident that these approaches contribute, on some level, to the anatomical and physiological development, use and freedom of the actor’s voice. It is clearly evident that each approach in a unique way, focuses on the removal of habitual patterns (possibly thus on the ‘freeing’ of the self) to facilitate the emerging of the most efficient and effective voice. Once this has been achieved, these cited practitioners move towards applying the work to the performer’s voice.

The hypothesis of this study instructs that the male and the female have significant structural differences. Although these vocal approaches are designed to develop the human voice, some of them, tangentially, acknowledge in their written material the sexual dimorphism. However none of these vocal approaches expressly provide example explorations for the development of the unique attributes of the male voice. The second hypothesis of this study is that these unique attributes are also (and significantly) shaped (and limited) by socio-cultural expectations, including, in this case, masculinity paradigms.

1.3 RESEARCH PROBLEM, OBJECTIVES AND APPROACH

1.3.1 Problem Statement

In my experience as an entry-level voice teacher, existing theatrical vocal approaches train and target the male and female voice as similar functional and expressive modalities, although they have different attributes. Preliminary research indicates that the human voice is situated in the body, which shapes, and is shaped by, the mind. Fundamentally the voice has two substrata: a) the voice as physiological construct which is primarily responsible for the functional and b) the social-cultural voice which feeds into the expression of the identity of the self. Both substrata have to be taken into consideration when training the male voice, as both transpire constantly as intertwined. The male student actor’s socio-cultural paradigm potentially limits the vocal function and expression of the male voice in performance. This study draws on prior research when providing unique and substantial structural differences of the male voice (Kent 1997; Seikel et al. 2005). As the voice is a
psychosomatic phenomenon, socio-cultural paradigms will influence how the voice is subsequently produced. This will affect how the male student actor modulates and employs voice usage in relation to a specific character, and the nuances of thought and emotion may consequently be suppressed. Taking these two substrata into consideration, extracts of a practical theatre voice program are provided as examples for the development of the male student actor’s voice to attain optimal vocal functional and expressive possibilities of his voice, engaging with yet respecting potential socio-cultural limitations.

The actor should be made aware of alternative strategies to vocally communicate the perspective and constitution of a character different to his own, to an audience. The actor therefore starts to circumvent limitations by means of retracting and reclaiming his vocal potential according to the anatomical and physiological composition. This would mean developing the distinctive functional and expressive potential of voice as a physiological construct in spite of (or despite) the actor's own socio-cultural paradigm.

1.4 INVESTIGATIVE QUESTION

What are the attributes that feed into the male student actor’s voice that has to be taken into account by the theatre voice teacher when these attributes are viewed through anatomical, physiological and socio-cultural lenses?

1.5 DISSERTATION STATEMENT

Knowledge regarding the specific attributes that define the male voice is of cardinal importance to the theatre voice teacher. The development of the male theatre voice should be motivated by an understanding of the vocal sound differences between the male and the female voice as unique physiological entities as well as the effect that the a specific socio-cultural paradigm may have on the male voice. This does not imply that male and female voices have a specific criterion which they should emulate and that they should reflect ‘standard’ voice patterns and frequencies, but rather suggests that the characteristics of the male voice should be taken into account in the theatre voice class. Extrapolating on existing theatre vocal approaches and related fields (and applicable research paradigms to attain necessary research, including voice and speech science, vocology, socio-cultural linguistics and so forth), will provide the scope for investigative possibilities to

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enhance the male voice by means of the practical voice program for optimized functional expressive potential.

1.6 RESEARCH OBJECTIVES OR AIMS OF THIS STUDY

1.6.1 Aim of the study

The main aim of this study is to prepare the entry-level voice teacher to facilitate the development of the male student actor’s voice in a theatre voice class, considering the male student actor’s voice as both socio-cultural and physiological substrata. Following a review of existing scholarship, example explorations from a theatre voice training program, providing provisional strategies to circumvent the limitations placed on the male voice, will be offered and discussed with reference to both the voice as object and as subject. The sub-aims below assist in meeting the prospective aim of the study.

Sub Aim 1: To ascertain and determine the functional anatomical and physiological attributes of the male voice.

Sub Aim 2: To determine and explore the influence of socio-cultural paradigms on the male voice.

Sub Aim 3: To utilize the knowledge gained from the execution of the above-mentioned sub-aims to provide example explorations from a practical theatre voice program towards the development of the male student actor’s voice.

Sub-aim 4: To indicate how the knowledge attained with regards to sub-aim 1 and 2 enhances the voice teacher’s skills and capabilities when facilitating a theatre voice class with specific reference to sub-aim 3.

1.7 RESEARCH APPROACH

In order to accomplish the proposed objectives and statements, this study was conducted through utilizing qualitative research methods (see Mouton 2001). Qualitative research methods concern the collation, analysis, and interpretation of gathered data, as qualitative research involves philosophies constructed by people (Creswell 2007; Merriam 1999).
According to Creswell (2007: 42), qualitative research involves collating non-numerical data to interrogate ideologies as an approach to gain insights into phenomenon/experiences and to allow interpretative and holistic perspectives (see also Merriam 1999: 13). However, qualitative research is subjected to ‘factual error’ as it involves the collection of data such as commentaries, opinions, aspirations, interviews, human behaviour, social trends and relationships, observations, experiences and so forth (Merriam 2009; Creswell 2007). As such data is primarily collated and analysed to conclusively present a descriptive document in nature.

A qualitative research approach to the research will enable me to locate, explore, describe, explain and ultimately interpret information. This will allow the categorization of the study into a theoretical background that will empower the voice teacher to assist the male student actor in attaining optimized vocal expression. As the research involves a qualitative approach, information sources such as books, monographs, conference proceedings, reference material, journal articles, theses and dissertations (Mouton 2009) will be used. The information gathered from the sources in the survey of scholarship, will enable me to compile and construct examples of a practical program for the male student actor to increase his vocal potential.

This study took place in two phases. Phase 1 was a review of scholarship and Phase 2 provided an example of a training program for the male student actor’s voice based on the knowledge and insights gained from the review of scholarship. Aspects that have to be taken into account specifically regarding 1) anatomical and physiological attributes and 2) socio-cultural routines will be indicated in order to prepare the entry-level voice teacher to facilitate the development of the male voice towards the envoicing of intent and emotion of various characters.

1.8 CHAPTER OUTLINE

1.8.1 Chapter two: Anatomy and physiology of the male voice

Chapter two addresses sub-aim one of this study and provides an overview of the specific anatomical and physiological attributes of the male voice.
1.8.2 Chapter three: The Socio-Cultural Voice

Chapter three speaks to sub-aim two and delineates the idea of self-identity within socio-cultural paradigms, with specific reference to the male voice and masculinity.

1.8.3 Chapter four: Theory in Practice

Chapter four addresses sub-aim three when it provides example explorations of a theatre voice training program. It further speaks to sub-aim four when it indicates how the anatomical and physical attributes as well as the socio-cultural influences are considered in facilitating the example explorations.

1.8.4 Chapter five: Conclusion

Chapter five provides a summation of the study and indicates shortfalls of this specific project as well as providing potential areas of research that can emanate from this project.
CHAPTER TWO

THE ANATOMY AND PHYSIOLOGY OF THE MALE VOICE

2.1 INTRODUCTION

As indicated in chapter one, the main aim of this study is to investigate, define and discuss the precepts specific to the male student actor’s voice. This is undertaken in order to gain insight into, and an understanding of the male student actor’s voice, so that the development of the male student actor’s voice can be facilitated in a holistic manner towards affective expression of intent and emotion. The purpose of this chapter is to explore the various anatomical and physiological attributes of the male voice, highlighting the most significant structural differentiations that distinguish the male voice sound mechanism to that of the female voice.

Voice as a mode of expression is at its root a mechanism comprising of an interrelated network of anatomical and physiological properties, each collectively constituting a construct that functions systematically and in specific relationship(s) to create voice and speech sounds.5 The primary biological purpose of many of these constructs is embedded in functions that uphold human life — thus survival.

The human voice, in this study, is acknowledged as a substratum of the body. This, for an actor, implies that the actor works towards the character’s intent and emotion manifesting through an embodied, and therefore envoiced process. As the voice is situated within the body, it is implied that voice and speech reference the self. Intertwined with the voice via the external world are social formations that shape, organize, and effect modes of thought, emotion and so forth (Merleau-Ponty 1962: 210; Johnson 1987: 21). Cavarero (2005: 19) asserts that voice “lies at the origins of many cultures that, in various ways, trace the beginning of the acoustic sphere of a divine presence”. The potential of each human’s voice is unique and multi-layered, for once the voice, as sound-producing entity, is explored, there begins the process through which the voice and body recognize and manifest the sustenance of personal uniqueness (Berry 1987: 14-19; Cavarero 2005: 25). ‘Personal uniqueness’ refers to the qualities of a human being that characterizes unique ways of expressing engagement within a socio-cultural environment (Hackney 2002: 48) through the anatomical and physiological construct. Thus the voice is an expression

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5 This study will acknowledge voice and speech as connected in the act of communication.
and manifestation of a unique self in a specific socio-cultural environment. This ‘self-expression or self-manifestation’, as well as the influence of socio-cultural paradigms will be discussed in chapter three. Although this study views voice simultaneously as subject and object, the purpose of the current chapter is to define and discuss the voice as borne from a physiological construct, thus as object.

This study argues that the entry-level voice teacher for training the actor needs to commit to a process of becoming acquainted with the individual functional and expressive capabilities of the physiological voice. This is critical for two reasons. On the one hand the voice teacher needs to grasp the parameters of healthy vocal development, so that the actor, under guidance, can reach full potential. Secondly, however, as part of the pedagogical process, it is critical that the voice teacher has the terminology and understanding in place to explain where, potentially, the actor’s development is being ‘limited’ by his own ‘acceptable’ socio-cultural voice sound and usage. An understanding of physiology therefore, can be used to demonstrate the difference between what the vocal instrument is capable of, and what the actor has imposed on those capabilities.

When considering the anatomy and physiology of the human voice, every individual, irrespective of sex differences, possesses an individually ‘tuned’ vocal apparatus that offers distinct and dynamic acoustic qualities which often, due to social patterning (Berry 1987: 21; Caverero 2005: 8-9), remains unfamiliar to, and unexplored by, the individual.

The functional and expressive relationship of the physiological body and therefore of the voice are thus substantive, as the possibilities for optimizing or realizing its potential is embedded within the physiological processes. As such, the interplay between science and embodied learning (praxis)\(^6\) is significant, as it highlights the need for an integrative approach\(^7\) for the actor to work towards “function and expression” (Hackney 2002), when employing training strategies for the male student actor’s voice. In order to gain perspective of, and insight into the comprehensive manifestation of voice, it is necessary to delve into the notion of voice as object, as

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\(^6\) As will be discussed and delineated in Chapter three meaning for the self is grounded in body-mind relations and therefore foregrounds an embodied experience. Embodied learning refers to a somatic approach to education/learning that considers or takes into account an individual’s lived experience(s) (Kerka 2002: 3).

\(^7\) This will be addressed in Chapter four.
an instrument which determines a specific acoustic output. For the voice teacher, knowledge and insight into the anatomical and physiological constructs as they pertain to realizing the trainable functional and expressive use of the male voice in performance is at worst only seen as beneficial but at best is seen as critically important. This argument in no way means that voice is only perceived as instrument or as object. It merely delineates the various levels of the comprehensive manifestation that eventually is perceived as the human voice.

It is acknowledged that the primary aim of this study is not to provide a comprehensive engagement with the anatomy and physiology of the vocal instrument but to highlight key concepts as they pertain to the motivation that drives this study, namely that of an entry-level theatre voice teacher. For the purpose of this investigation, therefore, the anatomical and physiological constructs will be clustered into physical functions as they relate to the generating, vibrating, resonating as well as the articulatory properties of voice production.

2.2 THE GENERATOR

2.2.1 Respiration

According to Seikel et al. (2010: 35) respiration concerns the relationship of gas exchange between an “organism” and its “environment”. Saladin (2012: 855) maintains that respiration relates to the “ventilation of the lungs (breathing) or the use of oxygen in cellular metabolism” (also see Kent 1997: 71). Zemlin (2011: 34) notes that gas exchange is a physical process. Zemlin (Ibid) further maintains that some biologists view the process of respiration as a chemical process due to the “oxidation of food to produce water, carbon dioxide, and heat”. In this sense respiration is an active mechanical process (see Zemlin 2011) by which air is brought into the lungs (inhalation) to supply cells with oxygen to sustain life, whilst rhythmically disposing of carbon dioxide through the process of exhalation.

The functionality of respiration in the light of this study will also serve as the vital generating energy to initiate and permit vocal sound. Zemlin (2011:31) argues that the mechanical process of sound production requires a “source of energy” and a “vibratory element”. As such, breath is essential as a generating energy to allow the outflow of air, but it is critical to explore how air is entered into the respiratory system

2.2.2 The respiratory system

The generated airflow is transported by means of respiration and is dependent on the respiratory system (or infraglottic vocal tract) (Sataloff 1991). The respiratory system is, in its most rudimentary anatomy and physiology, an input and output system arranged with tubes and organs, comprising a gas exchanging mechanism — the lungs — and is protected and contained within a musculoskeletal framework — the thorax (Saladin 2012: 256 – 259; 855; Sataloff 1991: 65-67; Zemlin 1969: 40).

According to (Zemlin 2011:35) the thorax (thoracic cavity) is an airtight cavity that interconnects mechanically with outside air (or the environment) through the synergistic interdependence of constructs that corroborate the process of respiration. These constructs comprise the trachea, larynx, pharynx, and the oral and nasal cavity, which collectively constitute the mid to upper respiratory system or tract (Seikel et al. 2010).

The respiratory system, thus, extends by means of a “passageway” from the nose and mouth, through the pharynx, larynx, trachea and terminates with the alveoli in the lungs (Seikel et al. 2010: 60). The respiratory system transmits air to the organs of respiration, the lungs. Kent (1997: 75) equates the respiratory system to an “inverted respiratory tree” so that its “trunk”, the trachea, is the top and its smaller “branches”, the bronchioles, spread out to the bottom and sides. The respiratory system sub-divides at the larynx into units differentiated by both anatomy and physiology – the upper and lower respiratory tracts.

The upper respiratory tract comprises the nose, mouth, and larynx fulfilling phonatory, resonating and articulatory functions during the process of sound production (Kent 1997). As suggested before, the impetus (or a source of energy) for voice is generated in the lungs in lower respiratory tract (Zemlin 2011:31).

The lower respiratory tract comprises the trachea, bronchi and the lungs which contain bronchioles and alveoli (Seikel et al. 2010: 61). The support from the lower respiratory tract during respiration contributes significantly towards the production of
voice, as the generated air pressure stimulates the vocal folds, for the emission of vocal sound (see Perkins & Kent 1989).

As the respiratory system comprises of various constructs that organize the continuous passageway that terminate with the lungs, it is necessary to identify and provide an overview of the major constructs of the lower respiratory tract responsible for generating the source of energy that initiates voice, and how these constructs differ in relation to males and females. These respiratory constructs comprise the ribcage, thorax (thoracic cavity), lungs, diaphragm and the abdomen.

2.2.2.1 The ribcage

The twelve pairs of ribs (the thorax) are bones attached by cartilage to the spinal vertebrae (thoracic vertebrae) (Seikel et al. 2010: 55). Each rib extends posteriorly and angles forward to form an arc that attaches anteriorly to the sternum at the front of the body (Kent 1997: 77; Saladin 2012: 258). The top seven pairs of upper ribs are individually connected to the sternum by means of a small hyaline cartilaginous (chondral) attachment — the costal cartilage — to form the true or vertebrosternal ribs (Seikel et al. 2010: 55-59). The subsequent four pairs of ribs (ribs 8 through 12) are termed the false, or vertebrochondral ribs. Ribs 8-10 are jointly attached to a cartilage that connects to the sternum and are referred to as the false ribs as they have greater mobility than the true ribs. The last two pairs of ribs (ribs 11 and 12) are the floating or vertebral ribs as they have no cartilaginous attachments to the sternum and are embedded in lumbar muscle and attached to the vertebral column (Kent 1997: 77; Saladin 2012: 259)

Seikel et al. (2010: 57) offer a metaphorical description of the ribcage construct, maintaining that if a fly were to walk along the superior surface of a rib, starting from the tip of the head and walking to the point of the attachment at the sternum, it would start out by walking in a posterolateral direction, but would quickly round a curve that would aim it toward the front.

Seikel et al. (2010: 57) further argue that if the ribcage was inactive and at equilibrium it would slope downwards. The cartilaginous and vertebral attachments between the ribs and to the sternum contribute significantly towards respiration as the flexibility afforded by the costal cartilage allows for movement that elevates the ribcage, providing an increased lung capacity for respiration (see Saladin 2012;
Seikel et al. 2010; Kent 1997). As suggested before, the twelve pairs of ribs are attached by cartilage to the twelve thoracic vertebrae and the structural outline of the ribcage slopes downwards, almost like a “bucket handle” (Perkins & Kent 1989: 23). During respiration, as a result of the posterior connection of the ribcage, and by means of a gliding (antrodial) joint the ribcage can rock up and move forward and in both lateral and anterior aspects (Seikel et al. 2005: 57).

The analogy of ‘a fly walking’ along posterior, lateral and arching aspects of a rib toward the anterior aspect of the body supports an image of the three-dimensional bony construct of the ribcage. Zemlin (2011: 50) offers that the shape of the ribcage gradually increases in size from the first through the seventh and eighth ribs, so that the thorax resembles a barrel shaped construct, whilst Saladin (2012: 256) maintains that the thorax is somewhat conical in its structural composition.

### 2.2.2.2 The thoracic cavity

According to Seikel et al. (2010: 39) the thorax relates to an area that includes the superior aspect of the first rib and clavicle (collar bone) while the inferior and anterior aspects construct the ribcage and the sternum (breast bone). Given its construction the thorax is suspended from the vertebral column or spinal column to protect the thoracic organs (Seikel et al. 2010: 39; Saladin 2012: 256; 867). The thoracic cavity resembles a comparatively ‘conical or barrel shaped musculoskeletal framework’ and provides protection for the lungs and heart, whilst equally serving as a place of attachment for the pectoral girdle and upper limb (Seikel et al. 2010; Saladin 2012). The shape of the thorax is a result of its broader inferior base, slightly narrower superior apex and the longer middle ribs (Seikel et al. 2010).

In addition to the posterior attachment of the ribs to the thoracic vertebrae, the thorax is fundamentally necessary during the process of respiration. It rhythmically creates and then collapses a vacuum through the displacement of respiratory muscles. Such a vacuum draws air into the lungs and, once the vacuum ‘collapses,’ the compressed thorax expels the air (Seikel et al. 2010; Perkins & Kent 1989). Kent (1997: 87) offers that the thoracic cavity can be likened to “a gas-filled container” the shape and volume of which continues to adjust. Perkins and Kent (1989: 18) maintain that when humans breathe for the purposes of making voice, they capitalize on an “inhalatory-exhalatory” dichotomy. This dichotomy allows for the chest to become a hypothetical
‘pressure pump’ or ‘vacuum’, due to fact that before pressure increases the lungs must be inflated (Kent 1997).

### 2.2.2.3 The lungs

The lungs are two highly elastic air sacs or tissue, consisting of three lobes on the right and two on the left side of both sexes (Shewell 2009: 125) In addition to the elastic composition of the lungs, the lobes of the lungs are anatomically vascular and terminate in narrow passages called the alveolar ducts to connect to miniscule alveolar sacs within the lung tissue (see Kent 1997: 75). Seikel et al. (2010: 63) maintain that the lungs are a composite of blood, arterial and venous networks, connective tissue, the lower section of the respiratory passageway specific to the lungs, and tissue specialized for gas exchange. The exchange of gases occurs in diminutive air sacs called the alveoli (Kent 1997).

Anatomically the lungs are fairly “conical organs with a broad concave base that rest on the diaphragm and a blunt peak called the apex” projects slightly above the clavicle (collar bone) (Saladin 2012: 862). Zemlin (2011:39) states that the lungs are best described as two asymmetrical, “cone-shaped” constructs. Saladin (2012: 862) confirms that the lungs are not symmetrical and do not fill the entire space of the thoracic cavity, as much of the space is occupied by the liver, spleen and stomach. Seikel et al. (2010: 63-71) maintain that the broader costal surface of the lungs are against the ribcage whilst the smaller mediastinal surface faces medially.

Kent (1997: 75-76) asserts that the right lung is slightly shorter than the left as a result of the liver occupying more space on the right. The left lung, although taller is narrower than the right lung due to the heart tilting left into the space of the mediastinum. The mediastinum is a structure that comprises of the heart, the esophagus, trachea, and blood vessels and which separates the two lungs (Kent 1997: 75). As tentatively indicated before, the lungs are thus contained and protected within a musculoskeletal framework (the ribcage and the thorax). It is furthermore maintained inferiorly by the diaphragm, a ‘large dome-shaped’ muscle that separate the thoracic and abdominal cavities.

As the lungs are contained within a compact thoracic cavity, the continuous communication with the environment via the respiratory tract develops pressure gradients within confines of the thoracic cavity.
Zemlin (2011: 35) posits that when air at atmospheric pressure is confined in an airtight container, equal amounts of pressure act on the outside and inside walls of the container, and the differential pressure is zero. A decrease in the volume of the container increases the pressure inside with respect to the outside, and an increase in the volume of the container causes the pressure to decrease with respect to the outside.

In addition to the respiratory system functioning as an input and output system, it subsequently also infers the supposition that it functions as a ‘typified pressure system’ to support and initiate pressure underneath the vocal folds to stimulate voice (Perkins & Kent 1989). As such, the process of respiration is propelled by physical principles responsible for the mechanical force by which air pressure is stimulated, relative to inhalation and exhalation.

Boyle’s\textsuperscript{8} law could be attributed as the theoretical basis for these principles. According to Zemlin (2011:34) Boyle’s law states “that if a gas is kept at a constant temperature, pressure and volume are inversely proportional to one another and have a constant product.” In other words, if volume within a container increases, the air pressure within the container decreases. Kent (1997: 23) ascertains that pressure becomes the force dispersed over an area. Seikel et al. (2010:34) maintain that air pressure is then the force exerted against a surface in which the air molecules travel, in this case the inner surfaces of the lungs. Consequently, the process of respiration is a rhythmically and perceivably muscular process, due to, as maintained by Seikel et al. (2010: 35) the forces in nature pursuing balance and equilibrium. These forces of nature have to be deliberately managed for voice.

The movement of air via the respiratory passage to the lungs is propelled onwards by the mechanistic interdependence of the trachea and bronchial tubes permitting air to be transmitted from the external to internal environment, until it eventually reaches the gas exchange mechanism – the alveoli (Seikel et al. 2010: 60; Kent 1997: 72). The trachea or the “windpipe” is a tube approximately 12cm long and 2.5cm in diameter, open in its posterior aspect whilst facing anterior to the esophagus (Saladin 2012: 860). This tube consists of approximately 16 – 20 ‘C shaped’ hyaline cartilage rings (Seikel et al. 2010: 60-61) until it bifurcates at the carina trachea to

\textsuperscript{8} Robert Boyle (1627-1691) was an Irish mid-seventeenth century philosopher and chemist.
become the left and right main bronchi (or bronchiole tubes), serving the left and right lungs respectively.

The trachea is significant for respiration in its task to transmit oxygen to the lung tissue. In its structural composition the trachea is both a flexible and rigid breathing structure serving as a conduit that is involved in the process of drawing air into the lungs as well as expelling it (Saladin 2012). Most notably the trachea is slightly smaller in diameter in females than in males (Leonard 1985: 179). The trachea as a conduit and conductive construct bifurcates at approximately sternal level into the left and right main bronchi. These two main bronchi are, like the trachea, supported by ‘C-shaped’ hyaline cartilage which continues to bifurcate into a network of complex bronchioles that subdivides until it assumes the semblance of a ‘tree’ with profuse branching networks within each lung tissue (Seikel et al. 2010). According to Saladin (2012: 862) the bronchioles are “continuations of the airway that lack supportive cartilage and are 1mm or less in diameter”. The configuration and characterization of the ‘tree-like’ airway structure arises from the successive bifurcations arranged from largest to smallest, progressing into the depths of the lungs (see Saladin 2012; Seikel et al. 2010). Seikel et al. (2010:68) maintain that the tracheobronchial tree involves more than twenty eight generations of intricate bifurcations. Saladin (2012: 862) argues that it is the particular function of the connective elastic tissue of the bronchial tree bifurcations that contribute significantly to the recoil that expels air from the lungs in each respiratory cycle.

The conductive conduit of the upper and lower respiratory tracts terminates with the terminal bronchioles. These terminal bronchioles also subdivide and their ends become the alveolar duct which in turn communicates with the alveolus (Seikel et al. (2010: 70). The alveoli are substantial in the terminal phase of respiration by virtue of their structure and their relationship to the vascular resource (Saladin 2012: 864). These thin (approximately 0.2 to 0.5mm in diameter) diminutive air sacs are the terminal stage of respiration significantly informing the capacity, vascularity and porous structure of the lungs (Seikel et al. 2010: 72). The alveoli are richly supplied with blood and as an effect of the thinness the alveoli allow rapid gas diffusion between air and blood (Saladin 2012:865). In essence during each respiratory cycle the alveoli are the regions in the lungs where gas exchange occurs (Seikel et al. 2010).
The porous composition of mature lungs results from the manifestation of approximately three hundred million diminutive air sacs (Saladin 2012: 865; Seikel et al. 2010: 70). Kent (1997: 75) offers that the capacity of the lungs corresponds proportionally to the total body weight in human beings. Kent further offers that the “sex ratio (male:female) for surface area of the human lung is 1:25 to 1. The ratio for total lung capacity is 1.41” (Kent 1997: 75). The proportion of total weight of the lungs is greater in men than in women. Zemlin (1968: 46) offers that a pair of well-developed, fresh lungs after removal weighed 950g for young adult males as opposed to 793g for young adult females. Similarly a well-developed right lung was measured at 270mm for males and 260mm in females, with a capacity in excess of 5000cc of air for a young adult male (Zemlin 1969: 46). Zemlin (2011: 41) maintains that a pair of well-developed male lungs consists of a capacity in excess of 5000cc of air whilst female counterparts consist of approximately 4000cc.

2.2.2.4 The diaphragm

The principle muscle of respiration is the diaphragm — a large, dome-shaped muscle and tendon structure separating the thoracic cavity from the abdominal cavity, whilst bulging upward against the base of the lungs (Shewell 2009: 131). Thurman & Welch (2000: 345) add that the diaphragm has openings for the passage of the esophagus, major blood and lymphatic vessels, and nerves, between the two cavities.

The diaphragm attaches along the lower margin of the ribcage (rib 7 through 12), sternum, and vertebral column (Kent 1997: 75). These attachments create the muscular boundary of the upper (thoracic) and lower (abdominal) cavities. The outer parameters of the diaphragm converge to form the intermedial region called the diaphragmatic aponeurosis or the central tendon (Seikel et al. 2010: 81).

Upon air intake (inhalation) the diaphragm contracts and flattens slightly as a result of muscle contraction and the shortening of muscle fibers (Kent 1997: 86-87). Subsequent to diaphragmatic contraction a downward movement of the central tendon towards the abdominal viscera is initiated (Seikel et al. 2010: 80). Saladin (2012:868) posits that due to this engagement a ‘superior- inferior’ enlargement of the thorax is instigated whilst spontaneously allowing an anterior to posterior

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9 These measurements are obtained from cadavers.
10 Cubic centimetres
expansion. This process is attributable to the flattening of the central tendon that pushes outward onto the sternum and ribs. The movement propelled by the diaphragm concomitantly allows for an elongation of the thoracic cavity, permitting more space for the lungs to expand as air enters via the respiratory passage (Saladin 2012: 333). In essence the process of inhalation is thus a muscular process.

The expansion of the thoracic cavity lowers the internal pressure, producing an instinctive inflow of air from the external environment. When the diaphragm relaxes, it rises to reassume the dome or an inverted bowl shape, pressing against the base of the lungs whilst perceivably decreasing the size of the thorax, expelling air (exhalation). Saladin (2012: 868) argues that the diaphragm accounts for about two-thirds of pulmonary airflow (breathing).

As indicated before, the movement of the diaphragm accounts for a dynamical expansion of the thorax that is rhythmical and perceivably three dimensional during the process of respiration. Saladin (2012: 868) ascertains that it is due to structural composition and connections of the ribcage at both “proximal (posterior) end and their attachment through the costal cartilage to the sternum at the distal (anterior) end”, which enable a dynamical increase and decrease of volume in the thorax.

Furthermore, the diaphragm fulfils a synergistic relationship with the internal and external intercostal muscles during the process of expanding and decreasing of the volume in the thorax. The external intercostal muscles are fundamental to the process of inhalation. These muscles originate from the lower margin of one rib, sloping downwards to insert in the upper margin of the next rib (Kent 1997: 79). The internal intercostal muscles originate from the lower margin of each rib and insert on the upper margin of the following superior rib (Kent 1997: 80). Saladin (2012: 333; 868) argues that these muscles are sets of interconnected muscles assisting predominantly in stiffening the thoracic cavity during respiration whilst preventing it from collapsing while the diaphragm descends (Kent 1997: 80). Seikel et al. (2010: 87) add that the intercostal muscles contribute significantly to the enlargement and contraction of the thoracic cage whilst contributing, as ascertained, as Saladin (2012: 868) argues “a third of air that ventilates the lungs”. 
It is the particular manner by which the ribs are connected to the vertebral column that supports the various muscles to dynamically allow an expanded increase sideways (transverse) and antero-posteriorly (back and front) (Seikel et al. 2010: 75). Longitudinal dimensions are encouraged by the descending of the diaphragm in relation to the intercostal muscles of the ribcage, during respiration (see Seikel et al 2010: 75). However, a utilization of the three-dimensional expansion of the breathing cavity suggests that a deeper inhalation of breath is activated. Saladin (2012: 868) maintains that when the diaphragm contracts, it flattens whilst descending approximately 1.5cm in relaxed inspiration while dropping approximately 12cm during deep breathing. The result of this is the increase of space caused by the descending diaphragm, which generates a ‘vacuum’ in the thoracic cavity that causes an inflow of air (Saladin 2012: 868).

During the task of respiration there are activated operations of the musculature that aid the processes of inhalation and exhalation. In relation to the intercostal muscles, several other muscles are distinguished in scholarship as accessory muscles relative to the diaphragm, that fulfil pivotal roles that aid the process of respiration (Shewell 2009). For the exploration of this study and chapter it is not essential to provide a detailed anatomical and physiological analysis (see Seikel et al. 2010: 75-119 for a detailed overview) but perhaps to just consider and locate the relevance in an overview of how these muscles aid/assist respiration.

Accessory muscles provide an enhanced expansion of the ribcage for deeper inspiration (see Seikel et al. 2010: 86-87). Saladin (2012:867) maintains that accessory muscle use for respiration implies a forced respiratory effect that is frequently associated with unusually deep and/or rapid breathing, as in a state of exercise, or when singing, coughing and possibly also the theatrical performance voice, and so forth. During deep inhalation the erector spinae of the back increases the anteroposterior dimension of the chest, while the sternocleidomastoids and scaleni of the neck, the pectoralis minor, pectoralis major, and serratus anterior of the chest as well as the intercartilaginous part of the internal intercostal muscles (the anterior part between the costal cartilages) support the elevation of the upper ribs (Saladin 2012: 867-868).
2.2.2.5 Abdomen

The abdomen relates to a region of the body situated between the thorax (chest) and pelvis comprising the digestive organs, spleen and kidneys, enclosed by a “ligamentous, fluid filled sack” (Thurman & Welch 2000: 340-341). As such, the abdominal cavity has little skeletal support and is maintained and enclosed by “layers of broad flat muscles whose fibers run in different directions, strengthening the abdominal wall on the same principle as the alternating layers of plywood” (Saladin 2012: 335). According to Kent (1997:87) the abdominal cavity could be equated to a “liquid-filled container” that is modifiable in its shape but not its volume. The abdominal muscles function like a “cummerbund, wrapping the abdomen into a neat package in the front, side, and back” of the body (Seikel et al. 2010: 107).

As indicated by Seikel et al. (2010:107), Zemlin (2011: 70) and Saladin (2012: 335) the interwoven layering effect of the abdominal muscles renders them as 'complex muscles'. The enclosure provided by the abdominal muscles to the abdomen serves a pivotal role during exhalation. The muscles of the abdominal wall are known as the anterolateral muscles that originate between the pelvis and the lower margin of the ribcage, connecting to the skeleton and additional surrounding musculature.

Kent (1997: 87) maintains that the significance of the abdominal muscles during respiration is in relation to their action exerted upon the viscera or the content of the abdomen. The abdominal muscles compress the viscera and exert force against the diaphragm, contributing to exhalation. Perkins and Kent (1989: 32) maintain that the abdominal muscles account for sixty to eighty percent of exhaled air. Thus the engagement of the abdominal muscles contributes substantially to the collective and perceptible expansion (inhalation) and shrinking (exhalation) of the inner space in relation to the respiratory system. As the muscular enclosure compresses the abdominal viscera, it activates the systems around the air in the lungs and propels an airstream past the glottis11 and subsequent vocal tract.

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11 The glottis refers to the space in between the vocal folds whilst the subglottal area is the region below the vocal folds (Seikel et al. 2010: 165).
2.3 PHONATOR

Sound production is initiated by the generation of an energy source to initiate vibration. In the human voice this refers to breath and vocal fold activity. The sound production process is partly supported by the outflow of air originating in the lower respiratory tract. Thus, the functionality of the ‘air generating construct’ (lungs) permits an airstream transmission through the trachea and into the larynx.

The larynx is the physical construct responsible for converting the generated airstream into a vibrating air stream (Seikel et al. 2010: 165). Zemlin (2011: 101) describes the larynx as the primary vibratory construct to convert the airstream into a vibrating airstream due to vocal fold activity. The vocal folds are located directly in the path of the generated airstream to constitute, as Zemlin (2011:101) asserts, the “vibratory elements”. The oscillating vocal folds inside the larynx are thus responsible for activating vibrations of the air. The actions of the vibrating vocal folds accordingly generate an elemental vocal sound, as the airstream is transferred through the vocal folds. Zemlin (2011: 101) maintains that this opening and closing of vocal fold activity produces an indistinguishable “vocal or glottal tone”. This elemental voice sound renders the voice source (Seikel et al. 2010: 165; Shewell 2009: 144; Sundberg 1987: 10). The development of a voice source as a result of vocal fold vibration (or activity) within the larynx is known as ‘phonation’. Sundberg (1977: 106, parentheses in original) posits that

... the sound generated by the airstream chopped by the vocal folds is called the voice source. It is in effect the raw material for speech or song. It is a complex tone composed of a fundamental frequency (determined by the vibratory frequency of the vocal folds) and a large number of higher harmonic partials or overtones.

This supposes that phonation is the source of voice for speech. As such, all sounds produced as a result of vocal fold vibration are referred to as voiced sounds, whereas sounds produced without vocal fold vibration are referred to as voiceless (Crannell 2011; Seikel et al. (2010: 165)). An example of voiced sounds involves vowels such as /o/, /a/, /e/, /u/, /i/ and voiced consonants such as /w/, /z/, /l/ and so forth, whereas voiceless sounds include /s/, /k/, /t/ (Sundberg 1987: 7-8). In this sense the process of phonation equates vocal fold activity where the opening

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12 Vocal fold activity relates to the opening (abduction) and closing (adduction) of the vocal folds in a vibratory cycle. In other words vocal fold activity is the opening and closing action of the vocal folds as air stimulates them into vibration.
(abduction) and closing (adduction) of the vocal folds follow a vibratory cycle to produce particular sound waves (Sundberg 1987: 9; Shewell 2009: 160).

As briefly indicated above, the vocal folds are contained inside the larynx, which is suspended by muscles, ligaments and membranes from the hyoid bone, and located in the anterior region of the neck. Although the positioning and attachment of the larynx on top of the trachea is fundamental in producing vibrations, part of its functioning is quantified as an outlet structure (Perkins & Kent 1989: 65). This implies that the larynx fosters the elemental voice source to pass through the pharyngeal (throat), oral (mouth) and nasal (nose) cavities as well as out and past the lips into the outer environment. These cavities collectively constitute the vocal tract (Sataloff 1991; Bunch Dayme 2005). The vocal tract configuration and morphology shapes and amplifies the elemental voice source acoustically (see Sundberg 1987; Bunch Dayme 2005). In other words, adjustments to the shape and size of the channel or the vocal tract alter the elemental voice or sound vibration into a perceived resonance and speech. Shewell (2009:137) argues that in order to produce a perceptible voice sound, an adequate subglottic air pressure is necessary to set the vocal folds into vibration. As indicated before the glottis refers to the space in *between* the vocal folds whilst the subglottal area is the region *below* the vocal folds (Seikel et al. 2010: 165). Therefore, over and above the respiratory system, the operations of the muscles located in the pelvic girdle (near the anterior sacral region), the diaphragm, and the movement of the ribcage also manage subglottal air pressure below the vocal folds to concomitantly facilitate effective vocal sound emission.

As alluded to before, voice sound, before it is modified into speech by an individual, is, in its most elementary level, vibrations in a channel — the vocal tract (see Kent & Read 1992) which starts at larynx and further consists of the pharyngeal, oral and nasal cavities. The larynx is a functional anatomical and physiological construct through which voice sound is shaped and produced. In essence the larynx contains phonation.

### 2.3.1 The larynx

The larynx, typically referred to as the ‘voice box’ in recognition of its function, is the foremost anatomical construct that contains the vocal folds that facilitate phonation.
The larynx is situated on top of, and shapes the upper and terminal segment of, the trachea (Kreiman & Sidtis 2011:34). As a result of this the larynx can be viewed as an organic interlinking mechanism. It could more usefully be seen as a ‘bridging valve’ of the respiratory system that connects the upper respiratory tract to the passages of the pharyngeal, oral and nasal cavities (upper vocal tract) (see Kent 1997; Seikel et al. 2005; Perkins & Kent 1989). Zemlin (2011: 101) maintains that the valve-like functionality of the larynx is predominantly a biological disposition. This credence is maintained widely as the larynx is “intrinsically” a constituent of the respiratory system (see Kreiman & Sidtis 2011: 32; Bunch Dayme 2005: 56). As such, the larynx is regarded as a “protective device” ensuring that air passes through the airway passage, whilst prohibiting foreign substances from entering the larynx or lungs, and, where and when necessary, to expel foreign substances from the lower respiratory tract (Kreiman & Sidtis 2011: 32; Saladin 2012: 857). Perkins and Kent (1989: 65) maintain that the larynx also serves as a “pressure device” in the event of heavy lifting, coughing, sneezing and so forth.

As indicated in the beginning of this chapter the fundamental purpose of many of these constructs is inherently biological in its foremost functioning. Although it is evident that voice production can be viewed as a non-biological function (Perkins & Kent 1989). Zemlin (2012: 102) argues that there could be a tension with this assertion, as voice and speech production is a significant part of human behaviour. However, within this chapter the larynx as the construct facilitating the generation of voice will be discussed. Consideration will be given to the anatomical and physiological properties of the larynx, so as to determine and understand what differentiates male voice sound from female voice sound.

The larynx is a musculocartilaginous construct comprising a combination of cartilages with surrounding soft tissue and is functionally connected by the attachments of ligaments, membranes and muscle activity (Saladin 2012: 857). Anatomically the larynx is an interrelated construct comprising nine cartilages with adjoining membranes and ligaments. The location of these cartilages is grouped so that three cartilages have paired relational qualities whilst the remaining three are unpaired.
These include:

<table>
<thead>
<tr>
<th>UNPAIRED CARTILAGES</th>
<th>PAIRED CARTILAGES</th>
</tr>
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<tbody>
<tr>
<td>Thyroid</td>
<td>Arytenoids</td>
</tr>
<tr>
<td>Cricoid</td>
<td>Coniculate</td>
</tr>
<tr>
<td>Epiglottis</td>
<td>Cuneiform</td>
</tr>
</tbody>
</table>

Table 2.1: The cartilages of larynx. (Based on: Zemlin 2011: 104; Seikel et al. 2010: 168-170; Bunch Dayme 2005: 56-57).

The combined and relational orientation of these cartilages provides the overall structural definitions and shape to the larynx. These cartilages will be discussed from superior to anterior appearance in the larynx. The larynx, in its most superior articulation, is protected by a projecting “leaf-like structure” composed of elastic and fibroelastic cartilage, and is known as the epiglottis (Zemlin 2011: 107). It is connected and located behind the inner surface of the thyroid cartilage, by means of the thyroepiglottic ligament. It projects superiority beyond the hyoid bone to in line with the root of the tongue (Shewell 2009: 162). The hyoid bone is seemingly ‘U-shaped’ and situated roughly inferior to the jaw and superior to the larynx (Shewell 2009: 162) with the ‘belly’ of the U facing forwards. The hyoid bone is the only bone in the human body that does not jointly or directly connect to another bone, and suspends the larynx inferiorly whilst it is attached to the jaw by means of muscles and tendons (Seikel et al. 2010: 184). As such, the hyoid bone serves as an integral support structure for the laryngeal construct. According to Kreiman and Sidtis (2011: 33) the hyoid bone serves as a point of connection for more than twenty different muscles whilst subsequently protecting the airway from injury. Consequently, the muscular attachments to the hyoid bone render it a mobile structure that aids the elevation of the larynx during swallowing and speech (Zemlin 2011: 102).

As mentioned before, the laryngeal construct comprises an interconnected framework of cartilages with surrounding soft tissue. The thyroid cartilage is the largest and most protuberant of the laryngeal cartilages, resembling a shield-like shape, as it is formed by the union of two cartilaginous plates, the thyroid laminae (Dickson & Maue-Dickson 1982). The thyroid laminae are fused in their lateral and anterior aspects to meet at the midline anteriorly to form the angle of the thyroid. The thyroid laminae thus shape a palpable V-shaped structure, the thyroid notch, with its

13 The hyoid bone has a flat antero-posterior orientation.
apex anteriorly and its open aspect posteriorly (Zemlin 2011: 104). Along the margins of the thyroid cartilage’s open aspects extend two pairs of horns or cornua which are in their superior aspects longer than in its inferior aspects (Dickson & Maue-Dickson 1982: 139). The superior cornua attach to the hyoid bone by means of ligaments whereas the inferior cornua attach the thyroid cartilage to the cricoid cartilage (Kreiman & Sidtis 2011:33). Thus, the anterior margins or edges of the thyroid laminae shape the angle of the thyroid cartilage anteriorly which accounts for a more protuberant laryngeal prominence or a more visible Adam’s apple in more males than females (Kreiman & Sidtis 2013: 33). Zemlin (2011: 104) notes that the angle at which the thyroid laminae join is approximately 80 degrees for adult males and about 90 degrees for adult females. Velhulst (1987 in Kent 1997: 101) ascertains that the thyroid cartilage in its anterior aspect is approximately 90 degrees in an adult male in comparison to approximately 120 degrees in adult females. Although variations in the shape, height, and size of the thyroid cartilage differ inevitably amongst human beings, the most notable structural differentiations exist between most male and female thyroids. For males, the distance between the tips of paired inferior horns and the tips of the superior horns averages approximately 44mm whereas in female the distance averages approximately 38mm. The anterior-posterior dimension averages approximately 37mm in males to the approximate average of 29mm in females (Dickson & Maue-Dickson 1982: 142).

This accounts for, as alluded to before, a substantially rounder and flatter shaped thyroid notch in females in contrast to most males whose thyroid laminae are easily palpable as a V- shape articulation of the thyroid in the anterior aspect of the neck. Comparatively, therefore, the angle of the thyroid notch is narrower in males in comparison to females. As indicated before, laryngeal prominence or the Adam’s apple is more pronounced in males as in females, along the anterior region of the thyroid cartilage. This occurrence is due to the susceptibility to hormonal changes during puberty (Seikel et al. 2005: 181-182). These changes produce a significant laryngeal expansion that produces voice changes. The outcome of laryngeal expansion for males is more substantial than in the case of females, and the voice is lowered in pitch as a consequence (Arnold & Lunchsinger 1965). Testosterone stimulates the growth of laryngeal prominence and therefore the laryngeal cartilages of most men are approximately 40 percent larger than those of women (Kent 1997: 100; Saladin 2012: 859). Subsequent to these differences and changes, the
differentiation in vocal tone is also substantially altered and distinctive between a male and female voice. According to Arnold and Luchsinger (1965: 132) the effects of laryngeal growth concerns the “diameters of the vertical height and sagittal depth [of the larynx], while lateral extensions of breadth are less pronounced.” In other words, laryngeal prominence is indicative of the location of the vocal folds in the neck region. Velhurst (in Kent 1997) maintains that as a result of this the larynx moves lower in the neck, producing a shape and size change of the cavities above the larynx which accordingly has a significant impact on voice sound.

Spatially, therefore, the cricoid cartilage is positioned inferior to the thyroid cartilage. The cricoid cartilage connects the larynx to the trachea, immediately above the most superior tracheal ring. The location of the cricoid cartilage renders it the most stationary cartilage of the laryngeal construct to which the other cartilages attach. The relational qualities of the thyroid and cricoid cartilages constitute, according to Saladin (2012: 859), the characteristic ‘box’ of the voice box. Significant credence has been provided to the characteristic ‘signet-ring-like’ semblance of the cricoid cartilage, as its posterior aspects are more pronounced in relation to the anterior aspect (Dickson & Maue-Dickson 1982: 142). According to Kreiman and Sidtis (2011: 34) the diameter of the cricoid cartilage is approximately 25mm in its posterior aspect whilst it is approximately 8mm in its anterior aspect. Zemlin (2011: 105) asserts that, structurally, the inferior margins of the cricoid cartilage are relatively horizontal, although asymmetrical, with no substantial landmarks. Movable articulations are apparent laterally on either side of cricoid cartilage for the attachments of the inferior horns of the thyroid (Kent 1997: 102). The attachment of the inferior horns to the cricoid permits the thyroid and cricoid to function in an interrelationship, allowing the thyroid a rocking movement relative to the cricoid (see Bunch Dayme 2005: 56; Kent 1997: 102). In addition to the attachment of the cricoid and thyroid there exists an anterior space between the thyroid and the cricoid that is significant for voice. Shewell (2009: 164) maintains that the space (or the location of the cricothyroid membrane) is palpable in the throat region in-between the inferior margin of the thyroid cartilage and the superior margin of cricoid cartilage. The spatial relationship between the thyroid cartilage and the cricoid cartilage permits the basis for pitch adjustments when the thyroid is tilted forward for higher-pitched voice sounds or the space widens for a comfortable lower-pitched voice sound.
Within this configuration, the paired arytenoid cartilages are positioned on the opposite margins of the posterior and 'signet' portion of the cricoid cartilage (Perkins & Kent 1989: 67). The arytenoid cartilages are very small and roughly shaped cartilages, resembling a comparatively three-dimensional pyramid comprising a base, an apex, and three surfaces (Zemlin 2011: 107). According to Dickson and Maue-Dickson (1982:148) the arytenoid cartilages for males are approximately 18mm in height in comparison to females’ approximate height of 13mm. The anterior-posterior dimensions of the arytenoid cartilages measured at approximately 14mm in males compared to 10mm in females. As the arytenoids are mounted opposite one another, their surfaces serve as points of attachments (processes) that are significant for the laryngeal musculature (Dickson & Maue-Dickson 1982: 145). Each arytenoid has two processes that project anteriorly and laterally, respectively. The anterior projection is the vocal process that serves as one attachment for one of the vocal folds, whilst the lateral projection is the muscular process, to which muscles attach to assist with vocal fold activity (Kent 1997: 104; Sundberg 1987: 7). The upward projection of the arytenoids is thus referred to as the apex (Perkins & Kent 1989: 69).

Situated on the apices of each arytenoid cartilage are the tiny and paired corniculate cartilages. According to Dickson and Maue-Dickson (1982: 148) the corniculate cartilages could roughly be compared to two miniscule “cone-shaped bits of elastic cartilage.” In addition to the location of the corniculate cartilages, they extend to the apices of the arytenoid cartilages dorsomedially (to the centre and towards the back). The cuneiform cartilages are located anteriorly and laterally to the corniculates to constitute the entry to the larynx (Kent, 1997: 104).

The central idea thus far supposes that the impetus and generation of an energy source for voice is initiated by the respiratory system that propels an outflow of air. Systematically, this airstream passes along the trachea and is converted to a vibrating airstream in the larynx. This comes about because of that subglottal pressure underneath the vocal folds stimulates vibration and as such produces an elemental glottal tone. Consideration will be given to the vocal folds as the oscillating construct that activate vibrations of the generated air stream.
2.3.2 The vocal folds

The vocal folds (also known as the true vocal folds) are ‘two-fold like’ muscular tissue situated within the laryngeal musculature (Zemlin 2011). Thus, the vocal folds are constituted by muscles that shape as folds and are covered by mucous membranes (Sundberg 1987: 6). The covering of these complex and layered structures is described and can be understood in relation to the “body-cover model” (see Titze 1994; Zemlin 2011 for a detailed overview). In brief, the structural composition of the vocal folds comprises five layers of property that is respectively distinguished to constitute the “body-cover model”. Firstly, the ‘cover’ / top layer of vocal folds comprise the squamous epithelium and the uppermost superficial layer of the lamina propria (Reinke’s space) (Zemlin 2011: 129). The epithelium is squamous and thin (approximately 0.05mm thick) consisting of a stiff layer that maintains the shape and provides protection for the vocal folds, whereas the superficial epithelium comprises of a soft fibrous ‘gelatin-like’ mass. Secondly, the subsequent section of the cover (or the ‘transition’) comprises the intermediate and deep layers of the lamina propria (or the vocal ligament) and is approximately 1.5-2mm thick (Kreiman & Sidtis 2011: 36). The intermediate lamina propria has its own layered structure and predominantly consists of elastic fibers — thus rendering it with vibratory features. Thirdly, below the ‘cover’ lies the ‘body’ of the vocal folds comprising the paired thyroarytenoid muscles (also referred to as the vocalis muscles (Zemlin 2011: 129). The thyroarytenoid muscles serve as the main body of the vocal folds and are likened to a body of relatively “stiff bands” (Zemlin 2011: 129). The purpose of these different layers of property imply that the different bodies of the vocal folds can be stiffened whilst the cover remain movable to enable movement around the body of the vocal folds. These different properties aid the vibratory effect of the vocal folds and are thus significant during the process of phonation.

The process of phonation is partly brought about by the relationships between several muscle groups of the larynx and how they connect to one another in order to produce vocal fold vibration. These muscles are divided into two groups: the intrinsic laryngeal muscles,14 and the extrinsic laryngeal muscles. The intrinsic laryngeal muscles relate to those paired muscle groups that connect to various cartilages and change their positions relative to each other inside of the larynx. The configuration of

14 This study will not provide a detailed discussion of the intrinsic and extrinsic laryngeal muscles but merely acknowledges an overview, as these muscles have no gender specific uniqueness.
the intrinsic laryngeal muscles contribute to abducting and adducting of the vocal folds and as a result directly impact on phonation adjustments. The extrinsic laryngeal muscles are the muscles located externally to the larynx enabling the larynx to be both raised and/or lowered, respectively (Kreiman & Sidtis 2011: 36-38). As the thyroarytenoid muscles serve as the main body of the vocal folds these muscles also fulfil a significant role during phonation. Perkins and Kent (1989: 70) maintain that the thyroarytenoid muscles are responsible for activating vibratory patterns. These muscles consist of two parts: the internal thyroarytenoid, which are the vocal folds and the external thyroarytenoid which are lateral to the vocal folds (Zemlin 2011: 130). Both these muscles run vertically just below the thyroid notch to attach at the bottom of the thyroid cartilage. However, the insertion for both the two parts of the thyroarytenoid muscles differs as they connect to the arytenoid cartilages (Kent 1997: 99). The internal portion of thyroarytenoid inserts into the vocal process whereas external portion inserts into the muscular process of the arytenoid cartilage (Kreiman & Sidtis 2011: 40). According to Thurman and Welch (2000: 256) the arytenoids have the ability to rotate in a swivelling movement whilst also having the ability to slide apart along the cricoid cartilage on which they are located. As such, the movement of the arytenoids opens a three-dimensional triangular space between the inner margins of the vocal folds, i.e. the glottis (Bunch Dayme 2005: 62). In this sense, when the vocal folds are engaged during the process of inhalation they would separate, and thus abduction occurs. If the folds approximate or come together, they are adducted (Perkins & Kent 1989: 72). The movement of the arytenoids regulates the abduction and tension of the vocal folds. Before advancing the discussion, it is necessary to acknowledge that as the larynx is involved in phonation, the contribution of many membranous, muscular, and skeletal structures are involved in the process of phonation. As such, and admittedly, many of these structures are positioned and constructed in and around three main cavities that are fundamental during the process of phonation. Firstly, the subglottal cavity is the region that extends from the lower margin of the true vocal folds to the inferior margin of the cricoid cartilage (Sundberg (1987: 8). The glottis refers to the space in between the true vocal folds (Kent 1997: 105), whereas the supraglottic cavity\textsuperscript{15} refers to the

\textsuperscript{15} The supraglottic cavity includes the Ventricle of Morgagni or the laryngeal ventricle. It is also called the sinus of the larynx (Sundberg 1987: 8). It is situated between the ventricular folds (false vocal folds) above the true vocal folds on either side of the cavity. This cavity is associated with the strengthening (resonating) of the fundamental tone of the larynx making it possible to travel higher up
region that lies superior to the glottis (Zemlin 2011: 202). Together, these cavities assist in shaping the construct responsible for phonation (see also Sataloff 1991: 24).

The synergy between the constructs responsible during phonation enables vibration of the vocal folds. As indicated before, as the vocal folds oscillate there is an intermittent interruption in the generated airstream from the lungs. This in turn produce variations in the air pressure as the vocal folds abduct and adduct. Vocal fold activity can therefore be understood through the application of aerodynamic myoelastic theory of vocal fold vibration (Van den Berg 1958; see also Perkins & Kent 1989; Titze 1994). In order to stimulate vibration, the vocal folds must be in an adducted state with an accumulated energy source (subglottal pressure) underneath the vocal folds. Once there is a sufficient accumulation of subglottal pressure underneath the vocal folds to overcome the stiffness of vocal folds they are ‘blown’ apart (see Zemlin (2011: 146-147). This process occurs as the vocal folds comprise tissue elasticity and thus regain their original configuration near the midline/medial surface. Kreiman and Sidtis (2011: 44) maintain that it is important that the balance between stiffness of the vocal folds and subglottal pressure are in relationship with one another. Aerodynamic forces are responsible for these actions, and one such a force is described by the Bernoulli\textsuperscript{16} Effect suggesting that “if the volume of airflow is constant, the velocity of flow must increase at the region of the constriction, but with corresponding decrease at the constriction” (Titze 1994:81). As such the vocal folds adduct by negative Bernoulli pressure in the glottis.\textsuperscript{17} The adductory action is only possible if the glottis is narrow so that adequate subglottal pressure accumulates near the midline of the vocal folds (Titze 1994: 82). As the glottis is not an even cavity, air that passes near the edges of the vocal folds has to travel farther around the vocal folds than air at the midline of the glottis. In this sense, the stiffness between the vocal folds (stiffness of the glottis) is then followed by the build-up of subglottal air pressure during closure, causing the folds to move outward and the glottis to open (Kreiman & Sidtis 2011: 44). This movement continues until the elastic

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\textsuperscript{16} The Bernoulli Effect was named after Swiss scientist, Daniel Bernoulli (1700-1782).

\textsuperscript{17} It should be noted that human beings have to a certain degree voluntary control over the vocal folds.
forces of the tissue retard the motion and reverse it. The vocal folds adduct and the next cycle begins.

The combination of vocal fold vibration with the laryngeal vibrations provides the impetus for voice sound production. Physiologically the larynx connects and allows air by the respiratory system to enter the air way passages of the pharynx, mouth and nose (Perkins & Kent 1989: 65). Shewell (2009: 122) argues the interdependence between the lungs and larynx as “breathing affects phonation and laryngeal behaviour affects breathing patterns.”

As indicated before, the fundamental source of voice emanating from the vocal folds in the larynx is known as fundamental frequency (as will be described below). Although Titze (1989) indicates that the growth of the layered structure of the vocal folds is quite similar for males and females prior to puberty, fundamental frequency decreases in both male and females (see Arnold & Lunchsinger 1965) as a result of the increases in vocal fold proportions. As most males experience voice mutation (Arnold & Lunchsinger 1965) as a result of laryngeal growth during puberty (and the development of secondary sex characteristics) males and females develop proportional differences in the length and size and mass of the vocal folds. This influences the patterns as well as the rate of the vibrating vocal folds (Titze 1989). The result of the anatomical and physiological differences in male and female voices means that there would also be substantial differences in the fundamental tone (frequencies) of male and female voices. The differences in vocal fold proportions account for an approximate difference in fundamental frequency (Kreiman & Sidtis 2011: 125; see also Fitch & Giedd 1999). The average fundamental frequency in females decreases approximately to 220 Hertz by adulthood, whereas the male voice drops approximately an octave lower to an approximate average of 130 Hertz (Titze 1994). The fundamental frequency difference between adult males and female is thus approximately an octave.

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18 It should be noted that in most scholarly reviews consulted it was determined that the variables of proportionate differences in males should be seen as relative to each individual as well as the relationship to the overall body sizes, which, in essence, is variable between most human beings.

19 Titze (1989) does indicate that not all female vocal fold vibration occurs in a smooth “quasi-sinusoidal fashion”, while male vocal folds close more rapidly than they open, which, as a result, produces an asymmetrically pulse shape.

20 Hertz relates to the measurement of a frequency unit, which means, in this case, that the vocal folds vibrate at approximately two hundred and twenty cycles per second (Miller 1994: 3).
As the vocal folds are located inside the larynx, as the primary contributor to voice sound production, the resonating quality of the voice would have been weak and functionally inaudible were it not for the acoustic features of the resonatory structures situated above the larynx. As such, most acoustic characteristics that are commonly associated with an individual voice sound could be attributed to the structures that lie above the larynx, namely the resonating properties of the vocal tract.

2.4 RESONANCE

The vocal tract as the primary air resonator arises from the glottis in the larynx and stretches to the lips and the nose. The vocal tract could be compared to a channel (Shewell 2009: 144) or a “series of linked tubes” (Seikel et al. 2010: 268) encompassing spaces or cavities that shape and determine individual vocal quality (see Bunch Dayme 2005). The individual vocal quality culminates (as indicated above) from the generation of breath that manages vocal fold vibration. This means that the voice source or the fundamental tone, as the pitch of the voice, has rudimentary volume or resonance. Crannell (2011: 39) maintains that for the voice to have quality the voice source or fundamental tone needs to be amplified by the moveable structures that reside above laryngeal cavity. These structures are cavities or spaces that include the Ventricle of Morgagni as part of the supraglottal cavity, the pharynx, oral and nasal cavity. These spaces or cavities respond to the accumulated vibrations of the oscillating vocal folds to distinguish vocal resonance (Seikel et al 2010: 269). Sundberg (1987: 11) maintains that “everything that possesses the properties of mass and compliance is a resonator … [and] air enclosed in the vocal tract acts as a resonator”. According to Seikel et al. (2005: 174) “resonance is the acoustic phenomenon by which the vibrating structure (sound source) excites the air in an air-filled chamber, which in turn causes the chamber walls to vibrate similarly”. Bunch Dayme (2005:69) posits that the “vocal tract consists of physical spaces that respond to the vibrations of the vocal folds to create what we know as vocal resonance.” Vocal resonance could therefore imply a process through which the rudimentary voice source (phonation) generated is enhanced in quality by air-filled cavities as the voice source is transmitted towards the outside environment.

Crannell (2011: 39) maintains that aspects pertaining to the size and opening of the cavity as well as the lining of the cavity impact on how a basic sound will resonate. The lips form the anterior margin of the oral cavity and the palatoglossal arch forms
the posterior margin or the oral cavity (Zemlin 2011: 226). The roof of the oral cavity (mouth) is known as the hard palate, whilst extending posteriorly with the soft palate or velum (Seikel et al. 2010: 321). The soft palate is located posteriorly at the roof of the mouth where the hard palate becomes soft. The soft palate terminates in the uvula. The location of the tongue on the floor of the oral cavity allows for muscle movement in combination with the attachment of the mandible (jaw) to produce shape changes to the cavity, and the subsequent formation of vowels and consonants (Seikel et al. 2010: 321). The shaping of the oral opening (cavity), as well as the lips of the mouth provide vital roles pertaining to shaping sounds that are orally emitted.

Kent (1997: 148) states that the velum is the pliable muscle mass that separates the oral from the nasal cavity. The nasal cavity relates to the “internal” chamber of the nose, and is divided into right and left halves called nasal fossae (Saladin 2012: 856). The nasal cavities are produced by the paired maxillae, palatine, and nasal bones, and are divided by the vertical plate called the nasal septum (Saladin 2012: 856). The nasal cavity is also the least versatile/mobile cavity of the resonating cavities.

The pharynx can anatomically be understood as a semi-circular fibromuscular funnel or tube that extends for approximately 13 cm from the base of the skull to the lower margins of the cricoid cartilage. Based on its location the pharynx comprises three different sections: the nasopharynx, oropharynx, and the laryngopharynx (Saladin 2012: 857). All three of these sections are critical to the production of optimal voice production. Fundamentally, these structures contribute significantly to the role of the pharynx, which is to strengthen and amplify the sound waves that have been generated by the action of the vocal folds.

These structures collectively define the vocal tract anatomically (Sataloff 1991). As such, pharyngeal, oral and nasal cavities regulate and manage the quality of the tone that informs the resonance. The tongue, lips, jaw, and the soft palate shape these cavities and/or articulators to form distinctive sounds (Kreiman & Sidtis 2011: 50). Seikel et al. (2010: 269) maintain that the vocal tract is manipulable, which suggests that changes to the modifiable structures will inform a particular frequency of voice quality and/or shape of a speech sound (phoneme) (Bunch Dayme 2005: 70).
Phonemes relate to contrastive units of speech sounds (vowels and consonants) in a language that differentiate one sound from another (Spencer 1996:4). When two adjacent mobile and immobile structures join, they articulate — thus producing phonemes. This production of phonemes is necessitated by the need for voiced or voiceless sound by an individual (Perkins & Kent 1989: 121). In this sense, the process of articulation for the shaping of vocal sound relates to the shaping of the vocal tract to produce the sounds of speech (Perkins & Kent 1989: 119; Sundberg 1987: 10). According to Miller (1986: 48) “articulation, to some extent, controls resonance”. Resonance and articulation of voice sound are thus reliant upon the synergistic sequence of events (see Seikel et al. 2010: 267; Kent 1997: 143). As such, vowel sounds are directly produced from the vibration of the vocal folds (as indicated before) relative to an open vocal tract that produces specific acoustic patterns of those resonances (see Kent & Read 1992). Each cavity of the vocal tract encompasses a natural resonant frequency at which it will vibrate. The frequency at which these cavities or spaces will vibrate is interdependent on the size and shape of the cavity. Kent and Read (1992: 13) maintain that a resonator can be set into vibration when it has a stimulus or an energy source or can be propelled into vibration when there is interaction with an already vibrating cavity (object). The quality of vibration is reliant on the relationship between the rate and the application of vibration applied to the natural capacity of a resonating space. This type of vibration is categorized as sympathetic vibration (Crannell 2011: 40). In this way when the frequency of vibration is in relationship with its corresponding resonator it will produce the output of acoustic harmonic amplitudes (Miller 1994:3). This means that the sound emanating from the vocal tract is louder or more resonant21 than the fundamental tone. Admittedly, a resonator can also be a filter as it shapes to produce vowel and consonant sounds. According to Kreiman and Sidtis (2011: 51) a resonating cavity will vibrate well at frequencies that are close to its natural frequency and will dampen/reduce (not vibrate well) frequencies that are not close to its natural frequency. Therefore it is the relationship between vocal fold vibration and the size, length and shape of the supraglottic vocal tract that produces individual voice quality.

Men and women have a significant differentiation in the size of the speech organs. Sundberg (1987: 20) maintains that vocal tract length is determined by individual

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21 This refers to the sound as a complex sound wave.
morphology. As such, the variables of the differences below, are not fixed indicators of structural differences in male and females but should be viewed as indicative of the substantial differentiations between a male and a female vocal tract, which is significant to this study. The tube of the pharynx (or the supraglottal region) from the vocal folds in males is considerably longer than in females (Kent 1997: 43; Shewell 2009: 144). The average length of the vocal tract (from the glottis to the lip opening) in men measures around 17 to 20cm, as opposed to women at approximately 14 to 15cm (Sundberg 1987: 22). Fitch and Giedd (1999) maintain that the vocal tract of a man is on average approximately 15 percent larger than that of females. According to Vorperian & Kent (2007) these differences between male and female could predominantly be attributed to the difference in the size of the pharynx (see also Kreiman & Sidtis 2011: 125). Titze (1989) notes an approximate 60 percent difference in the size of male and female vocal folds and as such the laryngeal construct differs by approximately 20 percent between males and females (see also Fitch & Giedd 1999).

2.5 MALE AND FEMALE PHYSIOLOGICAL VOICE FUNCTION AND THE VOICE TEACHER

Vocal tract morphology has a significant impact on the shaping of the sound. This means that the acoustic amplification of sound is borne from a generated laryngeal sound (the culmination of airflow and vocal fold vibration) that is shaped and resonated or amplified acoustically and projected towards the external environment. The vocal tract is a “mechanical acoustic filter” determining the nature of acoustic output (Miller 1986: 48). In other words, before the voice source is amplified acoustically, it exists as a frequency dependent on the output of subglottal air pressure (see Zemlin 2011: 198).

In this sense the vocal tract as a primary air resonator functions as an acoustic resonator (as sound waves travel through the spaces of the different resonating cavities) to shape an acoustic voice quality from the voice source or fundamental frequency. Zemlin (2011: 198) maintains that this “tone is acoustically rich as being composed of a number of partials that are harmonically related integral multiples of the fundamental frequency”. Relative to this exist the morphological differences between male and female vocal folds that physiologically shape the fundamental frequency (F0) respectively, and by extension, inform a perceived pitch. According to
Kent and Read (1992: 17) vocal pitch frequencies are determined by the vibratory action of the vocal folds. Therefore, the longer the vocal folds, the lower the rate of vibration and thus the lower the pitch. Fundamental frequency (F0) is, thus, the main indicator of the perceived pitch of the voice (see Kent & Read 1992). In other words the voice source that culminates from the oscillating vocal folds maintains multiple frequencies which shape in the vocal tract once vocal folds adduct and abduct — thus forming harmonics or a series of overtones (Miller 1994: 3). This process relates to the ‘Source-Filter Theory of Speech’. The Source-Filter Theory of Speech production accounts for and describes how physical properties and the active shaping thereof inform voice quality and speech sounds (Kent and Read 1992: 18).

Subsequent to this, the contributing sections of the vocal tract participating in resonance and articulation are distinguished (as briefly indicated above) into the pharyngeal, nasal, oral cavities. The extent to which the vocal tract will resonate a particular voice source is dependent on the size, shape and length of the anatomical ‘uniform tube-like’ shape (Miller 1986; Kent & Read 1992; Kreiman & Sidtis 2011) of the vocal tract. Resonance produced by the vocal tract is also known as formants, whereas their frequencies are referred to as formant frequencies (Miller 1994: 3). This implies that the vocal tract is characterized by an array of different resonant frequency options when a speaker’s vocal folds vibrate whilst producing vowels and consonants (Kent & Read 1992: 14). Reflectively, the fluent, interactive and continuous shaping of the vocal tract with specific reference to the oral cavity determines the strengthening and dampening of the harmonics or overtones. This leads to formants where a specific frequency cluster has more energy. Thus, the formant changes are observable, and lead to, the production if various vowels.

The length of the vocal tract is responsible for producing higher or lower resonating formants in male and female voices. The vocal tract is responsible for producing a resonating frequency value relative to its size, length and the shape. As indicated before, males have a relatively larger vocal tract than females. As such, due to this difference, it means as the vocal tract as a resonator, for males, is longer than in females, the resulting resonating frequency will thus be lower in male than females (Kent & Read 1992: 14-16).

Shewell (2009: 145) offers that the conscious awareness of consistent shaping of the modifiable structures of the vocal tract for voice and speech is imperative for the
theatre voice teacher and practitioner. Vocal tract shaping will produce particular vocal qualities or formants which will connect to an individual's unique resonating qualities. The adjustments to the size, the shape and the density in the changeable structures of the face, lips, jaw, tongue, soft palate, pharynx and the larynx influence the generated airflow for speech generation — thus articulation (Shewell 2009: 145). The passageway of the vocal tract and the muscles of the face impact on the generated voice sound in that the vocal tract, the pharynx and the nasal cavity enable voice sound to have a vibratory effect on the chest, the neck and the head (vocal resonance) (Thurman & Welch 2000: 449). This effect could more accurately be described as bone-conducted tone (Sundberg 1987; Lessac 1997). Modifications to the vocal tract or the inability to employ effective use of the facial muscles will influence the vocal resonance/sound projected (Thurman & Welch 2000: 450; Shewell 2009: 145). The projected sound as released from the lips of a speaker introduces a distinctive perception for the listener of the pitch, volume, tonal quality (timbre) of an individual voice (Shewell 2009: 145-147). In other words, the quality and all loudness characteristics associated with an individual voice are shaped and significantly controlled by the pressure of airflow as supported by the muscles in the lower abdomen. The relationship to resonance is impacted on by the speech organs (resonating constructs) that situate above the larynx — thus the articulators.

For the voice teacher and following Sundberg (1987: 1) notion of the “voice organ”, it is evident that voice as an acoustic phenomenon results from the culmination of various constructs. As indicated and discussed above, the acoustic phenomenon of voice is predominantly determined by the dimensions of the vocal tract, the constructs of the respiratory systems (including the nostrils, nasal, pharyngeal and the oral cavity as well as the larynx, trachea and the bronchi). Understanding the concepts of how vocal production is constituted implies and will assist the voice teacher in facilitating optimal vocal production from a pedagogical standpoint. This knowledge of voice will serve the voice teacher with the skills necessary to ascertain how optimal vocal function of voice is accomplished and implemented. This means facilitating each person's individual anatomical and physiological uniqueness to determine optimal voice quality. As this study focusses on the male voice, the voice teacher is inevitably challenged in the voice class with a variety of male acoustic dimensions. It should be noted that male voice quality are distinguishable into various categories and/or registers. Although more directly linked to and utilized in
singing praxis male voice quality could be distinguished according to various categories. Miller (2008: 30) maintains that most males are baritones, but notes that the final determinant of a specific voice quality is dependent on an individual’s own perception of what constitutes a “beautiful” voice quality. This implies to the voice teacher that an understanding of voice science will enable and assist the teacher when faced with task enhancing individual vocal potential. Nair (1999: 13-14) maintains that vocal pedagogy involves a process of creating awareness towards “behaviour modification”. Nair (1999: 13) argues that the combination of verbal and aural feedback with a continuous awareness on developing ability will permit students to gradually develop “neuro-muscular skills.” From a socio-cultural perspective (as will be discussed in Chapter three) the connections made by an individual to his own vocal sound are the vibratory actions of the vocal folds in the vocal tract. The amendments to the shape of the vocal tract will have an impact on an individual sound and subsequent speech emission (see Shewell 2009: 144-146). The relationship between an individual and the manner in which he expresses his sound can be directly linked to the environment in which human beings grow and live, as well as the physical and emotional demands on their bodies. This implies that the manner in which the moveable structures of the vocal tract are used may be reflective of a particular socio-culturally expected and appropriate use of the voice. Consequently, the degree to which a particular resonator’s potential may be realised by the male student actor, will thus be inhibited. In other words, this implies that the pliability of an acoustic quality as far as functionality and expressivity in accordance to the resounding size and shape of a resonator cavity may thus as a result of the socio-cultural impact not be optimal.

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22 This study will not provide a discussion of these terms but will simply acknowledge the main categories according to which the male voice can be distinguished. According to Miller (2008) the male voice can be distinguished into lyric baritone, Verdi baritone, non-operatic baritone, Baritenor, Bass-Baritone and the Bass.
CHAPTER THREE

THE SOCIO-CULTURAL VOICE

3.1 INTRODUCTION

As indicated in chapter one, the main aim of this study is to investigate and delineate the specific profile of the male voice as it influences the development of the male student actor’s voice for theatre. Chapter one outlined the basic premise of voice as function and expression. Chapter two considered the function of the male voice by presenting the structural properties of the physiological construct. This was undertaken to facilitate an understanding of the functional male student actor’s voice as a sound-producing mechanism or ‘instrument’. The purpose of this current chapter is to explore and determine the expressive and therefore, necessarily, the socio-cultural influences that impact on the male voice and its manifestation. Furthermore, the chapter aims to interrogate socio-cultural influences that may limit the male student actor’s ability to dynamically envoice stage characters that are incongruent to the actor’s own socio-cultural paradigm. This chapter will argue for the notion of a ‘dichotomised voice’ — the physiological voice and the socio-cultural voice interweaves brain/mind/body to form a sense of self, reflected in and through voice usage.

In current scholarly credence it is contended that the human voice is a “psychosomatic phenomenon” (Shewell 2009: 4; also see Linklater 1976: 2; Titze 1994: xx-xxi). The expression of, and through, voice therefore reflects the composite manifestation of both the physical (somatic) and mental (psychological) processes of an individual. Voice thus culminates from a holistic dynamic relationship between function and expression (as argued in chapter one). Furthermore, internal and external impulses of, and reactions to, an individual’s persona, emotions, health, physical shape and usage of the body with and within an environment have an impact on the voice both functionally and expressively (Martin 1991: 36-41). Voice is the culmination of, and reflects the conglomerated manifestation of, an individual’s experiences in and of himself and his environment. Correspondingly, an individual voice also provides a referential indication of an individual’s upbringing, and, with this, representations of the sex and gender perceptions which influence how an
individual’s voice is constructed by himself and perceived by others. In this sense voice references the self (Caverero 2005: 7; Linklater 2006: 6; Rees 2007: 3). The construction of the self implies that the experience of the self relates to, and is self-evident in, a dynamic and symbiotic interrelationship between the body, mind and voice (Damasio 2010). To demonstrate this relationship this research now offer overviews of body, brain and mind respectively.

3.2 MIND

The positioning of the mind and the body in this context as confluent contributors to voice requires further discussion. Levitin (2006: 83) maintains that mind, for cognitive scientists, relates to that part in human beings that “embodies our thoughts, hopes, desires, memories, beliefs and experiences.” Thurman and Welch (2000: 11) highlight that the mind emerges systematically over time and partly forms the capacity within human beings to discover and learn. This capacity is influenced by the culture and the environment within which a person functions (see Butler 1988). Mind is determined by the shifting relational qualities substantiated and identified by an individual — thus mind is a cluster of psychological dynamics. Simon (2004: 21) posits that mind and self (see below) are interrelated and interactive in social processes.

Before advancing the discussion of mind relative to body and voice, it is necessary to explore how the mind and brain are operationally interrelated. It is acknowledged though, that mind and brain can be separated on an interpretative/theoretical level only, so as to locate and support the argument of this study.

3.3 BRAIN

In existing scholarship the brain has been documented as the functional anatomical and physiological (physical) entity located in, and interacting with, the body (Thurman & Welch 2000; Blakeslee & Blakeslee 2007). The brain, as a physical and

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23 It should be noted that the reference made to others here, primarily relates to the voice teacher.
24 It should be noted that the mind, brain and body are so inextricably interlinked that to separate them for the purposes of discussion can be seen as ‘artificial’. Nevertheless, to determine the chief functions and operations of each allows for a clearer understanding of their interrelatedness.
25 The possible positioning of cognitive science in this study assists in framing and locating the understanding of human behaviour, as well as the regulation of central processes and experiences (bodily, sensory, thoughts, movement et cetera). However, this study will not delve into cognitive science.
therefore material entity, creates and translates neural information from the external world via electrically and/or chemically coded transmissions into the nervous system26 (Blakeslee & Blakeslee 2007). In addition, the brain is never physically and directly in contact with the environment (Blakeslee & Blakeslee 2007: 19) but receives stimuli from that environment from which it regulates all bodily processes, to ‘inform’ and ‘interpret experiences’ that lead to ‘cognition’. Thurman and Welch (2000: 7) argue that the brain regulates bodymind ‘knowledge’ from and for sensory experiences in order to contribute to internal stimulus for movement (prompting behavioural patterns) and to create perceptions, thoughts and conscious awareness of moods and emotions. As indicated above, the mind and the brain are interrelated as they fulfil interactive roles that determine the function and expression of the body and therefore, by implication, also the voice. Mind, therefore, comprises brain. However, as the mind is dependent on the brain, the brain resonates as confluent with the body and the impact of the mind/brain on the physical body is substantial (see Damasio 2010: 4; 17).

3.4 BODY

The body can be viewed as an anatomical and physiological construct or a corporeal structure capturing the manifestations and embodied experiences of an individual (see Merleau-Ponty 1962: 121-124; Munro & Coetzee 2007: 99). An embodied experience (embodiment) relates to an indeterminate outline to which the individual perceptual experience attributes a presence that summarizes or reflects an engagement with the world (see Merleau-Ponty 1962, Johnson 1987: xiv-xv; Csordas 1993: 135). For Noland (2009: Chapter 2), embodiment refers to a “dynamic of self-affection inflected by social patterning and thus impossible to theorize without reference to gestural routines.” An embodied presence or the ‘lived body’ is thus constantly modulated and is, therefore, indicative of an individual as an occupant of, and participant in, a social environment (Johnson 1987: 20-43). The body thus assumes a dualistic presence as it gauges engagement with internal and external environments. As mind and body are reliant on the environment, they function in an interrelated way in social processes. This interrelatedness accounts for body

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26 The nervous system relates to the nerves, the brain and the spinal cord, all of which, in their interconnectedness, enable organisms to perceive pain, heat et cetera, and with which, amongst other functions, the coordination of movements is controlled (Thurman & Welch 2000: 19; Blakeslee & Blakeslee 2007: 19).
experiences and embodiment. The body can therefore not be considered solely as a stable biological entity but rather also be seen as responsive to, or in a state of flux in relation to, shifting realities of socio-cultural activity and interaction (see Simon 2004). Merleau-Ponty (1962: 94) states that the body is the “vehicle of being in the world, and having a body is, for a living creature, to be interrelated in a definite environment, to identify oneself with certain projects and be continually committed to them.” According to Csordas (1994: 1-2) the comprehension of the body should be understood as the embodiment of a process or as a shifting entity connected to cultural and historical change — thus as a “flux” — and not as a fixed or stable entity involved in a process — therefore not as an entity “amidst flux”. To have a body means to be continuously placed in and reminded of an anatomical and physiological construct but also, irrevocably, to be connected to an embodied experience/practice — thus body becomes a symbolic representation of cultural and historical change (see Munro & Coetzee 2007).

The body becomes an agent in a specific context — to function and integrate embodiment of a specific cultural and historical context. Such an agency pertains to the way humans experience their bodies and how they are placed in a cultural environment (Butler 1988: 3). This results in the body perceiving/experiencing a relationship between inner and outer sensation that, in turn, informs mind. Blakeslee and Blakeslee (2007: 195) posit that mind is embodied and its relationship with the body is interrelated with, and connected to, experience. Mind in relation to the body is understood through sensations (Berlucchi & Aglioti 2010; Thurman & Welch 2000). The relationship between mind and body can thus be viewed as holistically reciprocal and this creates a confluent liaison towards the process of embodiment. The reciprocity of human activity as mental and physical processes, indicates their inseparability and their contribution to cognition. Stated differently, cognition involves a state of mind that shapes the knowledge of self in reality — thus consciousness (see also Fauconnier & Turner 2002: 249; Herrero 2009: 57).

The consciousness through which human beings perceive their world is placed in and connected to the body. The embodied self is also experienced through sensations. Sensoric impulses determine and effect “varied qualitative properties” (Damasio 2010: 158). The properties will in turn uniquely impact on the construction of body, mind and voice. As a result the interactivity between the body and the mind
manifests through an embodied perception or bodymind (see Thurman & Welch 2000; Damasio 2010).

According to Noland (2009: Chapter 2) “perception is simultaneously a set of sensations, a call to rehearse and select from a ‘repertoire’ of sensorimotor schemas, and an attitude or affective stance.” A body schema is quantifiable as a “physiological construct”, enabling the body to communicate interactively and expressively through the senses — touch, vision, as well as internal experiences, balance and hearing — to encapsulate the space in, of, and around the body (Blakeslee & Blakeslee 2007: 32). Body schemas are embodied and infer a tangible experience that is internal to the perceiver and regulated by experience(s) (Johnson 1987: 20). Embodied reactions to external impulses and experiences may include envoicement.

The way in which human beings envoice, imagine, experience, embody and so forth, is a process that reveals a sense of the self. Damasio (2010: 8-9) argues that the perception of the awareness and the experience of the body and mind, generate feelings and emotions which are processual. As such, the self, in the constant flux of ‘becoming’, is consistently restructured and reconfigured to familiarize itself with a certain process at a particular time — thus generating meaning, content and associations. Thus identity develops, and is formulated in accordance with a perception that is both of being in the world (and the body) and of becoming through the world (and through the body). As such a perception of self as a process will have a direct impact on how an individual will use voice and the expression that the voice will ‘embody’ or rather envoice.

3.5 THE SELF AND IDENTITY

It is contended that identification of the self is through perceptions, and perception is shaped by the personality that experiences the perception (see Merleau-Ponty 1962; Noland 2009). The assumption that a perception is reflective and customized in accordance with a specific socio-cultural environment is central to the argument being made here. The interplay between the inner and the outer experiences suggest an inevitable notion of social, cultural as well as psychological conditions that impact on the voice and the usage thereof (see also Marshall 2001).
Human beings become conscious of their worlds or realities through their bodies (see Merleau-Ponty 1962; Blakeslee & Blakeslee 2007; Noland 2009). The body is a source of ‘sensory feedback’ that shifts between external and internal experiences to process and filter information. The body (and thus by implication the voice) therefore becomes a marker that locates and inherits a socio-cultural practice (Csordas 1993). Being embedded in a cultural world cultivates and encompasses a socially interactive mode which pertains to social conditioning.

As described above, the body is the locus of communication between both the internal and the external worlds. The voice, as a functional physical entity located within the body, externalizes internal experiences (Cavarero 2005: 9). The body, as a mediator of human experience, has a direct impact on how voice is subsequently produced (see Marshall 2001: xii-xiii), experienced and related to the self. The voice is subject (and subjected) to the embodied socio-cultural experience, which impacts on how the voice is (physically) produced and (expressively) used in relation to a sense of self. Therefore the voice is intimately shaped by body and embodiment. The voice almost becomes a ‘window’ through which inner experiences of the body can be, or are, understood. Brodnitz (in Martin 1991: 41) argues that

. . . all the mechanical, acoustic and physiological forces that shape vocal function and vocal quality are but tools with which the mind, the personality, the emotions are expressed in vocal terms.... Voice is more than a mechanical or acoustic phenomenon. It is a mirror of the personality, a carrier of moods and emotions...

Vocal expression manifests and makes apparent a speaker’s thoughts, emotion, attitudes, personality and purposes (Marshall 2001: 72-74; Martin 1991: 4; Titze 1994: xx-xxi), thus elucidating the inner world of an individual.27 Voice, as the manifestation of identity, personality, moods and emotions, is subject to the body’s orientation and engagement within time and space. The manner in which emotions, personality and moods are translated or interpreted would belong to a specific cultural paradigm (see Noland 2009: Chapter 2). As argued above, an embodied presence is substantiated within the “existential condition in which culture and the

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27 Essentially, voice as body interprets information which is transcendent beyond a linguistic representation, although socio-cultural experiences may influence linguistic expression (also see Noland 2009: Chapter 9).
self are grounded” (Csordas 1993: 136). As such, voice is both an individual and a culturally specific phenomenon.28

Merleau-Ponty (1962: 210-211) states that

the body converts a certain motor essence into vocal form, spreads out the articulatory style of the word into audible phenomena, and arrays the former attitude, which is resumed, into a the panorama of the past, projecting an intention to move into actual movement.

The body’s function as a socially constituted entity impacting on the voice is all-pervading. The extent to which voice sound as well as voice usage is produced and perceived could be substantiated and attributed to conditions within a social paradigm (Merleau-Ponty 1962; Noland 2009; Blakeslee & Blakeslee 2007; Johnson 1987). Voice sound and voice usage are susceptible to, and therefore defined by, an individual in accordance with the continuous interplay of expectations of a social context (see Cavarero 2005). Human beings are their bodies and, consequently then, they are also their voices.

Voice therefore also expresses an identity. Identity can be viewed as the expression of the self (Herrero 2009: 24-25). For Simon (2004: 2-3), identity is a multi-faceted phenomenon in which the comprehension of human experiences and behaviours are mediated from an interaction with the social world that in turn facilitates interaction in the social world. To have an identity has become synonymous to the proliferation of discovering, inventing, demonstrating as well as integrating principles through action and behaviours (Simon 2004). Debates around identity generally centre around essentialist and social constructionist arguments. McLaren (2002: 120-122) argues that the basic difference between these two positions is that essentialist thinking positions identity as an unchanging ‘core’ or ‘essence’ outside historical, cultural or social factors. Social constructionists maintain that nothing is located outside of culture, history or society.

In this study identity will be applied as an attribute that manifests and shapes individuality in relation to a cultural context, with specific reference, for this research, to voice. As indicated above, the positioning of the mind implies that a person

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28 The listener’s perception of the voice is influenced by the listener’s identity and culturally specific paradigm.
discloses and shapes a sense of self in relation to the self and the other and vice versa, as well as its social context. In identity theory\textsuperscript{29} and social identity theory\textsuperscript{30} it is contended that the concept of identity relates to the structure and function of the self (McCall & Simmons 1978; Turner et al. 1987; Brewer 1991). Simon (2004: 11) maintains that “self-regulation depends on social mechanisms, such as social norms and social validation.” Turner et al. (1987: 46) maintain that the “self is reflexive in that it can take itself as an object and can categorize, classify, or name itself in particular ways in relation to other social categories or classifications”. Tajfel (1978: 61) maintains that in social identity theory this process is recognised as self-categorization\textsuperscript{31} (also see Turner et al. 1987; Stets & Burke 2000: 224). In identity theory this process is acknowledged as identification (also see McCall & Simmons 1978). The relationship between the process of self-categorization and/or identification informs and shapes an identity.

The concept of identity thus far presupposes aspects of experience as they relate to permutations of the function and structure of the self in an environment. Morineau (in Bauman 1999: xxxi) maintains that identity relates to a primary desire – that of belonging to a group, of being received by another, by others, of being accepted, of being retained, of being sure of support, of having allies…. More importantly still than all those specific satisfactions received one by one, separately, is that underlying and all-embracing feeling, on top of having one’s personal identity endorsed, confirmed, accepted by the many – the feeling that one has obtained a second identity, this time a social one.

The concept of the self cannot be conceived (or conceived of) on its own, but a sense of identity arises from a social process. Simon (2004: 2) posits that an identity develops as an interaction in the social world that facilitates, in return, an interaction in the social world. Turner (2004: xii) argues that the self is a “mental system, a mental homunculus.” Self is thus related to mind and is “fundamentally social and

\textsuperscript{29} Identity theory relates to the categorization of the self as an occupant of a role, and the incorporation thereof, into the self, as well as the meanings and expectations associated with that role and its performance (Burke & Tully 1977: 36). Stryker (1980: 49) maintains that identity theory relates “principally with the components of a structured society.”

\textsuperscript{30} Social identity theory relates to the self-knowledge of a person that he belongs to a social context or group (Tajfel 1978: 62).

\textsuperscript{31} Turner et al (1987: 42, brackets in the original) maintain that self-categorization theory relates to the “assumptions and hypotheses about the functioning of the social self-concept (the concept based on the comparison with other people and relevant social interaction)”. In other words, this refers to the functioning of an individual in a “system of orientation” in which meanings and definitions are created to locate the individual in a social context (society)” (Tajfel 1978).
interactive” (Simon 2004: 20). Turner (2004: xii) further adds that, as such, self cannot be “a fixed thing; it is a complex social psychological process defined above all by a functional rather than a structural property, that is, reflexivity.” Callero (2003: 119) would agree with this assertion by maintaining that the reflexive process centres on notions of human capacities to become an object to oneself, and to possess the ability to shift between a subject and an object to oneself. James (in Bauman 1999: 89) asserts that human beings perceive themselves as persons that are “partly known and partly knower [as well as] partly object and partly subject”. Mead (as cited by Callero 2003: 119) maintains that “it is by means of reflexiveness – the turning-back of the experience of the individual upon himself – that the whole social process is thus brought into the experience of the individuals involved.”

The process of the self is indispensable in attributing and identifying an individual in a particular context or social structure, or in a particular role. The self in a social process thus individuates and attributes a personal identity and thus an awareness of the ‘inner’ in relation to the ‘outer’. Hackney (2002: 214) posits that the connection between “inner connectivity” and “outer expressivity” is the awareness of the “lively interplay” in a particular circumstance that shifts the relationships of experience for any person at a particular moment in time and space. The interplay between mind and the social process is thus substantial. For Damasio (2010: 8) conscious minds are the manifestation of a self-process that is continuously present when an individual is assumed to be ‘mindfully aware’. As indicated above, Damasio (2010: 8) also argues that the self-process is interchangeably maintained by the self, through the manifestation of a “dynamic object” and “knower”. The dynamic object is constituted by certain manifestations of the mind, traits of behaviour, and a history of life, whereas the self as knower is quantified as a process that focuses on experiences and fosters reflections on those experiences (Damasio 2010; also see Seigel 2005: 651-653; Simon 2004: 5).

The account of the self in a social context therefore identifies a personal identity and provides meaning to the expression of the “I” (subject), and develops characteristics that differentiate one individual from others within a given social context (Bauman 1999: xxxi; Brewer 1991: 476). Locke (as indicated by Herrero 2009: 8) maintains that a personal identity relates to a person as “a thinking intelligent being that has reason and reflection, and can consider itself as itself, the same thinking thing, in
different times and spaces.” The “I” (or the self) is maintained and recognized but not limited to the body or body schema, personality traits, attitudes, social roles, experiences, feelings and so forth – all those qualities or characteristics that distinguish an individual or, in other terms, a ‘bodymind’. Stets and Burke (2000: 225) maintain that individuals in a “particular context of social structure name one another and themselves in the sense of recognizing one another as occupants of positions”. As such, the invoking of meaning creates and accounts for expectations and behaviour with regards to oneself as well as the other. The idea is thus that the self is constructed in and through time, as a supposedly unified being, whose consciousness is linked and based on the premise of an environment in which a person develops and the experiences a person has.

The collective environment categorizes the self into a social identity (or social identities) that, according to Brewer (1991: 476) “depersonalizes” the self-concept, but in addition allows the “I” to become part of an inclusive “we”. Turner et al. (1987: 50) postulate that social identity entails “a shift towards the perception of self as an interchangeable exemplar of some social category and away from the perception of the self as a unique person.” Thus, self-definition in relation to a social identity is changeable, as elements of the self also coincide and assemble with a collective social identity(ies) — to substantiate a sense of belonging (Simon 2004: 21). Bauman (1999: xxx) asserts that in order to belong “with the ‘imagined’ totality one must identify”. This process of belonging to a social identity involves a certain form of conformation in which the social “we” is validated, appropriated and accepted through the confirmation that entrusts to an individual the power of acceptance and the strength to protect those who have already been accepted (Brewer 1991; Bauman 1999). Identity is an active adaptation process constructed in the mind of an individual and encapsulated by the body that contains that mind (within a socio-cultural context). An identity is thus embodied (Herrero 2009: 9) and therefore envoiced. Identity as an embodied and envoiced phenomenon is a self-disclosing essence that seamlessly intervolves thoughts, existence, agency, reflexivity, reflection and so forth. Identity is manifested in acts of behaviour over time (Butler 1988; Noland 2009; Stets & Burke 2000). Identity is continuously shifting and reinventing the self (and thus contradicting the idea of a unified, core self), due to active interaction with the environment.
Identity is expressed and manifested through specific “gestural routines” (Noland 2009) and their impulses, to foster a legible communication with or within the body (Merleau-Ponty 1962: 102 - 110). Gestural routines and further behavioural attitudes as well as how a person perceives himself become markers that are repeated in and over time (and thus are, or become, habitual) in order to construct a “socially legible” body (Noland 2009: Chapter two). These routines include body and, by implication, voice. The interrelationship between body (and thus voice) and identity is indivisible during any act of communication. The self is thus reflected and communicated through voice. The relationship between the self, identity and voice is processually coordinated in relation to a cultural context within which it functions.

3.6 CULTURE

Bauman (1999: xviii) states that culture is a “social system” of “pattern-maintenance efforts” that is “internalized” in a process of “socialization”. Culture can be viewed as a system in which the coordination of ideas or beliefs, expressive symbols, and value orientations are developed that secures their function. Culture therefore becomes a feature of social reality that manifests various and varied situated contexts and practices. For the purposes of this research “social” refers to the demands that persons need to accomplish as they operates in community, whereas, “culture” refers to the way that such demands manifest, are shaped and are carried out (see Weedon 2004; Green 2008).

As socio-cultural beings (which implies that humans are consistently culturally situated) the self and relationships between the self and context(s) often manifest in diverse and often hegemonically coded patterns of behaviours. Cultural and societal existences are manifested within patterned dichotomies in order to enable human beings to identify themselves in relation to other individuals, and to substantiate a sense of belonging in a specific social paradigm (Johnson 1987: 101; Merleau-Ponty 1962: 96-101, 404- 425). As indicated previously in this dissertation the individual voice, as an expressive modality, reflects social and cultural expectations. These expectations can pose limitations on the functional and expressive capabilities of the physiological voice if, as shall be argued below, such expectations exclude certain physiologically organic capabilities. Stated differently, cultural and societal expectations can encourage superfluous tension to accumulate, and if this is upheld in the actor’s body and voice, it may lead to diminishing the efficiency of the physical
body and voice as a physiological construct. It is therefore vital to acknowledge how the physiological (functional) abilities of the voice are entrenched socially and culturally and vice versa. As the self is continuously subjected to a cultural and societal paradigm, it inevitably interlinks with a social and cultural identity. As such, social arrangements and/or patterning are ever present and exist in many forms and shapes (Bradley 2007). From this it can be deduced that voice in a cultural and societal paradigm is subject, and connected, to a socio-cultural identity (Karpf 2006: 121).

3.7 GENDER

One of the main markers of social identity is gender. Gender relates to, but is not equal to sex. Sex is in general viewed as a biological marker of the male and the female body. (I acknowledge intersex and transgendered people whose sex may not be clearly identifiable within this binary.) Sex is a physiological construct whereas gender speaks to self-identification and emerges from a lived experience and learnt behaviour. Traditionally, within a patriarchal context, sex and gender were conflated to the extent that sex implied assuming a specific gender role closely associated with a particular sex. From the perspective of the patriarchal context, the male sex, by virtual of its physiological ‘maleness’ is/was required to (or it was deemed ‘inevitable’ that it would) manifest behaviour patterns or roles that should enact, envoice and embody the qualities of courage, physical strength, competence, rationality, independence, emotional reserve and sexual potency. Behavioural patterns/gestural routines (which become ‘gender markers’) that presented these qualities would ‘confirm’ the dominant male role, and biological difference. Similarly, the female sex ‘should’ exemplify passivity, timidity, fragility, delicacy, emotionality, dependence and chastity (Ruth 1995: 55-56). As such the patriarchal context advocates a congruency between biological sex and gender. This refers to the notion of Butler’s (1990) “heteronormative matrix” that situates male and female on an oppositional scale. According to Butler (1990: 151) a heterosexual matrix refers to a

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32 It should be noted that the argument developed in this section and the rest of the dissertation moves strongly from the position of the social ‘imperative’ of roles and gestural routines that are allocated to males and females by society. As such, gendered roles are seen as social constructs. However, there is a body of scholarship emerging through neuroscience and evolutionary theory that has begun to theorise gendered roles not as social constructs but as biological ‘inevitabilities.’ In simplistic terms, the debate centres around the “nature/nurture” binary. However, for this dissertation, the social construct approach has been used primarily, because the strength of the argument lies in engaging with social and cultural identities, so that the organically malleable vocal apparatus can be ‘optimalised.’
hegemonic discursive/epistemic model of gender intelligibility that assumes that for bodies to cohere and make sense there must be a stable sex expressed through a stable gender (masculine expresses male, feminine expresses female) that is oppositionally and hierarchically defined through the compulsory practice of heterosexuality

Kimmel and Messner (1995: 64) maintain that gender is the central feature of social life and that people use it as an organizing principle around which to structure their lives. In a strong patriarchal society gender identities are predominantly compartmentalized by males in comparison to females in a specific socio-cultural paradigm. Accordingly, social and gendered roles are adapted and adopted, or, alternatively, these roles are inevitably ‘placed upon’ certain/most individuals within a specific cultural paradigm.

Patriarchy is one of the strongest ideological and societal organising structures that functions in accordance with the fusion of sex and gender (Connell & Messerschmidt 2005: 848, 850; Payne 1998) as described above. Patriarchy determines a binary between ‘sex-gender’ within a heteronormative matrix by placing ‘male’ and ‘female’ in oppositional relationships and then locating this within a social hierarchy which justifies male superiority (Bradley 2007; Connell 1987; Ruth 1995). A binary is “a relationship of opposition and mutual exclusion between two elements” (Payne 1998:64). Such a relationship is always/already in tension. This specific binary fixes ‘sex-gender’ as stable points of reference in the patriarchal concept of the self. These divisionary categories have material effects in that they manifest through internalised beliefs and in the ways social interactions reward/affirm gendered expressions of self in accordance with sex, or punish/distance expressions/gestural routines of self that are incongruent with their associated sex (Butler 1988: 11).

In current scholarly discourse it is widely accepted that gender is a socially applied attribute not necessarily constructed on the biological sex distinction of a person (Bradley 2007). As a socio-cultural construct, gender identity is not fixed or stable, but manifests as a set of socio-culturally pre-determined and stylised acts, representations and codes of behaviour that are associated with a sex-gender conflation. These acts, behaviours and representations are repeatable and are continuously cited to create the illusion of a coherent, stable and gendered self (Butler 1988: 11). To illustrate this idea, Butler (1990: 272, 277) likens the process of a person conforming to the sex-gender conflation to an actor performing a role on stage, where a dramatization of the body — ritualised and public — takes place.
Repeated acts/behaviours or gestural routines become an internalised expression of self that is naturalised to the extent that people ‘become’ who/what they perform, repeat or cite. This process is termed ‘performativity’ (Butler 1990: 78). In this context, I would argue that embodiment and by implication envoicement, refers to the way that the meanings that the body ‘carries’ and the way these potential meanings are performed, become visible and are made public. The ‘truth’ of that which sex-gender signifies only remains valid as long it is continually and repeatedly performed or displayed. A socially affiliated sex-gender practice imposes expectations pertaining to these acts, behaviours and representations from a very early age, in accordance with what is perceived as appropriate cultural sex-gender behavioural patterns and customs. Within this cultural perception lies the perceived notion of what is gender-appropriate behaviour in relation to sex and thus the acceptable use of the body and, critically for this study, the voice. One such arrangement is the apparent and consistent discriminatory and social stratification that forms and informs gender practices (see Connell 1987; Connell 1995). Following the central focus of this specific study, the concept of masculinity will now be discussed.

3.8 MASCULINITY

For the purposes of this study emphasis will not be placed on inter-group variation of masculinity and femininity, but rather on an overview of the intra-group variation of masculinity.

Masculinity is a configuration of social practice that concerns ways of ‘being in the world’, which has a synchronising relationship with (and to) the biological male body, but is never embedded in, nor in a fixed coordination with gender choices of an individual (Connell 1987; Connell 1995; Connell & Messerschmidt 2005). Masculinity is concerned with (but not limited to) configurations and performative expressions of ‘being a man’, foregrounding a particular mode of self that temporarily limits and fixes who and what a man apparently is in accordance with ideas around sex-gender. From this perspective, masculinity constitutes an ideological role that limits possibilities of differentiated expressions of sex or gender. This interpretation, however, has evolved to include shifting relations beyond a heterosexual matrix between men as a group, women as

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33 In this sense ‘inter-group’ refers to the relationship between the male and female ‘groups’, whereas ‘intra-group’ refers to the relationship between members of the same group.
a group, and individual relationships between particular men and particular women (Connell 1995).
Masculinity is subject to change as it is shaped in accordance with gender relations which are predominantly achieved in particular social settings through social actions (Connell 1987; Connell 1995; Connell & Messerschmidt 2005). Gender relations involve complex arrangements to inform a concomitant gender identity. These identities involve the intricate relationships of ‘being a man’ and are constituted through degrees of masculinities within certain socio-cultural paradigms. Some forms of masculinities are ‘valued’ more than others, and this phenomenon is typically the result of social and cultural pressure to conform to the dominant ideas of what constitutes the configuration of being a man) within a sex-gender conflation (Connell 1995; Connell 1987). Within a theatre voice class the teacher is often confronted with the presentation of multiple masculinities and tensions around singular interpretations of masculinity within cultural matrices that reinforces the sex-gender conflation. This study acknowledges various constructions of gendered identities (as already briefly indicated). As such the purpose of this study is not to problematize certain notions around particular ways of being, but instead to construct the conceptual outline in relation to assertions made in existing scholarship. This implies and supposes that reference will be made to ‘gender stereotypes’ and more specifically how these gendered perceptions are manifested and reflected in voice usage as indexical of a specific socio-cultural gestural routine. As acknowledged throughout the literature consulted in this study, it should also be recognised that the perception of a specific gendered stereotype is not necessarily a perception of an individual’s own reflexive gender identity. The perception of distinguishing stereotypes lies or is based more on the socio-cultural paradigms of the listener than the speaker per se.

3.8.1 Multiple Masculinities
Multiple masculinities could be viewed as various alternative ways for constructing and enacting or ‘embodying’ masculinity outside of the patriarchal norm and associated sex-gender conflation. Connell (2002: 16) offers that there is no one pattern or form of constructing masculinity. There are various ways in which masculinity can be configured and this is reliant on an individual’s cultural milieu as well as historical influences. Connell (2002: 16) further maintains that within societies
constructed out of a multi-cultural paradigm, it is most likely that “multiple definitions of masculinity” may exist (see also Lindisfarne 1994; Maclnnes 1998: 15). As such multiple masculinities may be practised within a multi-cultural society, and within cultural domains multiple masculinities may also exist. Morrell Jewkes and Lindegger (2012: 3) argue that the existence of multiple masculinities can contribute to hierarchy in society. The dominant masculinity within a specified socio-cultural paradigm is termed hegemonic masculinity, which often has its roots in patriarchy (Carrigan, Connell & Lee 1985; Connell 1987).

3.8.2 Hegemonic masculinity

Hegemonic masculinity is a conceptual arrangement concerning power relationships and a type of masculinity formed in order to effect the subordination of non-hegemonic masculinities. Hegemonic masculinity also implies domination over women across a number of differentiated masculinities (Connell 1987: 183). Connell (1995: 77, parentheses in the original) suggests that hegemonic masculinity propounds a

... configuration of gender practice which embodies the currently accepted answer to the problem, of legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women.

Hegemonic masculinity thus involves social power which associates with authority, and presupposes the subordination of women and other non-hegemonic masculinities. Furthermore, Carrigan et al. (1985: 592) argue that hegemonic masculinity concerns the “question of how particular groups of men inhabit positions of power and wealth, and how they legitimate and reproduce the social relationships that generate their dominance.” Hegemonic masculinity is particularly aimed at cultivating a patriarchal sense of competitiveness which may be constituted within the self towards, and from, the other (Donaldson 1993: 655).

Hegemonic masculinity as an embodied experience is formed, and performed, in conjunction with symbols and ideologies that uphold authority and other socially central concepts, although “most men and boys do not fully live up to them” (Donaldson 1993: 645-646; see also Connell & Messerschmidt 2005: 846; Hearn 2004: 55-56). In addition, Connell and Messerschmidt (2005: 852) posit that hegemonic masculinity may involve particular relations that manifest “internal
division and emotional conflict, precisely because of their association with gendered power.” Hegemonic masculinity as a social phenomenon provides a ‘hierarchical strategy’ as a putative appropriation to instigate a practice of how ‘real men’ should behave (Connell 2005: xvii; Morrel et al. 2012) and by extension, use their voices. These socially constituted boundaries create expectations and relationships (social pressure) that motivate and challenge the body’s physiological functional capacities, and therefore the voice. As a result of these ideologies and implied behaviours, gender identity is re-shaped, learned, associated, informed and performed (see also Butler 1988) in action.

Connell (1987: 119) asserts that such ideological representations involve amongst others image selection in mass media that highlight the deployment of the ‘male-body’. Connell (1987: 119) further maintains that notions and theories around gender either focus on personal relationships between people or on a society as a whole (Connell & Messerschmidt 2005: 830). Gender relations may be constituted through whichever means of interaction and are present in all types of institutions — thus not limited by, and through, a particular setting (Connell 1987: 120). Institutions particularly documented include the confrontational nature of some sporting events, which according to Messner (1992) function as a “renewed symbol of hegemonic masculinity.” As an embodied phenomenon (see Connell 1987; 1995), the idealisation and social significance of sports can for example, be viewed as crucial in the navigation of hegemonic masculinity. The physical body practises and explores gestural markers and gestural routines that signify power, force, strength, physical development and sexuality (Messner 1992). Other institutions may include “the family, the state and the street” (Connell 1987: 121-134). Connell and Messerschmidt (2005: 850-851) assert that hegemonic masculinity is therefore embodied as a cultural and social experience which is constantly subjected to historical rather than biological fact. Thus, hegemonic masculinity is perpetuated in relation to its constitution of action and is shaped by a constant process of symbiosis (also see Hearn 2004; Donaldson 1993).

Hegemonic masculinity as a discourse, however, falls outside the scope of this study, but deserves acknowledgement in order to contribute to the outcomes of this study. Hegemonic masculinity as a discourse is a widely contested subject in scholarly writings and its contentions appear discursive at times (see Connell 2005).
However, Connell and Messerschmidt (2005: 841) assert that “hegemonic masculinity is not intended as a catchall nor as a prime cause; it is a means of grasping a certain dynamic within a social process.”

As offered earlier, the practice of hegemonic masculinity appears to be desirable within a patriarchal society. This practice also includes the use of functional and expressive voice. South Africa can be viewed as an example of a patriarchal society.

3.8.2.1 Hegemonic masculinity in the current South African context

As South Africa is a multicultural society, Morrell (1998; 2001) as well as Morrell, Jewkens and Lindegger (2012) offer that there are various forms of hegemonic masculinity present, constructed and embodied in various socio-cultural South African contexts (see also Bozzoli 1983). Morrell et al. (2012: 12) offer that the representations of hegemonic masculinity in South Africa include at least three manifestations. These are white, African and black masculinities (see also Bozzoli 1983). Morrell et al. (2012) maintain that South Africa’s historical and current political dispensation is substantially influenced by the shifting ideologies regarding hegemonic masculinity present in this country. According to Morrell et al. (2012: 17) Jacob Zuma, as the current president of South Africa, embodies “heterosexist, patriarchal, implicitly violent and glorified ideas of male sexual entitlement, notably polygamy, and conspicuous sexual success with women.” Morrell et al. (2012: 17) further indicate that Julius Malema embodies a hegemonic masculine endeavour that focuses on “land seizure, forced nationalization, and celebrates attacks on white farmers”. Morrell et al. (2012: 17) assert that Julius Malema “celebrates assertions of power and wealth, with acquisition predicated on entitlement, use of violence and brute strength, rather than personal achievement or respect for the legitimate use of power”. All these manifestations of hegemonic masculinity stand in contradiction to Nelson Mandela who represented a more “egalitarian masculinity” to South Africa, or as Unterhalter (2000: 158) maintains a “new masculinity”, a masculinity that was

34 Morrell (2001; 1998) applied the concept of hegemonic masculinity to a South African context concentrating on how male power is distinguished, individuated, manifested as well as projected amongst men in South Africa. As mentioned above, he specified three types of hegemonic masculinities, defined as white, African and black. White hegemonic masculinity lies predominantly in the political and economic dominance of the white ruling class, whilst African hegemonic masculinity involved a rurally based masculinity manifesting and continuing through indigenous institutions and practice such as chieftainship, communal and land tenure and customary laws. A black masculinity evolved in the context of urbanization and the development of geographically separate and culturally distinct African townships.
characteristically “heroic”, and that extended into his public presentation. As such, Mandela’s ‘new masculinity’ challenged and surpassed Apartheid’s white male politicians as well as the traditionally patriarchal masculinities of Bantustan leaders. Thabo Mbeki, as successor to Nelson Mandela partially embodied Mandela’s egalitarian masculinity, but was perceived as “aloof and dictatorial” (Morrell et al. 2012: 17). These potent examples demonstrate the shifting manifestation of hegemonic masculinities present within South Africa’s political dispensation.

3.9 ALTERNATIVE MASCULINITIES

Research indicates that there is not just one form of masculinity (see MacInnes 1998; Schrock & Schwalbe 2009; Shefer et al. 2007), and as such this study acknowledges that there is a multitude of masculinities. Pertinent to this study I will discuss gay male identities and drag queens as forms of alternative or variant masculinities. Schrock and Schwalbe (2009: 280) argue that the notion of multiple masculinities facilitated itself as a response to, and rejection of, the culturally idealized and mostly revered version(s) of hegemonic masculinity. Males embodying an alternative masculine identity thus subvert hegemonic masculinity and are categorized according to marginalized social group(s) manifesting itself/themselves through diverse and multiple ways that constitute a masculine self (MacInnes 1998). The development of a masculine self emerges as a specific and situated process within a particular historical and cultural context (Connell 1995: 100).

As Connell (1992: 736) posits:

> Multiple masculinities should not be viewed as a relational character of gender. Different masculinities are constituted in relation to other masculinities and to femininities — through the structure of gender relations ([see also] Connell, 1987: 175-178) and through other social relations… [Variant constructs of] masculinity are thus in relation to hegemonic masculinity and is subsequently marginalized/subordinated.

The defining of a specific masculine self is through embodied gestural routines, behaviour, attitudes or specific markers that connect an individual to a process of being that is situational, appropriated and thus perpetuated. According to MacInnes (1998: 100) the attribution of a masculine self is manifested through the act of performing the self (see also Butler 1990). An overview of gay masculinities will be provided as examples of alternative masculine identities and how these masculinities manifest themselves as variant forms of masculinities. This study acknowledges gay
masculinity and transsexual identities as variant expressions of masculinity. An overview regarding the manifestation as well as indicators of its gendered markers and behaviours of body and voice will be discussed as applicable to this study.

3.9.1 Gay masculinities

Gay masculinities is commonly related to males who dissociate themselves from hegemonic masculinity through the manifestation of an identity that expresses public defiance to the hegemonic masculine ideal insofar as expression and representation of actions, practices and behaviour are concerned (see Connell 1995; Schrock & Schwalbe 2009; Fejes 2000). Traditionally the concept of gender practice is positioned in relation to a heteronormative matrix that involves the relational qualities through which oppositional sexes are expected to embody and envoice specific meanings and codes. These are characteristic of the gender representation, as far as action and behaviour are expressed through gestural routines. A heteronormative gender matrix therefore assumes a dichotomous relational quality in which gender is perceived in specific ways, for example masculine (male) equals the attraction of females and vice versa or put otherwise, the duality of oppositional gender preferences constitutes attraction (Badinter 1995: 97). Gay male identification exists beyond this matrix of gender construction, and as such homosexuals destabilize this gendered matrix (Cornwall & Lindisfrane 1994: 2-5). Bullough and Bullough (1997) assert that as a result of the clear definitions existing within a dichotomous gender binary of sexual orientation and gender practice, men displaying ‘effeminate’ behaviour and action were often assumed to be homosexual. However constructions of homosexuality may also involve or pursue heightened expressions of masculinities. In this sense, ‘expected’ gestural routines, as posited by hegemonic masculinity, and ‘actual’ gestural routines did not coincide. Gay men are, within the realm of a heteronormative matrix stereotypically considered as ‘othered beings’ or ‘outsiders’ (Irvine 1994: 239). Fejes (2000: 114) asserts that gay male sexuality and gender exist as a fluid system in which a perception is based on “desire” that is in itself a fluid construct. For Irvine (1994: 237), gay men transform and destabilize

35 A further category of the influence of sexuality on vocal work can be conceived of in the situation of the transgendered individual. Because the transgendered situation points (a) either to male becoming or ‘being’ female or female becoming and ‘being’ male through certain procedures, and (b) or to the dynamics of the movement of the one to the other (where a ‘different’ voice to locate the new gendered person in the new socio-cultural environment would form the focus of the training), the transgendered situation does not form part of this study.
social meanings of same-sex relationship and sexual behaviour — thus notions of masculinity. Gay men therefore are able to engage with gender in ways that remain isolated from ‘straight men’ due to the dichotomous gender system that expects ‘straight men’ to perceive, feel, and envoice their thoughts through gestural routines congruent to what is appropriate and expected. This means that gay men have the ability to perceive, experience, configure and reconfigure, and combine personal ideas pertaining to their own gender and masculine construction.

Connell (1995: 162) offers that gay men are more prone to self-reflection which situates itself as directly oppositional to the experience of the heterosexual man. The notion of gay masculinity sits directly in an oppositional relationship to the hegemonic version of masculinity as a particular variety of masculinity to which all other masculinities — among them ‘effeminate’ and gay men — are subordinated. Common notions or beliefs surrounding gay male experiences (as posited by hegemony), involve the tendency to locate homosexual behaviour as ‘effeminate’ — thus negating masculinity, as masculinity as a concept is associated with the institution of heterosexuality (see Connell 1992: 735; Badinter 1995: 97).

As masculinity is shaped and rooted in a patriarchal gender order, it exists in contrast to femininity (MacInnes 1998: 14, 25). Within such a binary, women are viewed as inferior and thus characteristics associated with femininity and being feminized are viewed as ‘lower’ in status and power. Gay men consequently establish an alternative masculinity in relation to that of hegemonic masculinity. However, Schrock et al. (2005) as well as Fejes (2000: 114) assert that the construction of gay masculinity is reliant on various elements of heterosexual masculinity as a basis for constructing it as a variant form of masculinity. This is due to the belief that masculinity is inherently linked to, or in opposition to notions of heteronormativity. As gender is fluid and constructivist by nature it implies that definitions or articulations of gay masculinity will have points of reference as far as its construction is concerned rooted and aligned in a heteronormative matrix — thus heterosexual and gay masculinity are contrasting but not necessarily oppositional masculinities. The active and fluid constructions of masculinity create a hierarchy amongst men (see Connell 1987; 1992). The products of gay masculinities dismantle the hegemonic versions of masculinity and imply the deconstruction of hegemonic masculinity as a process of reconfiguration, to produce various ways of masculine
identities ranging from the macho-gay\textsuperscript{36} man to the ‘effeminate’ as well as drag queens (as indicated by Fejes 2000).

As suggested above and following Butler’s (1990) concept of performativity, gay males draw from various contexts to construct their own identity, involving complex gender and sexual dynamics. Drag queens or female impersonators involve and revolve around a self-concept of a man that has no desire to live as a woman, nor become a woman (Strübel-Scheiner 2011: 13). Being a drag queen or a female impersonator relates to a process in which a man constructs a feminine identity and performs in front of an audience that generally knows that the performer is not female. According to Barrett (1998: 140) drag queens prefer being referred to as a female impersonator or illusionist, as a means of distinguishing and distancing themselves from non-professional drag queens. Professional drag queens have their own individual persona (as opposed to only reproducing the persona of a single celebrity) (see Barrett 1998: 141; Mann 2011: 794-795). Female impersonators aim to produce and present the illusion of being a ‘real’ woman, usually performing as a specific character (Barrett 1998: 141). In this sense, many of the ‘roles’ that drag artists select come from Hollywood depictions of femininity, such as Mae West, Marilyn Monroe, Liza Minelli, Cher and even Tina Turner. Thus the process of preparing for a drag performance involves emphasized cross-dressing\textsuperscript{37} as well as emphasized or ‘hyper feminine’ behaviour and is usually restricted to a performance situation only (Hopkins 2004: 137).

According to Murnen and Byrne (1991: 480) ‘hyperfemininity’ behaviour relates to the construction of exaggerated ideas and embodiment of what constitutes ‘femininity’. Drag queens, as such, should not be confused with transvestites and transsexuals. Transvestism generally relates to a man that has a fetish for feminine attire (see Bullough & Bullough 1997: 1), but does not necessarily self-identify as a man or a woman (see Cornwall 1994: 111), but instead focuses on himself as dressed in woman’s clothing, as opposed to attaining sexual desire from a person of either sex (Bullough & Bullough 1997). The central difference, therefore, lies in that

\textsuperscript{36}Machismo relates to a configuration of being macho/‘manly’—a concept associated with excessive masculine pride or, as Ruth (1995: 57) maintains, a masculinity of the “bad boy”. Macho-gay on the other hand, involves a gay subculture in which male homosexuality emphasizes gender conformity according to notions of most culturally revered configurations of masculinity (Levine 1998: 1).

\textsuperscript{37}Cross-dressing refers to any individual that wears attire that is commonly associated with the opposite sex/gender, irrespective of sexual orientation (Barrett 1998: 140).
drag queens ‘perform’ theatrically, while transvestites ‘perform’ social roles. Cornwall 1994: 112 maintains that transvestites would shape their bodies in exaggerated ways so that the contours directly depict a female body, disguising the male body’s penis whilst emphasizing female breasts. A transsexual identity primarily relates to a process of self-construction and identification connected to an experience in which an identity is radically changed. Mason-Schrock (1996: 176) describes a typical process as involving an individual being born into the wrong-sex body that alienates an individual from that body’s biological markers, as those indications of sex differentiation are considered repugnant to the transsexual (also see Schrock & Schwalbe 2009). Ways in which these various gender identities and masculinities are constructed and performed involve the negotiating of a gender identity transmitted via bodily codes, behaviour, gestural routines and, consequently, action.

Tewksbury (1993) maintains that the drag queen identity exists as a relational identity relative to an actual identification of the self and is generally activated and embodied to mark or indicate a physical and social transformation of the self through performance. Rupp et al. (2010: 277 – 278) posit that the construction of a drag identity reinforces notions of gender presentation and sexual desire that is rooted in the hegemonic ideal (see also Rupp & Taylor 2010; Tewksbury 1993; Schacht 2002). The formulaic “drag performance” involves the reification of gender patterns and standards of conventional ways of being a female and a male. These patterns are juxtaposed through a seemingly overt masculine embodiment of the feminine (Rupp et al. 2010: 277), and further a “homosexual embodiment of the heterosexual” (Brown 2001: 38) — thus shaping and perpetuating masculine hierarchy (also see Connell 1992).

According to Strübel-Schener (2011: 13) drag performance is a way of negotiating a gender identity, whilst Taylor and Rupp (2005: 2115) argue that, given the dynamics of drag queens and a drag performance, there is continually a shift in balance and power between drag queens as men and as highly ‘effeminate’ performers in a show. Drag performances place a strong emphasis on performing a mockery or a subverting of ‘hyper-effeminate’ attitudes and ridiculing female gender stereotypes. These ‘hyper-effeminate’ behaviour patterns and attitudes are thus performed as codes or markers.
Bodily and vocal manifestations serve as primary gestural routines and provide codes or markers that express the chosen or celebrated masculinity of the self. The relationship between identity, self and gender have (as indicated) by implication therefore a direct influence on the perceptions of how voice and usage thereof are manifested. This points to the necessity for addressing socio-linguistics and voice.

3.10 SOCIO-LINGUISTICS AND VOICE

As this chapter focuses on the voice presented, it is necessary to examine ways in which masculinity as a social role is expressed vocally. Voice can be viewed as a gestural routine as a result of its subjection and connection to identity. The phenomenon of the self being expressed vocally points to the use of voice within its socio-cultural context — thus the use of language within specific contexts. The study of language in its scientific and structural nature refers to linguistics — a ‘knowledge’ system through which language is studied (Matthews 2007: 1). Matthews (2007: 1-2) states that linguistics concerns the lexical (content of the words expressed) and grammatical categories (functioning of words in a sentence) of languages as well as the differences between language forms (such as prosodics, for example) and the historical relationships between languages. Although the aim of this study is not to provide an in-depth discussion of linguistics, basic information informs this study. In order to understand the effect that masculinities have on the usage of the voice, an exploration of socio-linguistics, as an interdisciplinary branch of linguistics is required. Socio-linguistics refers to the “study of the structure and use of language in its social and cultural contexts” (Holmes & Pride 1972: 7). Lavandera (1974: 196) maintains that socio-cultural linguistics expresses the view that social function gives form to the ways in which linguistic features are encountered in actual life; [it] must begin by identifying social functions, and discover the ways in which linguistic features are selected and grouped to serve them...it shares a concern for social realism and validity...Socially constituted linguistics is concerned with the social as well as referential meaning and with language as part of communicative conduct and social action.

A language can therefore be seen as a ‘social science system' acquired by the self, enabling the self to construct, engage, process, evaluate, and more importantly express himself through various vocal gestural routines. For Halliday (1974: 1) language as a process for an individual arises through continuous exchange with other individuals in a social process. This may imply that social structures which are
present in a cultural paradigm can be viewed as cultural practices within that specific paradigm, which, by extension, implies a particular usage of the voice.

The manner in which the socio-culturally learnt gender practice manifests in, or shapes the usage of, the voice should be acknowledged. ‘Linguistic patterning’ due to gender is socially constructed. In this sense ‘linguistic patterning’ might be seen to equate with a type of verbal gestural routine. As gender is a confluent social practice, voice could be acknowledged as being subject to socio-cultural norms. In other words, voice, as shaped by the body, manifests and expresses specific gestural routines that are subjected and connected to the identity of an individual. Research indicates that voice as a marker of an identity is often attributed to a perceived sexual identity (Kiesling 2007; Edwards 2009). Edwards (2009: Chapter 7) asserts that “perception locates its own reality.” At the immediate level, the marker for such a perceived sexual identity engages with vocal characteristics, specifically on the primary acoustic differences in the speech of males and females.38 Therefore, one can imply that the perception of gender is conveyed by the voice through “phonetic correlates” that render voice as a marker of male and female speech characteristics. According to Abercrombie (in Herrero 2009: 19) these characteristics of voice as far as the production of speech sounds is concerned, are dependent on features such as vocal quality and vocal dynamics. Vocal quality relates to the acoustic properties determined by the innate anatomical and physiological features of an individual’s voice, whereas vocal dynamics involve all those features that an individual learns, associates with and expresses within a social process (Crystal 1976: 86-92). Consequently, the combination between an individual’s vocal quality and his use of vocal dynamics would fulfil specific objectives in the act of communication (see Laukkanen 1995: 12; Cavarero 2005). As such one can posit that the voice carries gestural routines that present and maintain particular expressions of self. The combination of vocal quality and vocal dynamics within a communicative engagement produces or shapes specific phonetic and acoustic correlates. Crystal (1976: 60) agrees that the vocal dynamics (or otherwise referred to as prosodic elements) of speech play a significant or central role in the communicative act of individuals. Prosody or the prosodic elements of speech relate to linguistic features encompassing the intonation, rhythm, tempo, loudness and pauses of an individual’s spoken utterance (Wennerstrom 2001: 4). For Shewell (2009: 184), prosody refers

38 As discussed in chapter two.
to a set of “ingredients” through which spoken communication is facilitated and managed. These “ingredients” include pitch variety, loudness variety, emphasis, pace variety and pauses as integral features of spoken communication (Shewell 2009: 184).

The prosodic elements of speech can be seen as shaping language according to specific markers that are expressed. The prosodic elements of speech, interconnects the manner in which linguistic units are communicated and expressed vocally (as utterances) by an individual (see also Cruttenden 1997). Facilitating an overview of the prosodic elements of speech would enable this study to understand how voice as a marker of an identity is perceived and expressed. According to Delph-Janiurek (1999: 138) the prosodic elements of speech are very strong indicators of “linguistic gender cues”. If as suggested above, sound carries specific patterns or ‘phonetic correlates’ it affirms that individuals through their everyday engagements in the social process function within a social structure. Consequently, status and/or social roles are affirmed, maintained and managed through vocal habitual gestural routines, phonetic correlates (in this particular case) and prosodic patterns. According to Halliday (1974: 2) this implies the institution or “transmission of (a) shared knowledge system of value and knowledge”. As gender is ‘learnt’ through a number of social institutions and relationships, people are socialized into gender roles. Voice and the usages thereof are also susceptible to cultural confluence and influence. A gendered voice is a confluent social practice made ‘public’ through habitual gestural routines. Kiesling (2007: 653) asserts that language employed by an individual could be seen as a way of expressing “power, solidarity, and identity.” According to Kiesling (2007; 2005) the relationship between language and gender facilitates a “dominance view” that situates male power in opposition with female subordination whereas the “difference view” locates oppositional perspectives as attached to, or arising from and within a specific cultural context (see also Edwards 2009). These dominances and differences become the parameters that inspire boys and girls to construct and inhabit particular roles when they are young. Schrock and Schwalbe (2009: 281) assert that children are “born into the world in which males/boys/men are differentiated from females/girls/women”.

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Edwards (2009: Chapter 7) maintains that these patterns develop very early in life and are “reinforced” and maintained accordingly throughout the course of life. Coates (1983: 121) maintain that

…in becoming linguistically competent, the child learns to be a fully-fledged male or female member of the speech community; conversely, when children adopt linguistic behaviour considered appropriate to their sex, they perpetuate the social order which creates gender distinctions.

This has a significant influence on how boys and girls learn to identify and categorize themselves into specific role in order to function according to an associated gender marker (see Schwalbe & Mason-Schrock 1996). Similarly, linguistic acquisition plays a significant role in how children identify and further ‘what it means to be male and female’. Boys and girls therefore would accordingly identify with an associated gender so as to copy bodily and linguistic variables of the related gendered ‘role models’ in order to emulate the appropriate behaviour. Hudson (1996: 17) argues that children from an early age have the capability to methodically distinguish, adapt and identify the cultural appropriateness to which the sound of their voices should be ‘arranged’. Coulmas (2005: 57) posits that the emulation occurs in correlation with the corresponding parent’s voice. Voice usage as an expression of gender practice is patterned from an early age through a number of social institutions and relationships. Though not all linguistic acquisition is conventionalist, the option to conform is easier, as the alternative norm seems not congruent with socio-cultural norms and is thus suppressed (Coates 1993: 13). The reification of socially accepted gender roles occurs publicly in collaboration with repeated physical and verbal gestural routines that ensures the emulation of ‘cultural appropriateness’. Similarly, Edwards (2007: Chapter 7) asserts that sex and gender role implications effect perception which in turn effect responses and assessments, of which language is one of those aspects.

3.10.1 Hegemonic masculinity and the male voice 39

The expression through language is a social performance that occurs in relation to a specific cultural perspective (see Eckert & McConnell-Ginet 2003). As this study argues that a dichotomous male voice is situated, maintained and manifested

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39 As far as I could ascertain, the majority of the sources consulted considered the manifestation of gendered voice patterns from Western viewpoints. Very few scholarly reviews directly deal with this matter from a South African perspective. An exploration of the linguistic self in a multilingual context has been conducted by Lemmer (2014), although not directly applicable to this study.
through envoicement, so language as an expression through speech sound provides a specific linguistic feature that expresses an identity. To this end and for the purposes of this study it is first necessary to discuss typical voice and speech patterns of hegemonic masculinity. Connell and Messerschmidt (2005: 836) argue that hegemonic masculinity as a social practice affects speech patterns, behaviour, and movement. Male speech patterns influence, and at times limit, the optimal or ‘full’ functional possibilities of the male voice. This comes about because of the socio-culturally learnt gender practice that manifests and shapes the usage of the voice. Voice is body; the voice cannot be separated from body and thus from bodymind (Thurman & Welch 2000). To this end, an exploration of hegemonic masculine speech patterns as expression of male voice usage in relation to gender will be undertaken.

Kiesling (2007: 660) agrees that a direct relationship exists between socio-cultural dynamics and masculinity through linguistic expression. Thus, the indexical manifestation of “cultural discourses of masculinity” can be viewed as gestural routines (Kiesling 2007: 661). Before advancing the discussion applicable to this dissertation, it is necessary to state that indexical meaning arises from the use linguistic features (or verbal gestural routines of ‘pointing out’) within communication (see Levinson 1983; Eckert & McConnell-Ginet 2003; Kiesling 2007). The indexical manifestation of linguistic features interrelates with a subfield of linguistic study, called pragmatics. Pragmatics in its most simplistic definition refers to the study concerning language usage (Levinson 1983: 3). This study does not endeavour to explore pragmatics in an in-depth manner. However, pragmatics can be seen to be significant as it is indicative of how language and gender are inhibited, facilitated and expressed in relation to how gendered bodies operate in specific circumstances. An example of this, according to Edwards (2009: Chapter 7), is the specific notion that “women’s speech tends to be more conservative, more ‘standard’ and ‘polite’ than men’s speech”. This could be attributable to the perceived gender role women are expected to enact in a patriarchal context. Johnson (1997: 16) asserts that the typical masculine verbal style is expressed through the inability to express emotions with the same lucidity as women, due to the pressure of patriarchal societies which demands that men appear rational and unemotional. Sattel (1983: 120) posits that it is comfortable to exercise power so as to “make it appear that all one’s behaviour seems to be the result of an unemotional rationality”. Being impersonal and
inexpressive lends to one’s decisions and positions an apparent autonomy and ‘correctness’. Similarly men are also seen as less descriptive than females, who have a tendency to over-report (Cameron 1997). Thus women’s speech is viewed as more “affiliative” whereas men are more “assertive” (Edwards 2009: Chapter 7). De Klerk (1997: 147), Smiley (2007: 20) and Tobolski (2007: 34) assert that the culturally gender-based vocal patterning in masculine voice and speech is somewhat ‘coarser’ and more direct, as opposed to women’s more ‘delicate’ speech. These manifestations could be ascribed to the direct influence of the perceived social roles men and women are expected to fulfil, as these are pertinent to the binary of what constitutes heteronormativity. In the same manner that men and women are socialized into their gendered roles coupled by perceived expectation, there are similar traits in language behaviour. Edwards (Chapter 7) maintains that women are expected to exemplify a “timid, dainty, ‘nice’ and eager to please” linguistic behaviour and/or gestural routines. These differentiations (as far as linguistic gestural routines are concerned) could be attributed to social issues that involve power and subordination (see Cameron 1997).

One can then argue that if women’s linguistic behaviour is limited due to these ‘restrictions’ placed upon them, the same might also be true for heterosexual men. Men overtly perform and uphold specific gender and linguistic gestural routines to sustain power and dominance. Kiesling (2007: 661) notes that certain gestural routines reinforce power and dominance. One such routine that indexes masculinity is the lowering of the pitch of the voice. As pitch is the most distinguishable phonetic variable between males and females this contributes significantly to perceived male dominance.

3.10.2 Male and female vocal socio-cultural manifestations and the voice teacher

Bergvall (1999) explores general perceptions of how expected sex-based behavioural differences are assumed and explained in accordance with the anatomy and physiology of a person. As indicated in the previous chapter, there are significant structural differentiations between the male and female physiological constructs that should be taken into account within the theatre voice class. These differences in structural composition between males and female voices constitute and characterize acoustic differences. Amongst the most noteworthy anatomical
differences are vocal fold and tract sizes responsible for shaping and emitting distinguishable voice qualities. Male vocal folds are longer and thicker, which consequently produce lower fundamental frequencies — thus there are pitch implications. The male vocal tract is longer and wider to enhance specific overtones and formants determining the specific voice quality defined as “male”. Females, on the other hand, have shorter vocal folds and narrower vocal tracts resulting in the emission of a higher fundamental frequencies and formant qualities.

However, the innate anatomical and physiological attributes of voice are not the ultimate destination. Due to the influence of the socio-cultural (as outlined in this chapter) voice is “often represented either expressively as personal and individualistic or socially as a discourse system” (Prior 2001: 55). In other words, voice is subjected according to a scale of a perceived gender identity. Hendrick (1998) maintains that examining pitch exclusively is inadequate, because the use of pitch in varying situations signifies stronger gender cues/codes. As such, an inference can be made that the relationship between vocal quality and vocal dynamics could be adjusted to perform an expectancy of a vocal gestural routine that upholds a particular perceived role of gender in a social process. For example pitch, accessed as a prosodic element of speech, is not purely physiological. Brend (1975: 84) offers that men’s intonation preferences favour monotonicity as they tend to avoid vocal patterns that do not end with the lowest level of pitch — thus limiting the innate functional (physiological) potential of the voice. Women are more inclined to glide upwards at the end of a sentence, and engage with a variation and range of tone and they change tone more frequently than men. Hendrick (1998) maintains that these characteristics credit women’s speech as more melodic as opposed to men’s more mono-tonal speech. These manifestations of men’s speech as seemingly more linear to that of women’s speech could be the result of a gender expectation and the occupation of power (Kiesling 2007). The verification of socially accepted gender roles occurs publicly in collaboration with repeated physical and verbal actions to emulate cultural (or gender) appropriate gestural routines (Connell 1995; 1987). These norms present themselves as “historically and socially constructed and consequently variable, to help echo masculine behaviour” (Cameron 1997: 49). Sattel (1983: 120) posits that it is comfortable to exercise power so as to “make it appear that all one’s behaviour seems to be the result of an unemotional

40 It can be assumed that this author is possibly writing from a hegemonic masculine perspective.
rationality”. Being impersonal and inexpressive lends to one’s decisions and positions an apparent autonomy and correctness. Kiesling (2007) maintains that one of the most prominent features positioning men’s power and dominance is language. The relational reference of silence for men implies reluctance to engage linguistically with women as a way of establishing power and authority. A further way men utilize or maintain power is by interrupting women as a means of claiming power (Edwards 2009: Chapter 7). Kiesling (2007) notes that if these social views are the preconceived ideas, the relational positions imply that men, when silent, confirm authority and potency whereas when women are silent this may imply weakness and timidity — thus subordination. Silence could be seen to contribute to men claiming social power and resultantly rendering them as emotionally inexpressive or rational. Kiesling (2007: 663) maintains that an inexpressive behaviour relates to obtaining power through suppressing emotions of which anger is an exception. According to Edwards (2009: Chapter 9) silence, in this sense, becomes a potent tool for men to suppress or deny inner feelings by maintaining a status of power rather than weakness. It may appear strange to target ‘silence’ as a ‘vocal strategy’ but it is important to note that males might respond to verbal cues using silence as the preferred mode of communication, brought about by a particular identity. The voice teacher needs to be aware that bridging silence by giving voice is a strategy that might run counter to identity.

Reflectively, it seems then that the use of very little intonation difference, small pitch range at the bottom of the vocal range and a downward inflection at the end of sentences can be interpreted as gestural routines of hegemonic masculinity. As such heterosexual men have to continually commit and repeat these specific verbal gestural routines in order to legitimize and validate their ‘manliness’ (Connell 1987). The expression of voice and speech is thus maintained as part of upholding the heterosexual matrix. To have a voice implies, inevitably, becoming and being a gendered voice, identifying the self as a specific social being within and interacting with a social process.

3.10.3 Gay masculinity and voice

There is great variation on how men use their voices to express a particular identity (as well as other linguistic features that are part of this process). Research about gay men’s speech characteristics focuses on stereotypical perceptions that gay men’s
intonation patterns display more dynamics than that of heterosexual men (Gaudio 1994: 31). As a result of this, gay men’s speech is perceived as sounding ‘feminine’, partly as it is reflective of women’s intonation patterns (Delph-Janiurek 1999: 142). These characteristics are in contrast to the heterosexual male voice that is perceived and/or expected to employ greater levels of being reserved (with regards to acoustic properties) and a much smaller degree of vocal dynamics (as discussed above). Thus, gay men can be seen to challenge the norms of acoustic and linguistic choices displayed by heterosexual men. As such, sounding gay is often documented as manifesting in linguistic features that stereotypically frame the gay male speech as similar to female speech. Examples of this include the use of adjectives such as “divine” coupled with dynamic intonation patterns (Gaudio 1994: 32). According to Levon (2006: 56) prosodic features such as pitch range have been identified in gay men’s speech and have indexed gay speech. Similarly, the ‘gay man’s lisp’ is a result of sibilant durations of speech sounds displayed by some gay males. Cameron and Kulick (2003: 136) posit that a particular gay speaking style should not be taken as descriptive generalizations about the behaviour of real individuals in particular gay communities, for those individuals may in practice display the speech characteristics that make up the ideological construct.

Rodgers et al. (2000) posit that gay males display a tendency to prolong fricatives such as /s/ and /z/, producing higher peak frequencies. According to Levon (2006: 60) the frequencies at which gay males produces a /s/ fricative varies from 5882Hz to 7333 Hz, while heterosexual men display frequency variations that ranges between 4722 Hz to 6882Hz. Resultantly, gay male speech attests to a gestural routine indicative of shifting towards a more ‘feminine’ use of higher frequencies.

Delph-Janiurek (1999) maintains that some gay men use a wide variety of prosodic elements that are usually associated with heightened and extremes versions of women’s voices. Men that perform as drag queens utilize clothing, makeup, wigs and various other accessories to present themselves as women to an audience (Barrett 1998:144; Mann 2011: 794). These performances consist of ‘lip-synching’ words to songs while dancing on stage or manoeuvring through an audience to collect tips. Linguistic interaction with an audience is limited to an occasional “thank you” for tip or a greeting to a regular audience member. These linguistic interactions are limited because they often require the performer to stop ‘lip-synching’, thereby potentially
ruining the intended illusion (Mann 2011: 795). Drag queens utilize their performances as ways of highlighting ways of crossing genders (Barrett 1998: 140). As such, performance strategies vary from large portions of ‘lip-synching’ to pre-recorded music, to the use of language as central to a performance work. As indicated previously, drag queens highlight society’s stereotypes of ‘femininity’ and depending on the context, drag queens emphasize female speech patterns.

As such experimental research endeavoured to illustrate how perceived ideas of gay male voice manifest and what markers or gestural routines are used by listeners when perceiving a gay man’s voice as different to that of a heterosexual man (see also Gaudio 1994; Smyth et al. 2003; Levon 2006; Crist 1997). Levon (2006: 56) utilized affective personality traits to determine how the perception of gay identity influences how men as a group view men with alternating gender manifestation. Such perceptions indicated that masculinity is often associated with greediness, whilst ‘effeminacy’ is linked to generosity. Personality traits such as friendliness and neatness were often associated with gayness whilst heterosexuality was characterized by personality traits such as aloofness and messiness. As such characteristics displayed by men as ‘effeminate’ is seen as gay whereas masculinity is associated with heterosexuality. This research corresponds to Gaudio (1994: 48) who posits that “straight/gay and ‘effeminate’/masculine scales were very strongly correlated…which means that speakers who were judged ‘straight’ were also judged as ‘masculine’ and ‘gay’ sounding speakers were also judged as ‘effeminate’.” Speculation of personality referring to masculinity, however, falls outside the scope of this study. Critically, the voice teacher is confronted in the voice class both with the range of identities as suggested here, but also with the demands of accessing, enhancing and challenging the envoiced/embodied identities that are present, as part of the training programme. As such voice training is concerned with the exploration and development of an individual’s unique voice potential.

It should be noted that a particular gender preference is an ideological status that is embodied and that positions an individual in a specific socio-cultural environment. As such, this study acknowledges that the examples addressed are mainly stereotypes as theorised above. Therefore the perception is that within the frame of performing hegemonic masculinity (for example), men embody their power through their gendered identity; masculine vocal expression could be described as ‘linear’ and
possibly ‘restrictive’ insofar as pitch, range and by extension the expression of emotion are concerned. As the power of gender is reflected in the identity, it affects thought as well as voice, as a psychosomatic phenomenon (Linklater 1976: 2; Titze 1994: xx-xxi; Shewell 2009: 4). Smiley posits that “cultural and gender images ... influence the unconscious mind and therefore the voice” (Smiley 2007: 18). Kiesling (2007: 661) maintain that “masculinity is expressed in language through features of language directly indexical of certain kinds of men”. Being able to identify and ‘read’ such indexical clues in the voice class assists in strategizing the interventions that are required.

The impact of ‘masculinity’ as a social discourse manifest in a multitude of ways as a result of a social relevance and appropriateness for and/to the individual. This could imply that body and voice patterns accumulate and become ingrained and habitual — thus limiting the functional or physiological potential of the voice. These socio-culturally dictated body and voice gestural routines are not, however, necessarily the most effective as far as function and expression within the performance context are concerned, where male student actors are potentially required to present a far wider range of expression in performance than what ‘masculinity’ might encourage. These patterns may, in fact, limit the functionality and expression of the performance voice.

The role of the voice teacher is to prepare and develop the male student for a potential set of markers/codes/signs that can draw on his full functional/biological male potential in order to play any character’s gender identity and subsequently prepare the student to set up signs for the audience to define that character’s gender attitude. McAllister-Viel (2007: 217) maintains that “gender is not simply a limiting force but instead a material condition of training and performance that negotiates larger and economic structures”. In addition to this, linguistic features become an integral part of an individual’s identity and how such an individual perceives and expresses himself within a specific socio-cultural environment. Espinoza (2005: 140) maintains that linguistic identity and cultural identity transpire as interrelated and therefore cannot be divorced from an individual and his self-concept. To this end, the manifestation and the dichotomised expression of voice is a complex undertaking. The need to explore training possibilities in providing the male student actor with strategies or skills will connect to the holistic process of an individual’s sense of self (bodymind connection). Voice teaching is considered an all-inclusive process or as
being “transformative” (see Madill 2011: 275) in nature, as it does not simply address the vocal skills of an individual but holistically addresses all aspects interrelated to an individual — thus his bodymind (see also Wither-Wilson 1993: 108). Peart-Reid (in Madill 2011: 275) maintains that five dimensions of experience and transformation are impacted on through the process of vocal training. These include “an individual’s sense of self, knowledge of skills and understanding, emotions and feelings (emotional expressiveness), sensorimotor perceptions, and behaviour and intentions” (Madill 2011: 275). As such, working closely on developing the physiological voice ‘beyond’ the confines of the socio-cultural voice implies that an individual will/might begin to question his sense of self as well as his survival strategies. Reactions to this process are either or often filtered in accordance to the four different fear responses that escalate as a function of proximity or danger to being threatened. These include Freeze, Flight, Fight, Fright (see Bracha 2004 for extensive overview). Critically, all four of these trigger the potential dynamics that would hinder the freeing and the development of the voice to reach optimal performance capacity.

Vocal training as process thus involves learning a “motor skill” (Madill 2011: 277). This is a behaviour that would enable an individual to voluntarily control the muscles of respiration, the larynx as well as manipulating the vocal tract to produce optimal sound in accordance with an individual’s personal, unique, physiological and anatomical attributes. The voice teacher’s task is to develop sensitivity towards each student’s own process in training. Furthermore the voice teacher needs to be aware of, and identify, necessary markers or codes to develop and enhance a potential gender attitude or identity as it is perceived or taken into a specific role, which is not congruent to a set marker or code of the male body, or of that of the student. As such, the voice teacher runs the risk of enforcing stereotypes but these attitudes and/or codes of gender identity will be dependent on the richness of a specific theatrical performance text. Critically, therefore, the voice teacher needs to triangulate the process: one aspect of the training involves developing the physiological mechanism to perform optimally, a second aspect engages with the identity construct of the actor in training (both in terms of affirmation but also in challenging the restrictions that such a construct might bring to the vocal development, as argued above), and the third aspect draws on the performance demands as presented by the character for performance. It is my contention that the
first two aspects should be in place before the challenges of the third aspect is undertaken.

This study does not set out to change the male student’s own gender identity but aims for a celebration of the student’s own gendered self, whilst developing the complete potential of the performer’s voice. In other words the voice teacher should facilitate and emphasize vocal skill acquisition as opposed to reducing or transforming an individual’s socio-cultural identity. Ultimately, the relationship between the socio-cultural and physiological voice should be developed or trained, to assist the male student actor in portraying characters incongruent to his own socio-cultural identity. Therefore, by means of skills building this study advocates for multiple gender identity acquisition expressed and or developed through voice training.
4.1 INTRODUCTION

The previous two chapters discussed the voice as proceeding from an anatomical and physiological construct whilst simultaneously manifesting the socio-cultural identity. In other words, the preceding chapters demonstrated how voice is dichotomised as an object which merges with a subject. The premise of this chapter is to facilitate the integration and interrelationship of the voice as simultaneously object and subject. The basic principles that underscore such a pedagogical approach to theatre voice training will be provided. Example explorations that can assist the early career voice teacher in facilitating optimal vocal function and expression for the male student actor within the class room will be provided. These explorations will be discussed with regards to the object-subject interrelationship of the voice to demonstrate how the information shared in chapters two and three informs the theatre voice training explorations. As such, comments will be made on each exploration provided, with regards to the potential impact on the physiological use of the male voice as well as on the effect that such an exploration will/might have on the male student actor’s socio-cultural sense of self. Following this, I will provide specific aspects that the voice teacher should keep in mind when facilitating each of these explorations. This is intended to aid and provide the early career voice teacher with an awareness of the effect and application of explorations on holistic theatre voice training.

4.2 THEATRE VOICE TRAINING AND THE MALE STUDENT ACTOR

The interactivity of the voice as object and subject simultaneously suggests to the voice teacher that both these substrata need to be considered in theatre voice training. This interplay of voice as object and subject suggests that the embodied experiences of self may potentially limit or have an impact on the capability and potential of the physiological voice. Delph-Janiurek (1999: 140) maintains that the physiological potential of voice is often limited by an individual due to a specific, gendered perceived, identification of self (as indicated in chapter three). Following Butler’s (1990) notion of performativity (as discussed in chapter three), one can therefore assert that an individual’s voice can also be ‘stylized and performed’ in
relation to a gendered identity. Noland (2009) ascertains that a perceived gender is expressed as gestural routines that bear connections to performative acts within the socio-cultural (Butler 1988). This may, in turn, be carried over to the portrayal of character in theatrical contexts. In relation to theatre voice training, one can argue that the expression of socio-cultural values become gestural routines that manifest and shape an individual's use of voice as equally 'comfortable' and 'restrictive' depending on the situation and circumstance. As demonstrated in Chapter three, these perceptions of self are reflected and 'managed' through the expression of voice insofar as voice range, quality, pitch and intonation is concerned. Alternatively, these gestural routines may also been seen as strategies that convey a sense of belonging to a social group for the self. Voice as gestural routine is thus utilized as a means of upholding, sustaining and supporting an individual's socio-cultural identity. In this sense, exploring the physiological potential of the male student actor's voice in theatre voice training implies a possible associated questioning of the individual's sense of self (as indicated in chapter three.) It is from these vantage points that this study presupposes that socio-cultural usage of voice may not be the most ideal for the male student actor, insofar as the emotion and intent for a specific character, incongruent to the actor's own, is concerned.

For the voice teacher this implies that various socio-culturally manifested gender patterns may be present in the class-room and will be performed as a significant part of an individual's self-concept through gestural routines — in this case specifically relevant to voice. McAllister-Viel (2007: 217) maintains that the voice-class intimately involves the voice teacher as part of a process in which the student actor facilitates, negotiates and expands the expression of himself. As such it is significant for the voice teacher to be aware of ways in which he can facilitate and/or train the socio-culturally expressed voice in accordance with the potential of the physiological voice. The interrelationship of voice as simultaneously object and subject thus necessitates a process of training through which the voice teacher can guide the student towards an awareness of realizing the potential of his voice beyond the limited expression of the socio-cultural self.

This study acknowledges that the interplay between science and praxis provide possibilities for optimal vocal functioning that would serve the actor as a dynamical and interpretative artist. According to Estill (1992a; 1992b) the human voice is
capable of attaining approximately four octaves, whereas Hart (Pikes 1999) maintains that the human voice is capable of accomplishing eight octaves. The validity of these suppositions fall outside the scope of this study, but what is necessary to consider is that physiologically the human voice is capable of a much wider range than generally used. Referring to the stereotypical vocal perceptions discussed in Chapter three, and as tentatively indicated above, the contention is that the socio-cultural voice uses only a diminutive part of what the voice is capable of physiologically\(^\text{41}\) as graphically presented in Figure 4.1.

The manifestation of the actor’s own gendered voice in preparing to portray a character would limit the expressive possibilities of the character’s voice as a result of individually perceived gendered perceptions that are ‘carried over’ and ‘placed upon’ the construction of a character. This may serve or lead the actor to construct a one-dimensional and/or expressively limited portrayal of a character, which is not part of the given circumstances of a scene in a play text. DeBoer (2007: 13) maintains that this use of voice may lead to an actor performing a character that is flawed with preconceptions. This could be the direct result of an actor’s interdependence on how he ‘situates’ or ‘phrases’ his voice (Berry 1987) in fulfilling specific gestural routines. It is thus necessary for the actor to be acquainted with his vocal potential, both objectively and subjectively.

**Figure 4.1: Example of anatomical and physiological voice potential versus socio-cultural usage of the male voice.**

For the voice teacher it is necessary to consider the skills-building strategies necessary for the male student actor to potentially circumvent such limited expression of vocal use when considering the portrayal of multiple stage characters. When the male student actor is not aware of alternative ways of utilizing his own

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\(^\text{41}\) Depending on where this stereotypical placement of voice usage situates itself on the indicated schematic representation, it is variable to, or dependent upon, the manifestation of an individual’s socio-cultural identity.
physiological voice capability, the credibility with which he will portray a character may be impeded.

To this end, the male student actor’s physiological potential of voice needs to be facilitated and developed so that, once the apparatus is functioning optimally, he can embody and envoice different patterns, codes or gestural routines that are representative of various gender manifestations. These latter routines can be envisioned as a skills-building tools for the actor so that, once he has developed his holistic functional and expressive vocal potential, he might proceed to acting roles in theatre. In this sense, this study advocates for (as alluded to in Chapter three) the engagement by the voice teacher with multiple gestural routines (as manifested in portraying various gender identities), as a developmental strategy, firstly to overcome sociocultural limitations in vocal usage, and, in time, to enhance the actor’s vocal skills in preparation for characterisation. This implies developing the actor’s physiological possibilities and expanding socio-cultural voice usage options so as to circumvent one-dimensional representations of culturally significant stereotypes (see Espinoza 2005) in character work.

Research around theatre voice and speech training indicates that it is imperative that the actor’s vocal attributes are developed and enhanced for the skills necessary to effectively express thoughts, feelings and emotions through his voice that are (or might be) incongruent to his own socio-cultural use of voice (Wither-Wilson 1993; Linklater 2006). This implies the necessity to have a flexible and durable voice that carries meaning with purpose and intent. It is the task of the theatre voice teacher to facilitate this process.

4.3 PRINCIPLES SUPPORTING THE PEDAGOGY FOR TRAINING THE MALE STUDENT ACTOR’S VOICE

As an entry-level voice teacher, I acknowledge that I am influenced by my primary voice teachers during my under-graduate as well as graduate training with regards to defining the principles that underscore my teaching of the male student actor’s voice. The common denominator of the training was the notion of an integrated approach to bodymind and voice. Furthermore, I applied predominantly Lessac principles as
guiding strategies in the development of my own teaching and facilitating style. Lessac Kinesensics has, embedded in its philosophy, the notion of holistic function and expression of the voice and body. Similarly, the research reported on in chapters two and three of this study and other reviews of relevant scholarship influence my pedagogical principles. I will indicate accordingly where the principles or the fundamentals from which I draw, come from. The following ten principles support my pedagogical approach, namely Holistic integration; Organic congruencies; Personal uniqueness; Sensory awareness; Inner and Outer; Awareness of continuous change; Habitual patterns; Re-patterning; Familiar events and Self-teaching. The overarching motivation behind these principles is the monist approach of bodymind.

4.3.1 Holistic Integration

Damasio (2004) indicates that humans are holistically integrated and offers (2004: 6) that the notion of mindfulness sprouts from this monist orientation. Hackney (1998: 40) posits an integration of the complete body or, as she calls it, “total body connectivity”. Lessac Kinesensics recognizes, capitalizes on and cultivates body, mind and voice as an innately organic integrated whole. Linklater (2006) supports the holistically integrated human body when her work is built on the need to ‘free the natural voice.’ Rodenburg (1992) equally argues for the importance of the monist approach. The holistically integrated principle begs for a pedagogy where anatomy and physiology are immediately integrated with the socio-cultural sense of self. It furthermore does not allow for a separation of function and expression (Hackney 1998: 45).

4.3.2 Organic congruencies

All humans have more in common in what they share than the differences that lead to each person’s uniqueness. Each body (which includes the brain and therefore emotion) as construct, is basically the same irrespective of the multitude of differences that may be presented. Lessac (1981: 5) refers to this as the Human Likeness Principle. This principle implies that most human beings are anatomically and physiologically analogous and motivates for the necessity of knowledge

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42 I attended the first ever Lessac Kinesensics Intensive on African soil at the University of Pretoria from January 6-25, 2013 as well as a follow-up four-day workshop on teaching Lessac Kinesensics, 24th to 27th September 2013.
regarding the various systems that are at play in human behaviour including anatomy, physiology and socio-cultural influences.

4.3.3 Personal Uniqueness

Equally important to the principles of Organic Congruencies is the principle of Personal Uniqueness (Hackney 2002: 48) which offers that each human being has a unique and non-replicable identity on a multitude of levels due to each individual’s phenomenological experiences. The specific levels where the personally unique attributes are of importance for this study are the anatomy and physiology of the male voice as well as the socio-cultural impact on the identity of the self. Personal uniqueness would imply that although humans are structurally akin to one another, there is a continuously interlinked meandering path as part of the self-concept, which should be acknowledged to enable the realization of the fully functional self, physically and vocally. In the theatre voice training situation, this may also directly impact on the emotional experience and expression of the male student actor in training. This implies to the voice teacher that although humans are anatomically and physiologically comparable, he should understand that the manifestation of each individual’s self-concept is fundamentally unique. This process will enable the student in training to become aware of his own experiences and to understand the connection or interplay between the body, voice and the expression thereof.

4.3.4 Sensory Awareness

This principle promotes the notion that all humans have the ability to sense and feel within their own bodies. Sensory awareness is consistent to what Blakeslee and Blakeslee (2007:182-185) refer to as interoception which implies an awareness of sensations in the “viscera and internal tissues of the body” (Ibid 2007:213). Sensory awareness also relates to proprioception (Blakeslee & Blakeslee 2007:214) which provides internal information of how and where the body is moving in space. Stated differently, proprioception provides an individual with the awareness and ability to sense the physical properties of the body. Sensory awareness can thus provide the individual with a subjective perception of the holistic integration, contributing to a monist sense of self.

The voice teacher can promote the deliberate use of sensory awareness as a guiding tool during the skills building process when facilitating optimal vocal function
and expression. Lessac (1997:1) maintains that it is necessary for the voice teacher to develop awareness of the body's “bioneural physical principles and its energy precepts” before one can embark on training the human body and voice. This supports Lessac's notion of Inner Harmonic Sensing (1981: 5) which reinforces the perception of sensory awareness and provides and equips the individual with the development of an increased inner awareness. These sensory responses enable the student to ‘harmonize’ experiences perceived and physically felt through sensation. In this way does Inner Harmonic Sensing become an important learning and feedback process for the student.

**4.3.5 Inner and Outer**

The principle of ‘Inner’ and ‘Outer’ is acknowledged in various fields. The ‘inner and the outer’ principle refers first and foremost to the perceptual awareness which processes both the personal inner environment of an individual as well as the immediate environment that the person finds himself in. This principle feeds into the notion that what is experienced internally by an individual manifests and is expressed in outer form by an individual (Hackney 1998: 44). ‘Inner’ and ‘outer’ refers to interoception and proprioception on the one hand and exteroception on the other. It furthermore refers to the interaction between the ‘Inner’ and ‘Outer’, specifically to the notion that an impulse from the outer will have an impact on the ‘Inner’ and the inner in turn will affect the outer. There is thus a continuous and lively interplay between inner and outer (Hackney 1998: 214). Lessac Kinesensics advocates a deliberate awareness of this interplay and offers that a balance between these two ‘spaces’ is necessary for effective communication. Rodenburg’s notion of the second circle (1998) reflects her awareness of her ‘Inner’ and the ‘Outer’.

**4.3.6 Awareness of continuous change**

Being alive by definition refers to a process of continuous movement or, as Hackney (1998: 16) posits, there is a continuous process of movement, thus change, at play in life. On a physical level the ebb and flow of breath is always present and the heart is always beating, for example. Yet each breath is a change from the previous one,

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43 Blakeslee and Blakeslee (2007: 212) defines exteroception as the “ability to perceive the world outside the self” through various senses.
44 This was actively advocated during both Lessac Kinesensic workshops that I attended.
as is each heartbeat. Humans are always moving either for function or expression (Hackney 1998: 45). Socio-cultural influences further infect this continuous change (Csordas 1993: 1-2). The interplay between the inner and the outer shapes a lived experience which is constantly emerging.

4.3.7 Habitual patterns

Several movement education approaches such as Alexander Technique (1996), Feldenkrais (2002), Rolfing (1989) address the notion that humans form habitual patterns and that these habits are not always contributing to the most effective function or expression. This principle features prominently in the various theatre voice training approaches (Berry [1973], Fitzmaurice [1997], Hart [Pikes 1999], Linklater [2006], Lessac [1997; 1981] and Rodenburg [1992]). Habitual patterning is again due to the constant interaction between the inner and the outer (Hackney 1998, 2000; Woodruff 1992). Awareness of these habitual patterns is necessary for self-teaching, critical reflection and personal growth. It has a direct implication in the theatre voice training situation where awareness of habitual patterns questions and expands the sense of self on a multitude of levels. Of specific importance for this study is the notion that sensory awareness contributes to the awareness of habitual patterns or gestural routines which have been acquired over time due to either physical demands or socio-cultural influences. Habitual awareness thus stimulates awareness towards socio-cultural gestural routine and in turn challenges them through the re-patterning principle.

4.3.8 Re-patterning

The principle of re-patterning relies on neuro-plasticity which implies that the brain and therefore the human is capable of changing neurological pathways (Blakeslee & Blakeslee 2007: 11). It is thus possible for the human being to change both functional and expressive behaviour as the patterns in the brain can be altered through conscious and deliberate choice. This principle forms the bedrock of most educational approaches and is specifically relevant to this study as it underscores the theatre voice training approaches mentioned in this study. This principle is overtly present in the work of Fitzmaurice (1997); Linklater (1976; 2006) and Lessac (1981). Woorduff (1992: 46) describes this as “neuromuscular re-education.”
Lessac Kinesensics refers to this principle as “De patterning” (Lessac 1981: 6) based on “neuro-regenerative growth” (see also Verdolini 1998: 61) and offers that it promotes self-awareness in or towards facilitating the reawakening of organically formed sensory experiences. These sensory experiences question, refine and expand the students' existing gestural routines. The deliberate perception through sensory awareness of the habitual patterns allows self-teaching and enables the student to consciously steer the interaction of the inner and the outer to either use or discard existing gestural routines as needed.

4.3.9 Familiar event

The principle of the ‘familiar event’ is based on the idea that the “body and the brain exist for each other” (Blakeslee & Blakeslee 2007:12). For a human to become familiar with an experience the ‘pattern of the experience’ has to be ‘cemented’ in the brain. Following this the pattern becomes accessible and can be used with greater ease and efficiency. To a certain extent this principle then underscores all learning. Lessac indicates that the deliberate use of the familiar event provides the student with “a kinesensic image resulting primarily from association with the initial familiar event (that) will become part of the body’s physical memory and then constitute itself as internal organic motivation....” (Lessac 1997: 7) for further learning and development. Familiar events capitalize on sensation, activities and/or experiences as guiding strategies in the ‘feeling process.’ It thus relies on interoception and proprioception. This continual recovery of sensation serves as a ‘familiar event’ towards enhancing the effectiveness of function and expression (Kinghorn 2014). Familiar events are thus explored recurrently to establish or become a guiding tool for the individual, so that these familiar events can begin to function as organic instruction when experiencing sensation. Familiar events are the precursors to utilizing instruction drawing on organic congruencies and they enable the student to become self-reliant. In this way the student facilitates his own self-teaching processes based on the holistically integrated bodymind activities.

4.3.10 Self-teaching

The principle of self-teaching appears in most pedagogical approaches and specifically draw on self-reflection skills (see Schön 1983). It draws on the deliberate use of the principles discussed above. Self-teaching draws on the willingness and
commitment from the student to learn and apply new knowledge. It furthermore relies on ‘mindfulness’ to ensure a monist bodymind application of new knowledge.

Lessac Kinesensics explains self-teaching as grounded in and through the holistic function and expression of organic and sensory learning strategies. Self-reliant motor and sensory based skills — intrinsic and organic to human beings — are facilitated as a process for the individual to realize and yield his self-teaching or the ‘teacher-within’ concept discoveries, as the student moves towards recognizing optimal body conditioning. Lessac coined the termed Kinesensics, as a skills-building process towards becoming, realizing and/or recognizing an ‘awareness’ that is behaviourally felt and experienced through sensation. It primarily provides self-reflective strategies towards understanding, and subsequently facilitating or guiding the optimization of vocal and physical function and expression. Kinesensics provide the cornerstone for developing a sensory based process in which the energy of the body is physically felt and perceived as a means of enhancing creative function and expression. The term Kinesensics was constructed by Lessac to represent a holistic bodymind approach to voice and movement training (Lessac 1997: 3-4). As such, and as indicated before, Lessac Kinesensics has a huge influence on my teaching approach and style.

These teaching principles outlined above are constantly at play and should be read as continuously present in the example explorations provided below.

4.4 EXAMPLE EXPLORATIONS FROM A THEATRE VOICE CLASS IN DEVELOPING THE MALE STUDENT ACTOR’S VOICE

The purpose of these example explorations is not to provide a comprehensive theatre voice training program but to demonstrate how the scholarly information provided in chapters two and three feeds into the facilitation of example explorations.

The trajectory of these explorations is as follows: Body integration, breath, phonation, resonance and articulation. It thus commences with the body as location of the training, after which a ‘bottom-up’ approach is followed drawing on the idea that the breath acts as the generator of the sound, phonation provides the vibratory properties, resonance refers to the enhancement of the sound for specific vocal qualities and articulation in turn focusses on the shaping of the oral cavity to provide various vowels and consonants thus shaping voice into speech (see Shewell 2009).

It is foregrounded that such a sub-dividing approach is artificial and is undertaken
here simply to provide structure to a program. Due to the holistically integrated manifestation of voice (and therefore speech) it is not realistic to assume that an exploration in a specific area or subdivision will only provide learning or change in that area. As a guideline it is offered that any exploration within any of the subdivisions at least can also impact on some of the subdivisions and often on all of them.

4.4.1 Body Integration

The foundation from which vocal production operates has been acknowledged in Chapter two (section 2.1) as directly interrelated to the body. In other words the ‘voice organ’ (Sundberg 1987) comprises of anatomical and physiological substrata that synergistically function to produce voice, as part of the holistic function and expression of the body. The body thus functions as the prime influence from which optimal vocal production can be recognized. It is therefore significant for the male student actor to gain perspective of and insight into the unique symbiotic interrelationship the body has on vocal function and expression (as indicated in chapter one). The process of discovering the body’s influence on the voice is known as body integration. Coetzee, Munro and de Boer (2004: 143) ascertain that the process of body integration for performance relates to the simultaneous interconnectivity between the bodymind and voice as an “organic-holistic” modality, deliberately facilitating the interplay of optimal function and expression of the body and voice in a theatrical performance. This notion to integrate the body as the locus from which optimal vocal function and expression is facilitated has been given significant reference in voice literature (see Shewell 2009: 271; Linklater 2006: 31; Rodenburg 2002: 5-8; Lessac 1981: 7; Berry 1973: 24; Miller 1986: 25).

Within the theatre voice class, it is cardinal for the voice teacher to establish and facilitate the premise of a holistically integrated body to facilitate optimal vocal expression. This implies that both the voice teacher and the male student actor should have an elementary understanding and awareness of the anatomy and physiology (as indicated in chapter two, section 2.1; see also McKinney 1982). For the male student actor specifically, this implies that he becomes aware of the difference between what the voice is capable of and what limitations he has imposed on those abilities (as indicated in chapter 2: section 2.1) through his gestural routines. The facilitation of function and expression through body integration can be
seen as establishing a bodymind and voice relationship in preparation of the body for optimal expression of voice. This process will directly draw on the principles of holistic integration and organic congruencies.

For the male student actor, this implies developing the sensory and physical awareness of neuro-muscular patterns, skills and/or behaviour (as indicated in Chapter two). This suggests that the male student actor will have to draw on an embodied learning process for the skills necessary to realize, and by extension, aid the functional interrelationship between the body and the total sum of its parts, in support of optimal vocal function. This begs for the facilitation to happen through embodied learning. As Kerka (2002: 3) offers, embodied learning refers to a somatic approach to learning, which implies a commitment to an ‘in the moment process’. Body integration facilitates such a process and regulates ‘bodymind knowledge’ (as indicated in chapter three). Body integration will thus draw on the principle of sensory awareness to aid the male student actor’s sensory and motor awareness. Munro and Larson (1996) indicate that optimal body integration sprouts from the recognition of a sensory awareness process that shapes the body’s alignment as an active, dynamic and continuously shifting and changing activity. In this way body integration can be viewed as an active construction of aligning the body holistically — thus drawing on the principle of continuous change.

Body integration will further also draw on the principle of re-patterning when developing a process creating the sensory awareness to stimulate the re-alignment of the body. As such, the voice teacher should be vigilant when facilitating a process of body integration as neuro-muscular re-patterning may affect the physical and the emotional experiences and responses of an individual. The process of developing body integration can by implication be seen as the expansion of body awareness, perception, feeling, functioning and so forth (see also Lessac 1981; Thurman & Welch 2000). To this end, the anatomical and physiological construct of the body, its muscular activity, movement and processes have a symbiotic vitality and influence on voice production. As body integration is a shifting activity or a process of continuous ‘becoming’, the integrated body thus has, by consequence, an efficient

45 See Munro and Larson (1996) for a comprehensive and extensive overview of the influence of body integration on voice production.
46 This study will acknowledge (in agreement with Munro & Larson 1996: 23) that body alignment relates to the vertical orientation of the body, whereas body integration refers to the balance or holistic function of the body in and through space.
relationship to the earth and gravity (Munro & Larson 1996; Hackney 1998: 41). This implies that the weight of the body should be distributed evenly, so as to balance the body in relation to the earth and gravity. Munro and Larson (1996: 17) clarify, and maintain that when the body is in a standing position the “weight of the thorax is carried out by the ‘body of the spine’ into the pelvis and distributed equally through the femur joints, knees, ankles, and feet into the ground.” Following this description and granted that gravity is a constant force, the manner in which the body moves in and through space, shifts. Thus, it is pivotal for the male student actor to realize through his sensory awareness skills the contribution and influence of the earth and gravity on vocal production. Furthermore, the embodied quality of body integration can be understood more comprehensively through Bartenieff’s fundamental principle of ‘Grounding’. Hackney (1998: 41) asserts that the principle of ‘Grounding’ functions as a tool for the individual to identify the gravitational pull of the earth by connecting and balancing the weight of the body in relation to it (see also Woodruff 1992: 206). Thus, being grounded can be seen as the self-facilitating embodied relationship to the earth.

Body integration is thus viewed as paramount in allowing the development of total interconnectivity of the body to serve the voice effectively in training and performance. It can further be perceived as the manner in which the body is prepared for optimal function and expression of the performance voice. Most approaches to vocal training view body integration as the foundational component from which all vocal exploration starts (see Rodenburg 1997; Lessac 1981; Linklater 2006).

The explorations that follow below emphasize and incorporate the significance of body integration as possible exploratory strategies to develop, establish and enhance the physical awareness of a holistically integrated body for vocal production.

4.4.1.1 Body Exploration 1: Heel Rock

The Heel Rock forms part of Laban/Bartenieff’s Basic Six exercises47 (Hackney 1998: 99) that is set up to prepare the holistic integration of the body through

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47 It is vital to acknowledge that in this study the reference to movement patterns do not focus on producing effort that is intended to exert the body to the point where exhaustion or cardio-vascular intensity for muscle fitness is stimulated. To this end references made to an ‘exercise’ be discontinued.
interoceptive and proprioceptive awareness. As body integration is a dynamic process, the Heel Rock will facilitate the movement and on-going connectivity from the feet through the head (Hackney 1998: 99; Woodruff 1992: 223).

4.4.1.1.1 Description of exploration

The Heel Rock can be facilitated from this perspective:

- The Heel Rock is facilitated through a preliminary body position known as supine position. Supine position relates to the orientation of the body on the floor, with the face facing upward and away from the floor.
- Once supine position has been established allow yourself\(^ {48}\) to surrender all your body weight to gravity. Allow your arms to rest next to the body with the palms of hands facing upwards or perhaps towards the ‘ceiling’.
- Prepare with an easy and even inhalation of breath.
- On the exhalation, sense the softness of the abdominal area, whilst stabilizing the heels with the toes pointing towards the ceiling. Be cautious not to lock or stiffen the knees, to encourage mobility as well as the initiation of movement which is the plantar flexion\(^ {49}\) and the dorsi flexion\(^ {50}\) of the feet.
- The rest of your body remains passive (and given over to gravity) whilst ready to be influenced by the movement of the feet in a manner of successive flow.
- This movement of the feet will facilitate or initiate a back and forth movement whilst simultaneously tilting or ‘rocking’ the pelvis somewhat forward and back (Hackney 1998: 99-100). Woodruff (1992: 191) offers that the Heel Rock promotes the awareness and the relationship between head/tail/heel whilst possibility enhancing grounding of the body and promoting movement/awareness of the lumbar/femoral region of the body.
- Allow yourself to facilitate the rocking forward and back a couple of times, whilst noting subtle changes in the spine. Once you have sensed this, follow this through with a gentle release.

\(^{48}\) The description of the explorations will be provided as if facilitating the explorations in class.

\(^{49}\) To initiate the reversal of the movement in the feet

\(^{50}\) To draw the heel back slightly
• Initiate the release all the way from the femoral joint, rotating the legs away from one another so that the small toes on either side reach for the floor and rotate them back so that the big toes come towards one another.

• Rest, after the inward and outward rotation of the feet, register the new sensation, sense the rhythm of your breath, and depending on your personal uniqueness or need, initiate a further set of Heel-Rocking.

4.4.1.1.2 How the Heel Rock contributes to the male student actor’s theatre voice training

The heel-rock leads to the integration and relaxation of the body — and thus facilitates the principle of Holistic Integration. The synergy of continuous and successive flow of movement in the body produces or brings about an organic flow of breath. The stimulation of successive movement of the spine that concurrently produces a shifting relationship in and between the body and its parts emphasise the principle of the awareness of continuous change. The Heel-Rock accesses, promotes and bring awareness to the organic flow of breath and movement in the body. As such, the Heel Rock stimulates the release of, and eases excessive muscle tension. This may lead to the relaxation of the body (the musculature), and thus the interrelatedness of bodymind, to provide a mindful awareness of self. Furthermore, the Bartenieff principle of ‘Grounding’ is active in the Heel Rock. This is observed as the heels prepare the ‘Grounding’. ‘Grounding’ stimulates or invites a sensory awareness of the connectedness between the pelvic floor and the head/tail and as such establishes an interoceptive and proprioceptive awareness of the vertical connection of the body — whilst lying down on the floor.

The male student actor should therefore mindfully explore the continuous awareness specifically of the ‘rocking’ motion of the pelvis so as to gain awareness of the movability and lengthening of the lumbar spine region. This draws from the principle of sensory awareness and enable or lead the actor towards an experience of ‘release’ in the lower back. The Heel-Rock fosters an experience through exertion as well as recuperation (Hackney 1998: 46-47) of the body and its musculature. As mind and thus self-identity is continuously present within the holistically integrated being, the heel-rock may have an effect of calmness or relaxedness as a subjective experience. It may contribute to a sense of acceptance and circumvent a possible
perception of ‘being attacked’ by the student when requested to make shifts in his gestural routines that stem from a specific socio-cultural paradigm.

4.4.1.1.3 Aspects regarding the Heel-Rock the voice teacher should be aware of in the theatre voice class

The Heel-Rock would serve for the teacher as a diagnostic tool in determining the integration of the body. From a socio-cultural perspective the Heel-Rock may directly address the male student actor’s sense of self. Through the Heel-Rock, the male student actor becomes aware of holding patterns that may have developed as manifestations and protection of his self-concept though gestural routines. The voice teacher must be vigilant and assess whether excessive tension has accumulated in the lumbar spine as well as in the abdominal area. There should not be a build-up of tension in the lumbar region of the spine as the relationship between the heel and pelvis cannot be realized with the accumulation of excessive tension. Observation of these holding patterns would ultimately provide the voice teacher with knowledge regarding the personally unique manifestations of the male student actor’s self-identity that may limit the student’s skills with regards to the performance voice. Further examples of how the voice teacher may use the Heel-Rock as a diagnostic tool include:

1. Ensuring that the male student actor stabilizes and initiates the Heel-Rock efficiently.
2. Ensuring that the male student actor does not tighten the body or “lock” the knees — this may lead to an individual hurting himself.
3. Monitoring whether the male student actor is experiencing discomfort — this may include pain in the knees, ankles, hips and so forth.
4. That the voice teacher is aware that, when the male student actor has well-developed muscles of the shoulders, the teacher should guide the student to place a book under the head for the elongation and support of the spine.

Since this study engages with stereotypical representations of what signifies notions of hegemonic and gay masculinity, the following speculations can be made:

As indicated (see subsection 3.1 & 3.5) the voice is foregrounded as a psychosomatic phenomenon that is shaped by the perceptions of self in relation to
others and *vice versa*. Thus the voice is consistently in flux, shaped and engaged (see subsection 3.4 and 3.5) as a manifestation of perceptions with which an individual embodies and expresses his sense of self. As explained (in subsection 3.5) this manifestation of the body is directly impacted on by the environment in which an individual functions. As such the body becomes an agent in a specific context to signify, function and integrate a specific experience and construction of the body as it is placed within a specific socio-cultural environment to indicate an identity. As indicated (in subsection 3.4; Blakeslee & Blakeslee 2007: 195) the interchangeable relationship of the body and its environment shapes the experience of an individual and in turn informs his mind. To this end bodymind, and thus the self, can be understood as a sensory experience (see 3.4; Thurman & Welch 2000; Berlucchi & Aglioti 2010).

As referred to in Chapter three (see subsection 3.8.2) hegemonic masculinity manifests itself in symbols such as sports. By implication, and within the context of the South-African sport landscape, Rugby51 can be offered as an example of a renewed symbol of hegemonic masculinity. In relation to exploring the Heel-Rock, certain limitations might pose challenges to the hegemonic masculine male in the theatre voice class room. The hegemonic male rugby player may struggle with the execution of dorsi flexion and plantar flexion of the feet due to the shortening of muscles in the ankle and foot areas. This would be as a result of using the feet in Rugby in very specific ways supporting his skills in kicking the ball (for example).

Similarly, specific bodily practices become gestural routines that are used to signify power, strength and physical development (see subsection 3.8.2) as an attribute to define and uphold the hegemonic masculine body image. This implies that hegemonic males may be inclined to have an awareness that the hegemonic masculine ideal encompasses qualities or signifiers that presupposes images of the

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51 Rugby is a national sport in South-Africa. Rugby could be classified as a contact sport that is played with an oval shaped ball consisting of 15 on-field members per team. In this way should it be noted that the term exercise would have been an apt description in facilitation the explorations. As per the reason indicated in footnote 3, the aim of the explorations provided here in this example program should be seen as a facilitation of the recognition of developing and possibly establishing a holistically integrated body/mind and bodymind as part of the function and expression of the male student actor's voice development. For this reason the voice teacher needs to systemically introduce the idea of 'exploration' as opposed to the notion of an 'exercise'. Significantly, the voice teacher is to remain vigilant in his observation towards the preferred gender codes or markers of the individual male student actor in the class.
'ideal man’. According to Ruth (1995:55) the notion of an ‘ideal man’ manifests itself through the Warrior Image or The Warrior Imperative. Notions around the Warrior Imperative includes images that impose notions that the “true male” is “virile”, an exciting hero and can be seen as a warrior irrespective of the battle he may find himself in. Thus the notion is to present a physical body suggesting muscle mass as an indicator of physical strength (see 3.8.2; Connell 1995; Ruth 1995). The importance of muscle mass is emphasized in Rugby, but also in body images of masculinity. One can therefore imply that if The Warrior Imperative suggests a ‘battle that needs to be won’ it engages or associates hegemonic masculinity with notions of social power. In this way and according to Ruth (1995: 55) the Warrior Image negates any affective qualities as part of upholding warrior virtues, thus constructing a hierarchal strategy of masculinity which feeds a patriarchal concept of masculinity (also see 3.8.2). Consequently, the performative behaviour and embodiment as gestural routines may inspire the hegemonic masculine male to construct how the physical body would enact and would then practise these gestural markers as ways of maintaining his power, force, strength and validity of sexuality.

Ideals of ‘masculinity’ vary (see subsection 3.9) and thus gestural routines that define a specific ‘masculine self’ for an individual vary accordingly when embodied through markers of attitudes that validate a ‘masculine self’ or specific gendered perception. An example of such a gendered perception is the manifestation of gay masculinities as an alternative or variant form of masculinity (see 3.9; 3.9.1). Notions around gay masculinity indicate that gay males are perceived to be less masculine and more feminine in physical appearance and expression. Gay masculinity thus dissociates or subverts hegemonic masculinity (see 3.9.1). Within the Patriarchal Ideal of Masculinity as proposed by Ruth (1995: 55), gay masculinity is thus viewed as ‘lower’ in social power (3.7; 3.8.2). Within the patriarchal image, gay male identity is equated to notions of expressiveness, emotionality, fragility, delicacy and so forth (Ruth 1995). If these qualities are present in a gay male, it can be seen that the expression thereof may be embodied as an overly increased usage of successive spinal flow.

Within the patriarchal concept of masculinity these are seen as affectionate characteristics and thus ‘unmanly’. Gettelman and Thompson (1993: 548) argue that
gay men typically shape their identity on popular societal expectations of displaying feminine qualities but also placing significant emphasis on the importance of physical attraction. Gay males thus place significant attention on their physical features as a way of establishing a sense of self. Gettelman and Thompson (1993) indicate common physical features that gay males demonstrate to be dissatisfied with. These include shoulders and abdomen as well as the functional coordination of their bodies. This dissatisfaction may be due to opposing the need of the Warrior Ideal and leads to an alternate masculinity that can be perceived as ‘effeminate’ (see Ruth 1995).

These characteristics impact on the usage of the body and subsequently the voice (see 3.5). These gestural routines, behaviour and/or attitudes imply a particular embodiment that validates a particular masculine self. In a theatre voice class the active engagement with an embodied learning process will question and challenge the male student actor’s socio-cultural identity or, stated otherwise, the gender appropriate use of the body and, by extension, his voice.

4.4.1.2 Body Exploration 2: Spinal Roll-down

The spinal roll-down will be presented according to Linklater’s approach to ‘Freeing the Natural Voice’ (Linklater 2006: 33-41). The Spinal Roll-down is aimed at developing or stimulating interoceptive and proprioceptive awareness of the spine and skeleton as well as the body’s relationship to gravity in a vertical orientation. The Spinal Roll-down engages with developing the male student actor’s awareness of total body integration as an active construct.

4.4.1.2.1 Description of the exploration

The spinal roll-down is facilitated from a standing position — thus in a vertical orientation in relation to gravity.

- Once you are in a standing position allow the feet to face forward with the feet in line with the hips, establishing an awareness of equal weight distribution between and through the surfaces of each foot. The distribution of equal weight in the feet facilitates or encourages softness or a buoyant sensation in all of the connecting parts of the body.
• Be aware that the knees are ‘softened’ whilst facing forward and over the second big toe of each foot.

• Sense and feel the head as the highest point of the body as balancing on top of the spine.\(^{52}\) It is helpful for the voice teacher to reinforce the awareness of the spine as a way for the male student actor to actively sense and feel the freedom of the body in relation to the sum of its parts. In facilitating this exploration it is important that the voice teacher refrain from, or is vigilant of, applying metaphors as a guiding strategy in the teaching of this exploration.\(^{53}\)

• Once the position is established, close your eyes, breathe in, and imagine from the soles of the feet upwards, the interconnectivity all the bones, joints, cartilage that create the construct of the body, ending with the crown of the head (cranium) as the highest point of the body. Breath should be experienced as an easy and free inhalation and exhalation (refrain from holding your breath).

• Maintaining the standing position, bring your awareness towards your elbow joints, rotate them forward, whilst allowing the arms to float forward in front of the body. Continue this movement so that the arms float upwards towards the ceiling.

• Now, as you maintain an easy stretch with the arms towards the ceiling, bring your awareness to your shoulders, sense how they rotate from the scapula during this movement. Be aware of and avoid any tension building up in the shoulder area as you want to continuously sense and feel a ‘floating sensation’ — keeping the body soft and realizing its dynamic interconnectivity. Additionally, sense the hands as extended loosely towards the ceiling.

• For a moment completely allow yourself to sense the space that you have created in the torso (thorax) and allow yourself to sense and feel the complete experience of a three-dimensional expansion of the thorax during inhalation.

\(^{52}\) (It is useful for the voice teacher to turn to the description of Munro and Larson [1996: 17] relating to the vertical orientation of the body.)

\(^{53}\) It would be useful to consider and guide and/or allow students to create their own metaphors. This is particularly significant in South-Africa as the cultural milieu is of such a nature that the use of a single metaphor as a guiding strategy may be reductionistic and suggest alienation as opposed to an atmosphere of inclusivity. I propose that the voice teacher describes specific landmarks of the body in the exploration, drawing on the principle of organic congruencies.
• Once this has been explored, continue to sense your breath, whilst focusing your awareness on your wrists and allowing, or imagining yourself to experience the wrists ‘floating’ towards the ceiling.
• In the same way, bring your awareness to your fingertips and let them float towards the ceiling.
• Once you have sensed this, bring your awareness to your torso and imagine that a person is pulling you from the torso all the way towards the ceiling by the fingertips whilst the rest of the lower body remains uninfluenced by the reaching or stretch of the upper body.
• Bring your awareness to your hands. Allow the hands to drop and hang freely from the wrists. Linklater (2006: 35) maintains that specific sensory awareness should be devoted to experiencing contrasting sensations in the hands and arms. The sensations in the hands should be registered as ‘relaxation’ and the contrasting sensation of the arms as ‘tension’.
• Once this is established, allow the forearms to drop, relax and hang loosely from the elbows. Again reinforce the contrastive sensations, this time experiencing the ‘relaxation’ in the hands and forearms whereas the sensation of tension should be felt in the upper arms.
• Now allow the upper arms to drop heavily next to the sides of the body and hang as loosely from the shoulders. Register the sensations and weight of the arms as ‘relaxation’ whilst sensing and establishing how gravity aids the relaxation of the arms.
• Direct your awareness towards the gravitational pull of the earth or at least the influence of gravity on the arms.
• Register this sensory experience and bring your awareness to the crown of head, gradually allow the chin to drop towards the sternum. Rest, wait, sense and feel the lengthening sensation at the back of the neck.
• Now imagine that your head becomes heavier and heavier; gradually allow yourself to give in to the weight of the head so that the head begins to move towards the floor or give in to gravity.
• Allow the weight of the head, shoulders, and arms to draw the spine slowly down and towards the floor. Subsequent to this, your spine will begin to curl and curve forward and downward. It is important to note the arms hang loosely and heavy next to the body.
- Bend or soften your knees so that the upper body ‘rests on top’ of the lower body. The back of the neck should hang free and loosely towards the floor. All your weight should be distributed equally on both feet, ensuring that the toes are free and not clamped. It is vital to ensure or allow the weight of the upper body to remain over the middle of the feet. In other words the torso, should hang from the tailbone, provided at all times that the upper body weight is surrendered to gravity.

- Sustain an easy inhalation and exhalation breathing rhythm to ensure that there is not an accumulation of tension somewhere in the body.

- Have an awareness of the sensation of breathing in the lower back area.

- On an easy exhalation of breath, slowly start uncurling or rolling through the spine, initiating from the tailbone, vertebra by vertebra, until you stand in a vertical orientation to the earth.

- Whilst slowly uncurling towards the vertical orientation (upwards), refrain from engaging the stomach muscles. The stomach muscles as well as the shoulders should remain soft and free.

- Continue to roll the spine towards the vertical standing position: when you start ‘uncurling’ the neck you must allow your head to float back up in alignment with the rest of the spine as it is already positioned. Be cautious not to lift your head up and shorten the back of the neck. Instead, imagine that your spin is continuing to grow from the crown of the head in a vertical orientation.

- Close your eyes and bring your attention to your entire body standing in the space. Move your attention inwards and, starting at the toes, scan through your whole body ending with the head. On the ‘journey’ make sure to relieve your muscles of any tension you detect until you finally reach the top of your head. For a moment just sense and feel the vertical orientation of your spine.

4.4.1.2.2 How the Spinal roll-down contributes to the male student actor’s theatre voice training

The exploration of the spinal roll-down can be seen as a way to facilitate the holistic sensory experience of the male student actor’s body through the principles of sensory awareness and holistic integration. It may also create an awareness of habitual patterns. As the spinal roll-down is explored from a standing position it
serves as a strategy towards developing the male student actor’s sensory awareness in experiencing the fluidity and delicate connection of the body as the sum of its parts, thus, developing the male student actor’s awareness of total body alignment and integration. This draws from the principle of continuous change. The spinal roll-down is explored directly in relation to the pull line of gravity, facilitating spinal integration or, in Bartenieff’s terms, the establishment of “head/tail connectivity” (Hackney 1998: 85), and specifically the freedom of the head-neck relationship (McCallion 1998; 17). The successive rolling action or movement initiated from the head through each vertebra, the ribcage and the lumbar spine will contribute to freedom of movement in the spine and skeleton. Consequently the spinal roll-down develops the male student actor’s awareness of the upper body release whilst simultaneously lengthening the neck and back muscles. It furthermore provides freedom in the shoulder girdle. The forward and down curl of the upper body may contribute to an active and flexible relationship between the head and tail and stimulate an awareness of the overall balance of the body.

4.4.1.2.3 Aspects the voice teacher should be aware of in the theatre voice class

The spinal roll-down would also, in similar fashion to the Heel-Rock, serve the teacher as a diagnostic tool in determining and facilitating optimal body alignment and integration in the male student actor’s body. The voice teacher should observe for the following holding patterns:

- The male student actors neck should be free/flexible and ‘given over’ in relation to gravity during the curl down and the uncurling.
- Ensuring the male student actor is employing three-point weight distribution in the feet.
- Monitor the softening or unlocking of the knees — as the purpose of the exploration is focused on the lengthening of the back muscles and the release of the neck, through sensing the weight of the upper body.
- Observing that the male student actor is breathing comfortably and without any restrictions; also a widening of the lower back area.

Functionally therefore the Spinal roll will develop the male student actor’s awareness towards sensing the balance of the body as an integrated whole. As indicated (in
4.4.1.1.3) the hegemonic masculine male upholds images pertaining to physical strength. This is maintained (as indicated above) through the manifestation of body mass. Thus the awareness of spinal flow might seem to challenge the hegemonic masculine ideals. Through the principle of continuous change, the Spinal roll may seem to develop successive spinal movement as a way of developing his awareness towards sensing the body as a continuous and active construct.

As indicated in (subsection 4.4.1.1.3) the gay male may present excessive spinal flow as a way of signifying his gender identity and as such the spinal movement of the Spinal roll-down may be a comfortable experience for him. The Spinal roll-down capitalizes on Bartenieff’s Fundamental of Grounding — and can thus be facilitated as a way to enhance the gay male student actor more support from the earth as well as sensing the influence of gravity on the body in preparation for voice production.

4.4.2 Breath

4.4.2.1 Breath exploration 1: Foetus Position

The following exploration for stimulating awareness of the breathing construct is known as Balasana/Child’s Pose as it is typically known in Yoga practice (Kiltz 2010). The child’s pose was in my own training referred to as the foetus position, as a result of the body shape in relation to gravity. The foetus position exploration is intended to encourage sensory awareness of the organic growing and shrinking pattern of breath through the interioceptive and proprioceptive facilities of the male student actor (in this case).

4.4.2.1.1 Description of the exploration

The Foetus Position can be outlined from this perspective to the male student actor:

- Kneel on the floor.
- Allow yourself to sit back onto your heels.
- Bring the knees and heels in line with your sit-bones. Take note: depending on your personal uniqueness — if this is difficult and challenging for you to maintain, allow the knees to separate as widely as possible away from one another, creating space for the torso/thorax to rest in the space between the legs. Keep on exploring this way until your flexibility increases. It is important
that you bring the buttocks as closely to the heels, as far as your personal uniqueness allows.

- Now, take a moment to bring your awareness to the rhythm of your breath and on the exhalation; allow the torso to drop forward and rest on.
- Allow yourself to focus your awareness on a slow, easy and steady inhalation and exhalation. In addition to this, focus on the tailbone (coccyx) ‘reaching away from the back of the pelvis’ whilst resting the forehead on the floor. Note: It is cardinal to focus your awareness towards the base of the skull as extending away from the back of the neck. Alternatively, also use the forehead hairline as indicator of orientation of how and where the head should rest on the floor. Ensure that you experience a sense of freedom and ease in the neck area. If this is not comfortable for your neck or it is difficult to reach the floor, support the forehead on a blanket.
- Following the above, place the arms on the floor alongside your torso with the hands next to the feet, resting the palms upwards towards the ceiling, whilst surrendering all of the weight of the shoulders and the body to gravity.
- Close your eyes and bring your awareness towards sensing and feeling the torso widening and lengthening, thus growing, during inhalation and narrowing and shortening, thus shrinking, during exhalation. Thus focus your awareness on your breath.
- Register this experience as a continuous ‘softening’ and subsequent relaxation of bodymind.
- Gradually allow yourself to sense and feel the inhalation and exhalation on an easy and even, steady breathing rhythm. Enjoy the growing sensation in your inner-space on the inhalation and the shrinking of your inner-space on the exhalation (Hackney 1998: 41). In this way there should be no noticeable body action, in the form of pull, push, or lift action in your abdomen, thoracic cavity, the sides of the body or in the shoulders (see Lessac 1997: 22). Consequently you should experience breath shaping the body, stimulating your awareness of the three dimensional construct of the thoracic cavity.
- In order to uncurl up, bring your awareness to first lengthening the front of the torso, and then on an exhalation initiate the movement from the tailbone, as for the Spinal-Roll down.
4.4.2.1.2 How the Foetus position contributes to the male student actor’s theatre voice training

The foetus position organically allows the male student actor to sense the action of the breathing construct. As such, the foetus position draws on the principle of Organic Congruencies as it directly brings the male student actor’s perceptual awareness to the movability of musculoskeletal framework of the thorax (as indicated in chapter two). The foetus position organically creates an awareness of three-dimensional breath. The foetus position can therefore be used as an exploration that integrates, or works in relation with gravity, to promote optimal movement of the thoracic cavity — thus developing awareness of the significance of a full breath. Through the facilitation of the foetus position the male student actor will be made aware of the “inhalatory-exhalatory” dichotomy of breath (see subsection 2.2.2.2; Perkins & Kent 1989: 18). The male student actor will thus, through sensory awareness, subjectively experience the movement of the respiratory system as a ‘hypothetical pressure pump’ (as explained in subsection 2.2.2.3). As demonstrated in chapter two (see subsection 2.2.2.3) the elastic composition of the lungs ensures that movement is perceivable in the thorax of the male student actor. This facilitates the mindful use of the three dimensional interconnectivity of the breathing construct as it relates to the production of voice whilst drawing on the principle of Holistic Integration.

Through the facilitation of the Foetus Position the male student actor’s awareness is deliberately drawn towards his personal inner environment in order to aid the perceptual experience of breath. As indicated in Chapter two (subsection 2.2.2 and 2.2.2.3) the respiratory system can be likened to an input and output system. As such the Foetus Position will offer the male student actor a conscious awareness of the continuous process of movement in the breathing cavity. Thus, relying on the principle of sensory awareness, the male student actor will become aware of the lengthening of the spine whilst simultaneously experiencing a widening of the thorax. This is foreseen as the foetus position organically draws from the influence of gravity to promote a sensory experience of an expansion of the back. This is as a result of the structure, the shape, the attachments and construct of the ribcage (as specified in section 2.2.2.1).
The effect and the relationship to gravity provide for the male student actor the awareness of the interrelatedness of his bodymind — stimulating a mindful awareness of self. If the male student actor focusses his awareness on his breath, he will further experience subjective qualities that relates to the calmness of the mind and or the layering of softness (muscle tissue) in the body. As such, the Foetus Position offers an experience of a release and relaxation of the bodymind by directly drawing from and supporting the principle of the ‘Inner’ and the ‘Outer’.

The foetus position engages with patterns of breathing whilst simultaneously promoting a heightened sensory awareness of inner and outer perceptual faculties of an individual’s body, and by extension his breathing patterns. Similarly, the foetus position requires patience and the ability to surrender to gravity in a state of almost ‘non-doing’. As such, the foetus position can be seen as an active-relaxation exploration.

It should be noted that due to the folding shape of the fetus position, the effect of the inhalatory and exhalatory dichotomy can be more readily experienced in the back, specifically the lumbar region (as described above). The foetus position therefore promotes a gentle stretch of the lower back and thighs whilst increasing the male student actor’s flexibility of hips (increasing the femur joint crease). It can be foreseen that the foetus position will ease excessive tension in the spinal area, whilst simultaneously relaxing the shoulders and neck area. In addition to this, the foetus position will promote a widening of the back and especially between the shoulder blades.

On the exhalation the male student actor should explore the softness of the abdomen whilst surrendering the weight of the arms to gravity to allow an alleviation of weight off the shoulders. It is important that the male student actor keeps the abdomen or abdominal muscles soft so as to become aware of the movement in the pelvic floor which in effect will rebound upwards to trigger a subtle movement in the spine. The organic sensing of optimal breath will question the male student actor’s habitual way of breathing. This relies on the principles of sensory awareness, habitual patterns and re-patterning.

The impact of the foetus position on the socio-cultural self may result in the questioning of self-identity and, as indicated in chapter three, the reaction hereto.
may be filtered in relation to a defence of the self (see below). However, and as alluded to before, the foetus position yields the interconnectivity of the bodymind, thus improving the male student actor’s bodymind relationship. This may contribute to a sense of acceptance when the male student actor experiences these shifts in his own perceived gender identity.

### 4.4.2.1.3 Aspects regarding the foetus position that the voice teacher should be aware of in the theatre voice class

The foetus position will supply the voice teacher with the opportunity to observe habitual patterns of breathing in the male student actor. Due to the physical shape of the foetus position, it will challenge the male student actor to activate and engage alternate parts of the body organically to stimulate a functional breathing process. As a result of this, the voice teacher must be aware that depending on the male student actor’s flexibility, the foetus position may cause a compression of the frontal/ anterior area of the ribcage. This may lead to a significant amount of physical discomfort as well as the build-up of internal resistance to full, frontal breathing. In this resistance the male student actor is challenged to shift his awareness of breathing to other parts of the body (the back) other than the front of the thorax, or in such a way so as to avoid the distending of the stomach as he inhales. Consequently the possible impedance of movement of the ribs may lead to the male student actor experiencing a compression or excessive build-up of internal pressure of the internal organs whilst the compression of the abdomen firmly against the thighs, may cause limited movement of the diaphragm. This may in turn, lead to the male student actor experiencing discomfort and/or feelings of fear, nausea and so forth.

It is crucial that the voice teacher observes that a ‘long, soft and free’ neck is maintained by the male student actor. If the voice teacher observes that the male student actor experiences discomfort such as cramps in the feet, it could be circumvented by placing a small blanket under the ankles. The blanket could be rolled up and positioned as in such a way that the toes rest over the edges. This may alleviate and reduce the pressure of extending the ankles going into the ground — thus reducing the cramping of the feet. Often this comes about because of the nature of the sporting codes practised which bring about an inability to relax into a leg and foot position that engages directly with the floor.
When facilitating the Foetus Position the voice teacher will have to be cognizant of the principle that addresses personal uniqueness. Should the foetus position become ‘a struggle’ the male student actor will not benefit from this exploration and his body will not organically soften and relax. The voice teacher must thus be aware that this will impede optimal breathing and will have to adjust the shape of the foetus position for the male student actor. Critically, part of the ‘reluctance’ or inability has to do with the body imaging that accompanies a flat or ‘ribbed musculature’ of the abdomen.

4.4.2.2 Breath exploration 2: Pleasure Smelling

Pleasure Smelling forms part of Lessac Kinesensics (1997: 20). In Lessac Kinesensics there is significant emphasis placed on discovering the complementary or interdependent relationship of breath and optimal body integration. Lessac (1997: 20) argues that “the function of breathing determines the structure of posture" at the very same time that the function of posture determines the structure of breathing". Thus the facilitation of Pleasure Smelling is used as an example exploration towards allowing the male student actor to discover the relationship and function of breath as interdependent with optimal body integration and vice versa.

4.4.2.2.1 Description of exploration

Pleasure Smelling or the smelling of a pleasurable object is facilitated in a standing position (the vertical orientation of the body in relation to gravity).

- Whilst standing, ensure that you have a stable and easy weight distribution in both feet, whilst the toes are relaxed.
- Once this is established, allow yourself to close your eyes, and cup both your hands in front of you, imagining that you are holding your most pleasurable aroma or aroma source in between the hands.

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54 ‘Posture’ is a term that appears in Lessac (1981; 1997) and will not be used a part of this study. The implications of the term ‘Posture’ suggest and relate to a specific ‘fixed-ness’ or rigidity of the body or some of its parts. Since this study argues for a lively interplay of the inner and the outer principle, the implication of the word ‘posture’ could be viewed as stifling and in opposition to the function and expression of the body and voice in performance.

55 It is again worth mentioning that in Lessac training the notion of the Pleasure Smell is particularly facilitated as the smelling of a “pleasant-smelling rose” (Lessac 1997: 21). It is advisable that the voice teacher allow each student to conjure up his own metaphor as part of facilitating the principle of a ‘familiar event’ to serve the desired outcome of the exploration. I prefer the use of a pleasurable aroma as part facilitating all the teaching principles at play in an exploration.
• Allow yourself to smell the pleasurable aroma. Focus all your awareness on purely enjoying the feeling of pleasure in the aroma. Every time you inhale its pleasure, allow yourself to sense and feel the permeating feeling of pleasure as it gently sinks deeper and as low into the body as it possibly can.

4.4.2.2.2 How Pleasure Smelling may contribute to the male student actor’s theatre voice training

The facilitation of Pleasure Smelling will engage the male student actor with accessing a sense memory or memory recall that functions intrinsically as an organic guide towards stimulating the male student actor’s embodied awareness of an optimized experience of breath and body integration. Pleasure Smelling thus draws on the principle of the Familiar Event so as to engage the male student actor’s mindfulness towards experiencing the effect and interrelationship between optimal breath support and body integration for voice production. Through Pleasure Smelling, the male student actor explores the interchangeable effects of breath as organic instruction in optimizing body integration. Through recognizing this ability, the male student actor will cultivate and draw on the principle of Self-Teaching to mindfully engage his curiosity and rediscover the sensory experience and the effect of the optimal function of breath and body integration. Pleasure Smelling further draws on the principle of the Inner and Outer, as the influence of breath on body integration will facilitate the male student actor’s sensory awareness towards the balance of breath and the body as a continuous and lively interplay. In this way Pleasure Smelling will draw on the principles of Sensory Awareness and Holistic Integration.

In relation to chapter two, Pleasure Smelling as a familiar event promotes the male student actor’s awareness of experiencing a three dimensional expansion of the breathing construct (as indicated in chapter two: subsection 2.2.2.4). As with the Foetus Position the exploration of Pleasure Smelling will similarly integrate or develop the male student actor’s awareness of the “inhalatory-exhalatory” dichotomy of breath (as referred to in subsection 2.2.2.2; Perkins & Kent 1989: 18). The associated awareness of three point weight distribution through the feet emphasizes the vertical orientation of the body in space and organically draws on grounding through gravity. In this vertical orientation, an organic or optimal expansion of the
thoracic cavity allows for ‘free’ movement of the diaphragm (as explained in subsection 2.2.2.4). Pleasure Smelling stimulates a sensory awareness of the movement of the lungs as a generating construct, supplying a sense of the ‘typified pressure system’ of the respiratory system (see subsection 2.2.2.3). Similarly (see subsection 2.2.2.4), the ‘free’ movement of the diaphragm, in turn, induces the perceptible three dimensional expansion of the ribcage during respiration. Lessac maintains (1997: 22) that this accounts for a fuller experience of breath in a vertical orientation to gravity. Thus, this implies that Pleasure Smelling activates a deeper inhalation of breath due to the employment of accessory muscles (see subsection 2.2.2.4). Pleasure Smelling promotes breathing activity into the lower lobes of the lungs. This simultaneously engages the physiology and the musculature of the lower abdomen.

4.4.2.2.3 Aspects regarding of Pleasure Smelling that the voice teacher should be aware of in the theatre voice class

Pleasure Smelling may require shifts from both stereotypical hegemonic and alternative masculinities as it brings an awareness of habitual patterns and through mindfulness invites de-patterning. Where the hegemonic masculine male may respond negatively towards the sensing of the organic and continuous flow of movement, which may imply ‘softening’ and as such oppose the Warrior Image, the alternative masculine male may respond negatively towards the awareness of the expansion of the thoracic area during inhalation.

It is the task of the voice teacher to find ways of facilitating the Pleasure Smelling exploration, specifically tapping into the memory recall of the familiar event. Any resistance towards this exploration will impede the effect and the aim of specifically tapping into the organic in order to get to a deliberate use of breath for effective voice. Critically the student should be guided to form his own unique image/metaphor of an aroma he chooses to inhale.

4.4.3 Breath management

4.4.3.1 Lip Trills

Lip Trills form part of Titze’s “Five Best Vocal Warm-Up Exercises” (Titze 2001:51). The Lip Trills, which are voiced, serve as a preparatory or warm-up exploration
towards sensing the synergistic action as well as the interconnectedness of the four physical functions of voice production, as indicated in the beginning of Chapter two (see 2.1).

The facilitation of Lip Trills is used as a pedagogical strategy and draws on the principle of sensory awareness. As such, the lip trills may develop or stimulate the sensory awareness of the forward orientation and loosening of the facial muscles. As such lip trills may promote an awareness of vibrations in the front of the mouth and in the lips (Titze 2001) as well as the facial region (Nix 1999).

4.4.3.2 Description of the exploration

The Lip Trills can be facilitated from this perspective:

- Allow yourself to loosely bring the lips together
- Bring your awareness to gently separating the upper and lower sets of teeth away from one another.
- Bring your awareness to sensing the looseness of the jaw (mandible) — allowing just enough space to prevent the teeth from coming into contact.
- The front part of your tongue should rest comfortably and effortlessly behind the bottom front teeth in the mouth.
- Once this is established, bring your awareness to allow the facial muscles to soften, whilst sensing and feeling the complete sensation of looseness and freedom in the face.
- Now, allow yourself to maintain the position of the tongue and the softness of the lips touching one another (note that there is an increase of constriction but the lips should not be pinched or pursed), whilst gently allowing yourself to sense a build-up of air/breath pressure inside the mouth.
- Release a generated ‘sound stream’ and sense the ‘flappable’ action of the lips enhancing the sensing of the sound vibration.

As offered above, the Lip Trills are voiced and should be explored by gliding up and down the vocal range. When the lips are simply set into the ‘flappable action’, it produces a voiceless sound produced known as a ‘raspberry’. During my training the raspberry was referred to as ‘horse-lips’ and, with phonation added, as ‘horse-lips’.

56 The word ‘flappable’ is used to attempt to describe the movement of the lips. The word attempts to capture the movement of the set of lips towards each other and making contact, and then away from each other, in a rapidly oscillating and continuous process.
with a siren’. What should be noted in relation to chapter two is that the execution of
the lip trills capitalizes on a shared energy that converts the generated aerodynamic
force into an acoustic energy (see 2.3.2). As such, an exploration of lip trills
simultaneously stimulates the flappable action of the lips (preparing the mechanism
for easy articulation) and phonation. According to Titze (2006) Lip Trill production
relies on a semi-occlusion of the vocal tract. Functionally therefore, both the lips and
the vocal folds act as vocal tract constrictors of the generated energy source
(airstream) thus providing two differentiated sound sources.

Various theatre voice teachers use the concept of a semi-occluded vocal tract as a
strategy to aid the functional vocal potential of the performance voice. Linklater
(1976) uses the idea of a semi-occluded vocal tract as a strategy to free the
speaking voice. Singing teachers, like Nix (1999) and McKinney (1982) also employ
the notion of a semi-occluded vocal tract as a strategy to develop a functionally ‘free’
voice. Lessac (1997) adheres to the notion of a semi-occluded vocal tract in his
Tonal NRG explorations of which the “Y-buzz” applies this concept most prominently.
Lip trills thus serve as a way of enhancing the sensory awareness of sympathetic
vibration in the facial region, due to the increase of acoustic pressure in the narrow
region of the vocal tract.

4.4.3.3 How Lip trills may contribute to the male student actor’s theatre voice
training

Lip Trills draw on the principle of sensory awareness to stimulate the male student
actor’s awareness towards sensing the constriction provided by the lips. This is
couraged as the semi-occlusion of the lips produce an increased pressure system
in the mouth. This, in turn, is due to the aerodynamic energy that contributes to a
heightened interaction between the glottis and the supraglottic vocal tract. Titze
(2001:449) offers that the awareness of greater supraglottal pressure produces
greater control over the intraglottal pressure and thus the airflow in the glottis. The
Lip Trills thus served as an example of a partially occluded vocal tract that aids the
build-up of positive and optimal intra-oral pressure.

Furthermore, both Titze (2001) and Nix (1999) argue that the function of Lip Trills
serve acoustic as well as physiological benefits in that they also promote the ability
within the student to improve the perception of, and freedom in, the orofacial
muscles and thus further aiding the development of vocal potential (see subsection 2.4).

The facilitation of the Lip Trills can thus be seen as an exploration that recognizes and is reliant upon the coordination of both the phonatory and respiratory processes (see 2.3.2). It is crucial that the voice teacher observes that a balanced coordination of an airstream is distributed and employed by the male student actor. Herein lies the value of the exploration, in that the student male student actor senses and feels the awareness of positive and optimal intraoral pressure to sustain the vibration of the lips and vocal folds simultaneously (see subsection 2.3.2). Thus it is essential that the male student actor develops his sensory awareness towards facilitating the awareness of both vibrations of the vocal folds as well as the lips, especially as the vocal pitch is raised. As such the lip trills can be explored as a synergistic example of developing individual vocal quality (see 2.4). Furthermore Lip Trills will develop the male student actor’s agile phonation for increased vocal range, as well as facilitating the sensory awareness of breath support. In accordance with chapter two (subsection 2.2) it is the balanced coordination between the inhalation and exhalation muscles that provide breath management as the stimulus (subglottal pressure) to initiate vocal fold activity (see subsection 2.3; 2.3.2; also see McKinney 1982; Miller 1986). Lip Trills, whether voiced and unvoiced, thus allow the male student actor to engage and explore the interchangeable effect that breath has on phonation and the influence of laryngeal behaviour on breath (see subsection 2.3.2).

4.4.3.4 Aspects regarding the lip trills that the voice teacher should be aware of in the theatre voice class

In this sense is it crucial that the voice teacher be vigilant that the phonation threshold pressure57 (Titze 2001) only increases as the pitch rises accordingly. As alluded to before this does not imply that the lips be pursed or pinched but rather that an increased awareness of intra-oral pressure is sensed by the male student actor, whilst maintaining soft or flappable lips. This is to say that if the student male student actor raises his lung pressure or holds the breath (as a possible result of sensing a threat to gendered perceived identity) the lips will cease to ‘flap’ if more pressure than necessary is applied to the vocal folds. Consequently the efficiency of breath

57 Phonation threshold pressure relates to the minimum pressure needed to establish phonation.
and phonation will be impeded, as the balanced function of the thoracic muscles and the abdomen are impeded (see subsection 2.2.2; 2.2.2.5).

Thus the male student actor has to continuously experience the balanced coordination of lip trills, which may lead him to experience the synergistic interplay of the respiratory, phonatory and articulatory functions.

As a result of the self-perceived gender perception in the socio-cultural environment, lip trills will address the vocal gestural routines that may be employed by an individual as part of engaging with and upholding his socio-cultural identity (see subsection 3.4; 3.10). In relation to the patriarchal ideal of hegemonic masculinity, the vocal gestural routines upheld as part of the Warrior Image will be questioned and challenged (as indicated in subsection 3.10). These vocal gestural routines will demonstrate the vocal quality and dynamics employed as a way of signifying a preferred gender identity. As indicated (see subsection 3.10) the hegemonic masculine male will employ vocal gestural routines that are indicative of, and imply positions of power and dominance. As described in chapter three the way of indexing power through vocal gestural routines for the hegemonic male is to remain monotonous and in a lower pitch range (subsection 3.10.1). This leads to assertions of autonomy and significance of power and thus places a possible limitation on the physiological potential of voice (see subsection 3.10.1). As such, a limited use of the pitch range and less vocal fold agility, possible employing phonatory qualities that relates to hard glottal attacks or pressed voice.

A vocal gestural routine signifying notions of gay masculinity is shaped in relation to the more dynamic intonation patterns employed by the gay male to that of hegemonic masculine males. As such, gay males are viewed as more expressive in relation to the patriarchal image of masculinity, and the gay male may be perceived as exploring higher pitch ranges more frequently as opposed to engaging with full capacity of the lower vocal range.

4.4.4 Phonation

As indicated in chapter two (section 2.3) the relationship between breath and vocal fold activity produces or manages the process known as phonation. This implies a working relationship between the phonatory process and respiration. These two processes are synergistically interdependent, and thus exist or function efficiently as
a coordinated process. McKinney (1982: 84) agrees and argues for the realization of a balanced coordination between the phonatory process and respiration in aiding optimal function and expression of vocal potential. Miller (1986: 23) equally highlights the significance of laryngeal efficiency. Thus, the balanced coordination between phonation and respiration should be coordinated and/or achieved with minimum effort between these systems. If the male student actor discovers the dynamic interplay during this process it may aid the skills-building process towards developing, enhancing and/or strengthening his physiological and socio-cultural vocal ability and thus the capability of his performance voice.

In facilitating the pedagogical process of phonation I draw on Lessac Kinesensics’ Tonal NRG (Lessac 1997: 122) and specifically refer to the Y-buzz. Tonal NRG relates to aspects that are inter-relatingly aimed at, and not limited to, the development and building of the dynamics of phonation and resonance. Tonal NRG capitalizes on a sensory process of a vibrational bone-conducted energy (Lessac 1997: 24) as guidance to coordinate optimal functioning of vocal production. That is to say sound waves are experienced as a vibrational energy specifically sensed in the bony areas of the oral cavity and face to facilitate phonatory activity and resonator shape. The Y-buzz thus particularly stimulates the male student actor’s awareness of interoceptive and proprioceptive facilities to consciously gain control over voice production. Thus Tonal NRG, and specifically the Y-buzz, interweaves the principles of sensory awareness and self-teaching as guiding tools to facilitate effective and easy production of voice. Through the Y-buzz exploration, the male student actor is encouraged to refrain from only accessing his auditory perception of his voice but instead continuously sense the vibration of voiced tones through bone conduction. According to Lessac (1997:122) the concept of Tonal NRG is based on “hearing what you feel rather than attempting to feel what you hear”. Thus, the Y-buzz as part of Tonal NRG strongly draws on sound wave reflections transmitted through bone conduction as a more dependable tool to aid function and expression of voice production and further the performance voice.

4.4.4.1 Description of the exploration

The Y-buzz can be facilitated from this perspective:
• Bring your awareness towards your facial area, soften the muscles and allow all the facial muscles to release and ‘be taken over’ by gravity.

• Allow yourself to sense a gentle and small partition between the teeth, whilst keeping the lips soft and pliable at all times.

• Once this is established, imagine that you are gently exhaling on a gentle sigh of relief with a very loose and gentle ‘ffff’. Sense and feel the freedom and pliability of the lips moving forward.

• Now maintaining the sense memory of the lips moving forward, imagine that you are lulling a baby to sleep, on a very gentle SSSSHHHHHH placing a finger vertically in front of the lips.

• Sense this ‘forward facial orientation’ or perhaps yawning forward with your facial muscle as you perform this gesture. Sense how the muscles of the cheeks (around the buccal cavity) and the lips (orbicularis oris) move forward. It is imperative that the lips are soft and pliable at all times.

• Once you have this established, continuously sense the forward orientation of the lip and cheek muscles whilst bringing your awareness to the vowel-like (or an English) /y/ sound.

• Imagine that you are saying “Yes”, but are prolonging the vowel-like “Y-y-y-y-yes” (this should not be seen as a series of /y/ sounds, but a continuous legato sound, throughout what follows).

• Explore the y-y-y-y tone in various pitches, but remain aware of staying in the lower third of your speaking voice.

• Furthermore, once you explore with sustaining the y-y-y-y-y sound again, ‘marry’ the y-consonant as y-y-y-y to the /ee/ vowel. Thus, upon exploring again, intone a gentle yyyyyyeeeee so that you feel the tone floating up towards your hard-palate.

• It is vital that you sustain or keep ‘feeding’ the vibration in the hard-palate until you can eventually sense and feel your vibration floating from the hard-palate towards the upper gum ridge, into the nasal bone and all the way into the skull.

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58 McKinney (1982:78) maintains that the effect of yawning with the facial muscles forward or sensing forward facial orientation as postulated by Lessac (1997) produces positive feedback for the voice user. McKinney (1982: 78) offers that the onset and the yawn with the facial muscles forward allows the jaw to drop open effortlessly (relaxed), upon which the larynx naturally descends. Subsequent to this, the soft palate also lifts creating a flexible and “open throat” for the easy and efficient phonation.
(cranium) until you can eventually sense the vibration permeating the entire body.

4.4.4.2 How the Y-buzz contributes to the male student actor’s theatre voice training:

If the male student actor is committed to exploring his own vocal tone in the Y-buzz, it should primarily be through a bone-conducted awareness of vibratory energy. As indicated above this vibratory sensation (buzz) should be felt forward on the upper gum-ridge, hard palate and nasal bone, traveling or ‘buzzing’ upwards into the cranium. Lessac (1997: 124) maintains that the primary vibration of the Y-buzz should be experienced in the facial mask. Lessac (1997: 126) posits that bone-conducted tone produces an optimal functional and expressive voice. Research by McKinney (1982) and Miller (1986) demonstrates that the experience of vibratory sensation for enhancing the voice might not necessarily lead towards optimal function and expression but offers a point of initiating the process towards effective voice usage. As such, it should be noted that this study advocates the facilitation of the Y-buzz exploration as a means towards developing the sensory awareness for the male student actor so that he can find, experience and sense his own personal and unique vocal tone (see 2.3) and utilize it mindfully towards organic and optimal voice use. Lessac (1997:123) maintains that the Y-buzz assists to “establish the vibratory foundation for bone-conducted tone ....” For the male student actor this implies that he can draw on the principles of the sensory awareness and self-teaching, to organically facilitate his own development of his vocal potential. A preliminary investigation of the acoustic potential of the Y-buzz indicates that Y-buzz could potentially aid the physiological potential of the voice for the enhancement of projection without compromising intonation (see Munro, Leino & Wissing, 1996: 337). This is due to the Y-buzz (as indicated above) being produced through a semi-occluded vocal tract. Thus, the facilitation of forward facial orientation induces an “inverted megaphone” (Lessac 1997: 160-167) creating positive intra-oral pressure (Titze 2006). Thus the lengthening of the facial muscles, through the forward facial orientation, shapes the air resonator (vocal tract) to produce healthy, effective vocal fold activity which is the healthy and optimal adduction and abduction of vocal folds (Peterson, Barkmeier, Verdolini-Marston & Hoffmann 1998; Verdolini, Drukker, Palmer & Samawi 1998).
Optimal shaping of the air resonator and effective vocal fold activity for each pitch (these shifts are made as the voice user aims to maintain the sensation of the bone conduction) in turn provides optimal acoustic output (with specific reference to F1 to F5 in relation to F0 — see 2.5; Munro, Leino & Wissing 1996; Barrichelo-Lindström & Behlau 2009). As indicated in chapter two (2.5) the active shaping of the vocal tract will produce the male student actor with the opportunity to experience the resonating qualities of his voice. Thus the forward shaping of the vocal tract implies that the basic glottal tone (F0) will be strengthened acoustically (F1 to F5) into distinctive qualities perceivable in pitch, volume and tonal quality (see 2.5).

4.4.4.3 Aspects the voice teacher should be aware of in the theatre voice class

If the establishment of a bone-conducted tone is challenging for the student male student actor, Lessac (1997: 17) offers the use of tuning fork to create a familiar event and encourage a sensory awareness of the bone conducted tone. The tuning fork is set into vibration and the base of the tuning fork is placed against the student’s upper teeth. The vibrations of the tuning fork, perceived through the teeth, serves as a familiar event for bone conduction and prepares the way for the student to ‘seek a similar sensation’ when executing the Y-buzz as a sensory feedback experience. The voice teacher should be vigilant and observe the ‘freedom’ of the tongue. The tip of the tongue should be placed forward preferably making contact with front bottom teeth, the sides of the dorsum of the tongue gently touching the upper molars. The tongue should never be held — and thus should be experienced as ‘free’ and as moveable as possible. Further aspects the voice teacher should be aware of or observe during the execution of the Y-buzz:

- The Y-buzz should be explored comfortably in the lower third of the male student actor’s vocal range
- The male student actor needs to beware of a continuous interplay and movability of the forward facial orientation
- Sense and feel the narrow lip opening so that you continue to draw on or from the sensation of the intraoral pressure for the alleviation of excessive phonatory tension, to aid ease of vocal fold activity.
- Ensure that the voice producing process is continuously experienced as moveable with no fixing, pushing, forcing of the tone and so forth.
• Ensure also that there is playable pleasure presence within the male student actor, especially a lively energy in the eyes that leads to mindful enjoyment of the experience.

As indicated above, the Y-buzz accesses the principle of sensory awareness and engages the male student actor with aspects of vocal quality and dynamics. As voice is a marker of socio-cultural identity (3.10.1) it could be implied that the hegemonic masculine male’s voice (and acknowledging that this can be perceived as stereotyping) would be placed in the lower third of his range. This implies that the hegemonic masculine male would possibly use a relatively long *adduction* phase in vocal fold activity as gestural routine of indexing power (strength). Thus, in fulfilling social power and dominance the sound of the hegemonic masculine male may reflect or echo a sound pattern congruent with the virtues of the Warrior Imperative — which may even result in a ‘pushed down’ larynx in an attempt to create a lower and/or deeper sound in order to sustain ‘monotonicity’ as part of persevering a gestural routine. In this way the pitch range of the hegemonic masculine man may be limited, as laryngeal agility will be impeded. Furthermore, as part of the power and control mode, the male student may find difficulty in assuming the softness and relaxation necessary to accomplish the Y-buzz effectively (‘spinal flow’).

Gay males are stereotypically more inclined to employ a higher pitch range (as indicated in subsection 3.10.2) and may even make use of a tilted thyroid (see subsection 2.3.1) to create an ‘effeminate’ sound. It could further be implied that gay males could be more prone to employ an aspirate/breathy onset of voice in attempt to oppose the stereotypical hegemonic male sound — this implies longer *abduction* in vocal fold activity as a vocal gestural routine. Furthermore, because the Y-buzz explores the lower third the vocal range the gay male may consider this to be playing into the Warrior Imperative, and therefore might be reluctant to fully engage in the exploration.

### 4.4.5 Articulation

The adjustable and interchangeable structures of the vocal tract shape individual resonating qualities (formants) and further also provide shape to contrastive phonemes. This process relates to articulation (see subsection 2.5). Articulation occurs in the oral cavity part of the vocal tract and transforms resonated sound
waves into spoken words that connote meaning whilst maintaining certain tonal qualities. The oral cavity is thus the area of the vocal tract where vowels and consonants are formed. To this end the process of articulation and resonance is inextricably linked (see 2.4). In this example exploration, the emphasis is on consonants. Consonants are formed either by a complete or partial occlusion of the vocal tract, interrupting the generated airstream.

An example of this (see 3.10.3) is the /s/ as a lingua-alveolar consonant that is an unvoiced, sibilant and fricative vocal characteristic. The /z/ is also a lingua-alveolar consonant with a voiced fricative quality. Both the /s/ and the /z/ consonants have duration and are produced within a narrow air channel and with constriction occurring at the same place in the oral cavity. The difference between these two consonants is thus in the acoustic quality; the /z/ as voiced (thus with phonation) versus the /s/ as unvoiced (without phonation).\(^{59}\)

Lessac Kinesensics advocates the use of a metaphor when working with consonants: Consonants are ‘played as musical instruments’ (see Lessac 1997: 68). During Lessac Kinesensic workshops the facilitators also referred to ‘tasting\(^{60}\) the consonants, implying the principles of sensory awareness and the teacher-within, instead of following primarily an auditory perception of the sound or copying another person’s sound.

In facilitating the pedagogical process I will draw on Lessac Kinesensics’ Consonantal NRG (Lessac 1997: 63). In relation to the example exploration provided above, and drawing for from Lessac Kinesensics, the /s/ is referred to as a “sound effect” (Lessac 1997: 81). Lessac Kinesensics refer to the /z/ as a bass fiddle (Lessac 1997: 79). Lessac (1997:79) posits that this voiced fricative should radiate a clear and resonant vibratory sensation on the alveolar ridge and upwards. No excessive air should escape. Due to the phonatory activity of the voiced /z/, the /z/ can be explored over the male student actor’s voice range and contribute to vocal-fold agility.

4.4.5.1 Description of the /z/ bass fiddle exploration

\(^{59}\) See Minifie, Hixon and Williams (1973: 260) for an explanation on why the /s/ can have such a high pitch. This is due to the space in front of (anterior to) constriction. A smaller space makes for higher frequency (pitch).

\(^{60}\) This was experienced in the first Lessac Intensive at the University of Pretoria from January 6 – 25, 2013, as well as the subsequent teacher’s workshop, 24th to 27th September 2013.
It should be noted that the exploration of the /z/ bass fiddle can be facilitated from this perspective:

- Bring your awareness to sensing and feeling the tip of the tongue toward the gum ridge.
- Sense the upper and lower sets of teeth as slightly separating away from one another leaving a very small partition between the sets, as if occluded completely.
- Focus your awareness on the sides of the tongue as gently touching the upper gum ridge.
- Bring your sensory awareness towards the placement of the tongue.
- The forward portion of the tongue tip is in contact with the upper gum ridge, the sides of the dorsum of the tongue should also be in contact with the gum ridge of the hard palate.
- Allow yourself to extend a legato /z/ of a period of time and observe the vibration in the very small aperture of the tongue against the upper teeth.
- Continuously allow yourself to sense and feel the vibration in your teeth and the front of the tongue tip.
- Feel the vibration as light, gentle and easy vibration.

4.4.5.2 Description of the /s/ sound effect exploration

The /s/ sound effect can be explored from this perspective:

The /z/ bass fiddle and the /s/ sound effect feed directly into one another.

- In order to begin exploring the /s/ sound effect, return to playing the /z/ bass fiddle.
- Once you have established this, allow yourself to ‘turn off’ the voice but maintain the air flow.
- Now you have established the /s/ sound effect and continue the sensation hereof as if in an ‘extremely quiet whisper’.
- It is crucial that you maintain your awareness on sustaining a light, soft, steady and smooth sensation of the /s/ sound effect.
- It is thus vital that you maintain your awareness on keeping the upper and the lower side teeth almost occluded and your tongue tip on the gum ridge.
Shewell (2009:140) indicates that when producing a /s/ and a /z/ a person should be able to maintain the /z/ as long as the /s/. If a person is not capable of maintaining the /z/ for a similar duration than the /s/, it is indicative of inefficient vocal fold activity during the /z/. Following this, one can also suggest that should the /s/ not be maintained for a similar duration than the /z/, it may be an indication of ineffective breath management.

4.4.5.3 Aspects the voice teacher should be aware of in the theatre voice class

As presented in (3.10.2), research indicated substantial differences in frequency in the production of /s/ and /z/ consonants of hegemonic masculine and gay males. As far as the hegemonic masculine male is concerned a voiced /z/ would most probably be employed as a way of potentially maintaining the sound in the lower range voice range. Once again this can be viewed as a gestural routine that indexes social power and the possible inability to engage with the higher range of the male student actor’s voice. This may impact negatively on characterisation work. Such a habitual gestural routine may further imply that the hegemonic masculine male may struggle with the agility of his vocal range — especially towards higher part of the range. Further the hegemonic masculine male is most likely to facilitate a ‘pressed voice’ as a gestural routine of the Warrior Imperative.

The overview provided in chapter three indicated that the representation of gender through gestural routines involves wide-ranging constellations of vocal gestural routines that include linguistic and vocal behaviours. The most obvious perceptual marker of gender distinction relates to the inflectional contours that a specific masculine male uses to affirm, situate and uphold the gendered expression of self. Intonation is the most obvious suprasegmental marker that separates hegemonic masculine and gay male identity within the patriarchal ideal of masculinity.

The perception is that the alternative masculine male employs more dynamical intonation patterns. Thus, the /s/ could be viewed as a more applicable consonant as a way of maintain a more ‘effeminate’ vocal gestural routine. As indicated (in 3.10.2) the frequency at which alternative masculine male produces the /s/ consonant is relatively high — thus the sound is ‘too sharp’ as a result of being

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61 A pressed voice relates to a longer period of adduction than what is needed for effective voice production. This would incur excessive tension and would stifle optimal function and expression of the performance voice.
overly emphasized. In other words placement of constriction is too far forward or the lips might be pulled back (in the gesture of a ‘smile’) to minimize anterior space or the duration of /s/ is maintained too long within context of a specific word.

A possible way the voice teacher could circumvent this is through focusing the male student actor’s awareness on sensing the resonant vibratory effect of the sound. The voice teacher should facilitate this process through the principles of sensory awareness and through developing a safe space for learning and optimizing the male student actor vocal capacity within the theatre voice class room.

4.5 CONCLUSION

As referred to above, it is cardinal that a theatre voice class is a safe space to allow an atmosphere of inclusion so that the student feels safe. ‘Instruction’ should be provided in such a way that male student actor is willing to explore and not feel threatened. He should be continuously reminded of what the goal of the training is. It should often be affirmed that his personal uniqueness is celebrated and that voice training provide options of function and expression that will lead to characterisation.

No theatre voice training program should only focus on the voice as an object but should also engage with the voice as a subject. The voice is never just a mechanistic tool, neither is it just a gestural routine reflecting self-identity. The entry-level voice teacher should keep this dichotomy in mind with every exploration shared with the male student actor.
CHAPTER FIVE
SUMMATION

5.1 INTRODUCTION

The purpose of this chapter is to summarise the knowledge and applications elucidated in the previous chapters as well as to note the shortcomings of this study. Further research unfolding from this study will be speculated upon and a conclusion to this study will be drawn.

As indicated in chapter one of this dissertation, the entry-level voice teacher in a tertiary situation is not necessarily prepared for the multi-dimensional demands confronted with when entering the classroom. As voice is contended as a “psychosomatic phenomenon” (Shewell 2009:4), voice in itself culminates from a holistic interrelationship between function (anatomy and physiology) and expression (interpretation linked to performance). It is this interrelationship which simultaneously refers to voice as object and subject, or, stated otherwise, voice as mechanism and voice as socio-cultural gestural routine. Fundamentally ‘what’ the teacher teaches is driven by the function of the voice, yet ‘how’ the teacher teaches must draw on the social-cultural gestural routines of the students (and, in time, on the socio-cultural theatrical character and theatrical performance demands).

One of the demands emerging from this and that has to be taken into account during the training of theatre voice is that of gender differences. As an entry-level voice teacher, I became aware of the notion that sex as a biological marker is not necessarily congruent to gender as a social identity. From this, I decided to investigate the unique attributes of the male voice from an anatomical and physiological (i.e. functional) perspective as well as from a socio-cultural perspective, investigating the fluid and continuously shifting sense of self expressed through voice as a gestural routine.

An overview of chapters two to four below is provided as summation.
5.2 OVERVIEW OF THE STUDY

In chapter two, scholarly materials concerning the various anatomical and physiological attributes of voice production were consulted. Voice is acknowledged as a substratum of the body. This thus implies that the human voice in general has at its root specific mechanistic properties forming an interrelated network towards a system approach. It is offered by several scholars (such as Berry 1987; Caverero 2005; Noland 2009) that the voice as mechanism or instrument has capabilities that supersede the limitations placed on it by socio-cultural paradigms. Consequently, it became clear that it is imperative for the entry-level voice teacher to not only have knowledge regarding the anatomy and physiology of the human voice but also has to have knowledge of the unique physiological attributes of the male voice (and by extension the female voice, but this was not the central thrust of this project) in order to facilitate effective theatre voice training for the male student actor. This chapter provided an overview of the anatomical and physiological constructs of voice with specific reference to the unique attributes of the male voice. As such the generating, phonating, resonating and articulatory properties of voice were described.

The generating property of the voice is respiration, which is fundamentally the mechanical process of breathing (Zemlin 2011; Saladin 2012). The respiratory system includes various organs, cavities, bones and cartilages collectively functioning as an interactive system that provides life through inhalation and exhalation and also propels an airstream through the glottis to ensure phonation (see 2.2).

Phonation (see 2.3) takes place in the larynx when the vocal folds are set into oscillation (Zemlin 2011) by the impact of the subglottal pressure (Shewell 2009). The oscillation of the vocal folds serves as the voice source (Sundberg 1987; Bunch Dayme 2005).

The voice source provides the fundamental tone, which, in turn, is primarily enhanced though the vocal tract acting as an air resonator or channel (Shewell 2009:144). The vocal tract is highly modifiable, variable and adaptable. Furthermore, the structure of the vocal tract leads into the oral cavity surrounded by the lips, jaw, tongue and soft palate. These structures are responsible for the generation of speech — thus articulation (Shewell 2009:145).
Chapter two provided a description and discussion of these various properties as pertaining to the study’s investigative question. Interspersed within the generic description of the vocal apparatus the chapter provided the unique attributes of the male voice as mechanism or instrument. These unique attributes of the male instrument include

- the lungs that are larger than those of females, with a capacity in excess to 5000 cc of air — thus 1000 cc more than females;
- the complete laryngeal structure is up to 40% larger in males that in females;
- the thyroid notch in males is approximately 90 degrees in males compared to 120 degrees in females;
- the arytenoid cartilages in males are bigger than females;
- that males have longer and thicker (mass, volume) vocal folds when compared to females (a 60% difference);
- the male larynx moves lower in the neck than the females, thus securing a longer air resonator for the male voice;
- the average fundamental frequency of the male voice is 130 Hz and the females’ 220 Hz
- the male vocal tract is longer and wider than its female counterpart. For men the length is between 17 to 20 cm and for females between 14 to15 cm.

These unique attributes of the male instrument provide a proportional difference between the male and female voices that can be compared to the difference between a violin and a cello or double bass — both are stringed instruments of similar shape but difference in size and therefore in sound. It is these basic anatomical and physiological differences that have to be taken into account when the voice teacher facilitates a theatre voice training program.

Chapter three defined and discussed the impact of various socio-cultural influences on the voice with specific reference to the male voice. It traced the interrelationship between mind, brain and body to motivate the notion of a ‘dichotomised voice’ constructed by the male himself and perceived by others. Mind is acknowledged as a process of embodied being (see 3.2) that shapes and determines the identity of the self and therefore directly facilitates voice as expression of the self and a gestural routine of socio-cultural belonging. Chapter three refers to culture as a “system in
which the coordination of ideas or beliefs, expressive symbols and value orientations are developed that secure their function” (3.6) and defines ‘social’ as the interaction within the cultural system. Chapter three indicated how gender is a central feature of social life.

The chapter demonstrated how patriarchy advocates a heteronormative matrix with male and female as opposites. This cultural perception begs for gender-appropriate behaviour. This in turn led to a discussion of masculinity. ‘Masculinity’ equates behavioural patterns and expressions of ‘being a man’. This study acknowledges multiple masculinities that support various constructions of ‘masculinity’. Hegemonic masculinity supports patriarchy and advocates a hierarchy and competitiveness. Current examples of hegemonic masculinity within the South Africa context include Jacob Zuma and Julius Malema (See Morrel et al. 2012).

As alternative masculinities, this study refers to the gay male identity and drag queens. These alternative masculinities are still placed as a response to hegemonic masculinity (Schrock & Schwabe 2009:280). Defining the self-identity of one’s masculinity is demonstrated through gestural routines which includes use of body and voice in expression and communication. Observation and interpretation of these gestural routines may lead to stereotyping, especially with reference to socio-linguistics. However, vocal quality and dynamics do provide and may even indicate specific gestural markers that index a perceived identity and therefore a self-reflexive gender identity (as was demonstrated in the scholarly overview in chapter 3). It is offered that the voice teacher should be aware of these various gestural routines in order to facilitate optimal voice building and usage within the theatre voice training situation. Centrally, the chapter concluded that such gestural routines, as markers of identity, often ‘limit’ the engaged range of the voice to that identity, resulting in the male student actor not engaging in the full potential range and capabilities of the generic male voice (constrained as it might be by the individual’s own specific vocal apparatus).

Chapter four emerged from this position, and acknowledged the interactivity of voice as object and as subject. It emphasised voice as an embodied expression that cannot be simply mechanistic or just an expression of identity. It offered that gestural routines as socio-cultural markers may at times confine the use of voice and constrain the vocal student from exploring and developing the full voice potential of
that particular individual. Consequently, the aim of this chapter was to present a
series of explorations that would facilitate training that strove towards exploring and
building the optimal potential of the male student actor’s voice. Such explorations
also emerge from principles supporting the pedagogy of voice training. These
principles underscore and inform my approach to theatre voice training. These
principles include holistic integration; organic congruencies, personal uniqueness,
sensory awareness, inner and outer, awareness of continuous change, habitual
patterns, re-patterning, familiar events and self-teaching (see subsection 4.3).

Chapter four continued by providing example explorations that can be used in a
theatre voice class. The aim here was not to provide a complete theatre voice
training program but to demonstrate how each of these explorations adheres to, or is
influenced by, the interactivity of voice as object and subject (in other words, the
interactivity between vocal mechanism and the socio-cultural identity markers of a
hypothetical male student actor). It integrates how information shared in chapters
two and three supports the entry-level voice teacher. Two explorations of each of the
voice properties were provided as examples. Centrally, the chapter acknowledged
that the differentiation of these explorations and properties is artificial as they occur
together, but they are presented independently in order to facilitate clarity of purpose
for the male student actor.

5.3 SHORTFALLS OF THE STUDY

The shortfalls in this study may be clustered around three areas, namely the science
of voice, the complexities of the male socio-cultural manifestations and the range of
explorations offered.

In the first instance, this study does not provide as comprehensive enough a
discussion on anatomy and physiology of voice for the entry level voice teacher. It
may be argued that the discussion provides enough information to engage with this
study only. Examples of this would include the acoustic dimensions of sound and
voice, addressing areas of recuperation from vocal damage, and character voice
development.

In terms of the socio-cultural elements influencing and determining use of voice
addressed, firstly, it is acknowledged that the influences of specific languages, race
(or ethnicity) and even age as socio-cultural constructs were not addressed.
Secondly, only gay masculinity and drag queens were accessed to demonstrate alternative masculinities. This choice is motivated by which alternative masculinities I, in my very limited experience as a voice teacher, have observed in the tertiary classroom. It is taken for granted that there are other manifestations of alternative male vocal gestural routines. Thirdly, I acknowledge stereotyping with regards to gestural routines of hegemonic as well as alternative masculinities — it is a given that the range of possibilities are present, encapsulating both the individual and the generic.

In terms of the exploration shortfalls, firstly, only example explorations used in a theatre voice training program were engaged with. Secondly, there might appear to be an artificiality in the isolation of particular explorations to engage with particular phenomena. However the voice classroom is a complex weave, both in terms of student profiles, and in terms of vocal preparation, and seldom are the explorations only ‘one-dimensional’. Finally, the use of explorations that lead into or from text are not included, as this would move the study toward characterisation, for example, and this study serves as a preparatory platform only.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

Each cluster (the function and expression of the voice, the socio-cultural influences, and the explorations) and each aspect in each cluster in the section on shortfalls (above) poses possibilities of further research. However, two sets of overarching concerns are presented with which, potentially, to tackle the shortfalls. Firstly, the approach of this study has been to integrate established scholarship on the function and expression of the voice, scholarship on the dynamics of the socio-cultural with specific reference to ‘masculinity’, and the extant exercises from established voice specialists. In this sense, the study brings potentially disparate literature, filtered through the eyes of the researcher, to bear in engaging with the problem. It can therefore, secondly, be argued that the conclusions reached in this study have not been empirically tested, or engaged with in practice.

Given this situation, further study will require far more empirical and qualitative testing of areas deemed to be shortfalls in this study. Furthermore, the actual experiences of vocal students in particular classrooms need to be documented, particularly in terms of the interface between voice mechanism building and identity.
It is also suggested that longitudinal studies, developing and refining particular explorations that speak to the particular masculinity issues raised in the study, be undertaken.

5.5 CONCLUDING REMARKS

Theatre Voice training assumes the voice teacher to have extensive knowledge of both voice as mechanism and voice as gestural routine expressing socio-cultural sense of self.

The mechanism of the male voice has certain attributes specific to only the male voice, as indicated above.

The voice teacher has to be aware of the interrelatedness of body, brain and mind and that bodymind as a monist concept influences the efficacy of the training process. Mind determines the filters through which the student frames the explorations and, due to this, all explorations will first be evaluated against self-identity, matching the perception of the exploration against the personally unique as well as socio-cultural identity. Although the self, specifically within a specific socio-cultural paradigm is fluid and emergent, it is against this ‘truth’ that explorations used during theatre voice training are matched. Inevitably, this ‘matching’ of the shift explored and advocated by each exploration questions personal as well as social identity. Due to this a need to defend his identity (as manifest in this case in his vocal identity markers and gestural routines) may arise from the male student actor. This need may be communicated in various ways depending on the personal uniqueness and socio-cultural paradigm of the male student actor. Protective mechanisms may be established through silence (see 3.10; 3.10.1) withdrawal and aggressive behaviour from the male practising hegemonic masculinity or through heightened expression of emotions form the male practising an alternative masculinity (see chapter three, 3.8; 3.8.1; 3.8.2).

As this study contends that mind shapes the self in relation to others within a specific social context, it is crucial that within the theatre voice classroom the male student actor is not only provided with time and space to explore his own identity but also be provided with a safe space where inclusivity and acceptance as well as bonding with the other students as a social group are encouraged. This addresses the social and interactive nature of the mind and allows reflexivity. It supports the lively interplay
(Hackney 2002: 214) between the “inner connectivity” and “outer expressivity” in an environment that supports the shifts required and as such promotes the male to be ‘mindfully aware’. It leads to what Damasio (2010: 8) refers to as the self-process manifesting the “dynamic knower”. Theatre voice training should essentially allow for a process where skills-building emerges from experiences and explorations as well as the reflections on these processes.

Within a safe space the male student actor should initially be invited to explore voice usage that falls outside his preferred gestural routines but within the capabilities of his voice as mechanism or instrument. The voice teacher should be aware that certain responses may appear due these explorations questioning the ‘accepted’ coded patterns of behaviour that the male student actor upholds. One can speculate that especially where the preferred masculinity of the male student is an alternative masculinity, which within a patriarchal paradigm may be rejected, the student may be wary of exploring voice usage options due to his experience of the rejection from the patriarchal perspective. Such a student may demonstrate resistance towards certain explorations. Similarly, if a student upholds hegemonic masculinity, vocal explorations that seem to explore the gestural routines consistent to alternative masculinities may be rejected as the male student actor may deem this as unacceptable and ‘weak’ (see subsection 3.8.2; 3.9.1). The hegemonic masculine male may experience these explorations as an attack on his power and strength (see Messner 1992).

Within the theatre voice training class it is imperative that the voice teacher acknowledges and respects the sex-gender conflation of each male student but encourages each student to explore and build a ‘voice’ that is capable of optimal expression in lieu of its functional capabilities or instrument. The ‘truth’ of the sex-gender of each of the male student actors may never be questioned. One masculinity may never be viewed as superior over another masculinity; thus teachers must practise the principle of organic congruencies where all humans are analogous. The voice teacher should facilitate the class in such a manner that each male student actor, irrespective of his personal identity or preferred socio-cultural paradigm, commits to exploring voice usage that requests of him to move outside his preferred gestural routines. He should feel accepted and safe enough within the class as social learning environment to explore the capabilities of his voice. The
voice teacher should create an environment where the male student actor knows that he may at times feel vulnerable but never attacked or rejected. It is through the behaviour of the voice teacher that he will gain the trust of the male student actor. It is the teacher’s thorough knowledge of the anatomy, physiology and socio-cultural impact on the male voice that the voice teacher will be able to successfully facilitate the preparation of the male student actor to create and present characters with substantial credibility that are not concurrent to the male student actor’s gender.

In conclusion, it is clear that the theatre voice teacher needs to engage with the ‘what’ of voice training, that is to say, the optimal development of the vocal mechanism in preparation for theatrical task of communication and characterisation. Yet, at the same time, the theatre voice teacher needs to engage with the “how” of that training, that is to say, how it is that the pedagogical approaches and the dynamics of the socio-cultural (and the student’s engagement with identity) influence the approaches to such vocal preparation and development. Centrally, this dissertation argues for a complete integration of the “what’ and the “how” to allow for a safe and optimal development of both object and subject.
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