Enabling Performance: Dyslexia and Acting Practice

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Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Drama, School of Arts, University of Kent, Canterbury.

13 September 2013
Word count: 73, 972

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Abstract

This thesis is concerned with the lived experience of dyslexic actors. It explores the role of performance in constructing dyslexic identities, actors' relationships to written and verbal language, the ways in which this might impact on their acting process and implications for teaching practice. Research into dyslexia and acting practice is needed in light of the growing interest in cognition within the field of performance theory, the legislative framework surrounding dyslexia, implications for policy and practice and the numbers of professional actors with dyslexia. The methodology draws on a range of paradigms, namely phenomenology, embodied cognition and disability theory and adopts a mixed methods approach, in order to explore the complex nature of dyslexia and address a range of research questions. The research finds that the research participants have a different intentional relationship to language and linear sequencing. Certain training and acting experiences have given them a different experience of being in the world, creating positive dyslexic identities and body images. Disabling training approaches predicated on linear-sequencing and literacy, are the antithesis to methods which utilise non-linear, holistic and non-verbal processing. Actors manipulate the physical environment and the objects in it, to control what is otherwise a chaotic environment. A number of examples of inclusive practice and support models exist, but evidence of disabling practices remain. The research has potential policy and pedagogical implications both for actor training institutions and the industry. It also has implications for those dyslexic learners who are not professional actors, as acting may have cognitive benefits for such people and encourage positive dyslexic identities. There are broader implications relating to theatre and performance theory as a discipline, as models of neuro-diversity (such as dyslexia) can enhance current performance theory. This research may also encourage dyslexic actors not to merely survive but to thrive in the acting profession.

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Acknowledgements

I would like to thank my supervisors Melissa Trimingham and Nicola Shaughnessy for their encouragement and critical insight during the past three years. I am indebted to the financial support from the University of Kent School of Arts and The Royal Masonic Trust for Girls and Boys, which enabled me to complete this research. I would also like to extend my thanks to the Actors Centre for hosting the workshops and to all the actors, teachers, theatre practitioners, academics and support tutors who participated in this research and shared their experiences with me. Special thanks to my dyslexia tutor Sally Daunt for her patience and good humour. Finally, I would like to acknowledge the invaluable support of my family and friends during this process, particularly my mum and Simon, and to my late dad Michael.

A note on publications and connections to previous research

Sections from Chapter Two will be published in an article in the November 2013 edition of the journal *Research in Drama Education*. Chapter Six is developed from a article entitled 'Enabling performance: dyslexia, (dis)ability and 'reasonable adjustment'', published in the *Theatre, Dance and Performance Training Journal*, April 2013 and from an essay entitled 'Enabling Performance: dyslexia, (dis)ability and 'reasonable adjustment'' which was submitted for the award of the Post Graduate Certificate in Higher Education in September 2012 to the University of Kent. Interviews cited with the year 2009 were conducted during my MA at the Central School of Speech and Drama and have been further developed in this PhD research. The full bibliographic detail of the MA thesis is available in the bibliography under the surname and date Leveroy (2009), and all interviews are referenced in the List of Research Participants section (pp.252-253).

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Chapter One: Introduction, Research Context and Methodology

Introduction

The awareness of dyslexia within the acting profession is nothing new: perhaps one of the first actors to speak openly about her dyslexia was Susan Hampshire in her 1981 autobiography *Susan's Story, An Account of My Struggle with Dyslexia*. In the book she describes her first job in the 1950s as an assistant stage manager, and the lengths she went to cover up her difficulties with reading aloud during rehearsals: 'spilling my tea during a long speech; pretending to have a bad cold, blowing my nose and talking from behind my hanky' (1981: 59). In auditions, she was prone to improvise around the text, resulting in one director shouting 'stick to the text – this isn't a play-writing competition' (1981: 66). In time she learnt to 'study plays comparatively quickly, to read with understanding, learn parts through meaning and not like a parrot, and read books which threw light on the subject of the play, its period, or characters' (1981: 60). Creating meaning out of background information and context to compensate for poor decoding skills and working memory is a common dyslexic strategy (Corkett and Parrila 2008; Nation and Snowling 1998). Susan's experiences are shared by many other dyslexic learners in the acting profession: they characterise some of my own experiences at drama school and in the profession.

I remember being at drama school some nine years ago as a young adult, and thinking that my dyslexia had been 'cured', unaware that 'dyslexia is not a disease which comes with school and goes away with adulthood' (Frith 1997: 8). After all, I was quite proud that I had completed my GCSEs without being 'diagnosed', achieving 3 Bs and 6 Cs. At university I was taught by my dyslexia support tutor how to plan essays and take notes from books but I did not have the slightest notion of dyslexia beyond these 'academic' tasks. Even through drama school I put dyslexia to the back of my mind and I managed well enough: blindly writing and re-writing my lines, unable to fathom, never mind remember the phonetic alphabet, haphazardly misreading and mispronouncing words and writing down every last piece of blocking for fear of ending up downstage left instead of upstage right. On reflection, I think that being in a structured environment which involved continual repetition of new skills and rehearsal was beneficial for me.

Yet when working in the profession (auditioning, attending classes, rehearsing and performing), the idiosyncratic difficulties I experienced at drama school became more accentuated without the luxury of full time classes and rehearsals which consistently reinforce new skills.[1] It was perplexing, and it was not until I started having conversations with other actors who also experienced the same sorts of difficulties, and who said they were dyslexic, that I began to put the two aspects of the situation together.

This thesis is a continuation of the iterative cycle of questioning and exploration that has led me to reflect on what initially drew me to plays and acting at school. Like so many 'would-be' actors, I enjoyed playing games and exploring new worlds and characters. However, I vividly remember the relief I felt in English class, when I scanned the first few pages of the stage comedy, *Educating Rita*, and noted that there were far less words on the page compared with the dense prose in the novel, *Lord of the Flies* (which had been gathering dust on my shelf for about two months). A momentary glance at a play text reveals an ocean of space around the words, and fewer words in the text as a whole. I sensed that the space on the page gave me a way into the text, making it seem less daunting and allowing me to fill in the space with my own imagination and connections. By reflecting on my early experiences with texts, I am attempting to make sense of my early inclinations towards acting and my identity as a dyslexic learner. As a reflective researcher, I am sensitive to the ways in which my own life narrative may be implicated in the research (Bryman 2012: 393). Whilst I acknowledge the potential limitations of research which is embodied in my own experience, I hope that the adoption of a reflective position allows me to embrace the research process in the phenomenological tradition of open minded enquiry (Dahlberg, Drew and Nystrom 2001: 97-8) meaning that my own experience does not impede the narratives of my participants.

[1] Drawing on the work of Hutchins (1995) and Grasseni (2004) Tribble suggests that skill is 'shaped through being embedded within a dynamic, cognitively rich working environment' and this point will be further discussed in chapter two (2011: 22).

This thesis is concerned with the lived experience of professional actors with dyslexia in the context both of training and in the profession to further an understanding of dyslexia within performance practice. The work draws on philosophical and theoretical paradigms such as phenomenology and social disability theory to place the lived experiences of the dyslexic individuals at the heart of the study. I build on the work of performance and cognitive theorists to establish an understanding of an atypical cognition in performance practice with specific reference to dyslexia.[2] I define dyslexia in light of embodied/extended mind theories of cognition (such as distributed cognition (Hutchins 1995)), conceptualising dyslexia as a dynamic system of elements which are distributed across a range of levels: the individual's neuro-cognitive mechanisms, the immediate physical environment (work/educational institution) and society at large.

Based on cognitive theories of dyslexia and learning style, the philosophy of embodied cognition, disability discourse and performance theory, I explore both the dyslexic actors' lived experience of the acting process and a series of performative techniques for use by both the dyslexic actors themselves and by teachers and directors. In the research I identify three potential enabling strategies: layered improvisation, contextual facilitation and the use of analytic frameworks, which may enable the actors to relocate their body intentionality within the linguistic environment.

In the initial stages of the research, I set out to provide an indication of how many dyslexic learners there are in the acting profession. However, as neither Equity nor Spotlight collects such data, this question is currently unanswerable. Therefore I surveyed drama schools in order to answer the research question: How many dyslexic learners are training to be actors? I recognise that the student-actor findings cannot be used to answer the question concerning how many dyslexic learners there are in the profession as a whole, as there is no guarantee that graduating actors will be working. However, the statistics from the drama school survey indicate that there are dyslexic learners training to be actors, and therefore a key research question is why this might

[2] The term 'atypical cognitive development' is used by cognitive psychologists to refer to dyslexia and autism, see Goswami (2011); Dowker, A. (2006); Broman and Grafman (1994).

be: why might a dyslexic learner choose to train to become an actor, given the demands placed on reading and memory? Additionally, what role, if any, does performing play in the construction of identity? The research is also concerned with how dyslexic learners process text and what strategies, if any, they have developed to read, remember and embody written text. The last two key research questions are concerned with the learning and teaching environment, the actors' experience of the acting process, pedagogy, support models and training approaches. I am interested in what, if any, barriers to learning actors experience within training pedagogies and professional rehearsal practice. Finally, are some training and rehearsal practices more inclusive for dyslexic learners than others? These questions aim to uncover key trends and common experiences, not to provide definitive answers or causal explanations. The research questions have emerged through my own experience and the research context, which I go on to discuss (see page 7-45). This chapter will justify the need for this research, review the literature, outline the methodology used, and describe the theoretical rationale.

There are three main shortcomings in the current area of dyslexia and performance practice which will be addressed in this thesis. Firstly, there is a need to acknowledge and explore atypical cognition within performance studies, in light of the growing number of performance theorists and practitioners who believe that associative cognition is central to an understanding of the acting process (Lakoff and Johnson 1999 in Lutterbie 2006: 150). The seminal work of Blair (2006, 2008), Lutterbie (2006, 2011) and Noice and Noice (1997, 2006) have contributed to a growing understanding of the relationship between cognition, neurology and performance practices, and continues to inform current scholarship into the nature of performance (Shaughnessy 2013).[3] However, these performance theorists and practitioners have yet to locate the performer's neuro-cognitive functioning within a wider neurodiverse framework, which take into account the autistic spectrum, Asperger's Syndrome, Attention Deficit (and Hyperactivity) Disorder (ADHD), dyspraxic and dyslexic profiles.[4] Without

[3] For other performance and cognition scholarship see Tribble (2011).
[4] For an intervention study which looks at the role of drama for children with autism see Trimingham (2013).

acknowledging neurodiversity, 'cognition' in performance theory is assumed to be 'typical', an approach which is therefore limiting. Whilst it is highly likely that neuro-diverse actors make up some proportion of the actors who have worked with these practitioners and theorists, this is not addressed in their published research. Therefore there is a need to apply theories and experiences of atypical cognition specifically to performance practices. For this reason, I will refer to the already established body of work as neuro-typical cognition and performance in order to distinguish it from my research which focuses on atypical cognition and performance (with specific reference to dyslexia).

The second limitation in the current area of dyslexia and performance practice which makes it necessary for research into this area lies in the legislative framework surrounding dyslexia provision. Since 1995, dyslexia has been labelled as a 'disability' and included in the Disability Discrimination Act (1995, 2005). In the Act, and its subsequent revisions, both educational institutions and employers have a duty to make anticipatory 'reasonable adjustments' to reduce disadvantage. The relatively recent legislation means that institutions and employers are still coming to terms with the practicalities of applying the legislation in practice (Griffin and Pollak 2009: 38; Pollak 2009: 1; Matthews 2009: 237). Although the requirement for drama schools and employers to provide 'reasonable adjustments' for dyslexic learners appears clear, the legislation raises questions for practitioners working both in educational institutions and the industry at large including that of the extent to which dyslexia can be considered a 'disability' in the context of actor training institutions and the wider profession. What barriers to learning do dyslexic learners face both in training and in the industry? What do 'reasonable adjustments' mean in the context of a movement class, an audition or a read through on the first day of rehearsals? Moreover, to what extent are these adjustments at odds with the nature of the industry? I argue that legislation can only be understood and implemented effectively in the context of research into the nature of the dyslexic acting experience.

Finally, the relatively high percentage of student actors with dyslexia also makes this research necessary. There is considerable anecdotal evidence to suggest that 'many

actors are dyslexic' (Heaslip, Interview 2011). In the media many actors such as Orlando Bloom have discussed their dyslexia; however without evidence of a formal diagnosis such testimonies are speculative, and for the purposes of this thesis will be treated with caution.[5] Currently it is unclear how many professional actors are dyslexic learners, whether they have had a formal diagnosis or whether they are self-identified. As has been mentioned, the actors' union Equity does not collect this data, and although the training accreditation body Drama UK collects student-actor data for monitoring purposes, it does not publish it because of data protection. [6] Consequently my own data gathering exercise asked drama schools to provide historical figures for the numbers of dyslexic students registered on their 3 year acting course (Drama UK/NCDT accredited courses).[7] However, as I cannot be sure that these student actors are now working in the profession, it is not possible to suggest that these figures indicate trends in the wider industry. The lack of industry-wide statistics is an area of potential further enquiry, looking into why such statistics are not collected, how they would inform future research and how they could be applied.

As a result of the student data gathering exercise, I found that the number of dyslexic learners training to be actors (in these statistics) is high in comparison to those within some other disciplines and professions: on average 14% of students registered on a BA Acting course are dyslexic compared with less than 1% in areas such as languages, law and medicine (James 2003). Some schools reported that as many as 30% of their intake had a dyslexia identification. These statistics raise some interesting questions such as why dyslexic learners choose to enter a profession which is dependent on reading and memorisation. Is there something about performance that has the potential to foster a positive identity for the dyslexic learner? Are dyslexic learners drawn to performance simply due to academic failure in other subjects at school? The high numbers of dyslexic learners in the acting profession might indicate that performance is an ideal

[5] Orlando Bloom discusses how he has 'learnt to live with [dyslexia and], learnt to overcome it' (Access Hollywood 2011)
Lina Das discusses how Keira Knightley 'worked hard to get the better of [dyslexia] and by the time [she] got to secondary school, it was much better' (Das 2013).
[6] Drama UK is an amalgamation of the former National Council for Drama Training and Conference of Drama Schools.
[7] See appendix 1a and 1b for full tables.

medium for such people; nevertheless, this does not necessarily mean that barriers to learning and achievement do not exist within training and the industry.

Research context

My own interdisciplinary research is informed by previous research and scholarship within a diverse range of disciplines and paradigms. The thesis is located within four key areas of previous research enquiry: the impact of dyslexia in the context of performance practice; actor training practices; neuro-cognitive accounts of dyslexia and theories of learning style. Grounding my own research in such a context, helped me to generate my research questions, informed my choice of methodology and data analysis and enabled me to understand the participants' lived experience.

Dyslexia and Performance Practice

The potential relationship between dyslexia and performance has been explored by a small number of policy makers, practitioners and researchers. In this thesis I refer specifically to the published work of Barden (2009) which highlights the role of performance in constructing positive dyslexic identities, Whitfield (2009) who explores the efficacy of actor training methods in the context of dyslexic university students, and Eckard and Myers, who detail the rehearsal methods of dyslexic actors working at the Improbable Theatre Company (2009).[8]

In his education study of a dyslexic A Level student, Barden (2009) finds that early childhood experiences of performance enabled 'Heidi' to transform both her negative identity and technical reading skills. The case study illustrates that the world of books can be made accessible through the act of performance. The implication is that performance is in itself an ideal medium to access the otherwise unobtainable world of words and letters. Barden's work informs my research on three levels: firstly it suggests that an individual's self-concept affects their performative outcomes

[8] Other references to dyslexia and performance include GCSE curriculum guides, newspapers and sight reading manuals. For organisations with published guides/reports see: Conservatoire for Dance and Drama (2011); Eadon (2005); Thomson (Dyslexia Scotland 2007); Leveroy (2012). For professional sight-reading/audition guides see: Spivak (2008); Finburgh (1992); Dunmore (2001); Annett (2004) Andrews (2008). Other studies: Sutterfield (2007); Leveroy (2009); Eckard and Myers (2009).

(whether this is in an exam situation or acting in a play). Consequently, in my methodology, I have been sensitive to issues of self-esteem by embedding positive constructive feedback into my workshop settings. Secondly, it implies that dyslexic learners are drawn from an early age to performance practices as a way into the world of words and books: consequently questions of motivation will be built into my interview process. Lastly, another key implication is that reading fluency and identity may be improved through embodied and multi-sensory practice, a hypothesis which I explore through the application of different acting and pedagogical methods ranging from analytical, physical and improvisational.

However, Barden's study should be treated with caution due to three potential problems within the methodology. Firstly, the use of only one case study makes any findings limited to one individual's lived experience and cannot be taken as representational of the wider dyslexic population (if one does indeed exist). Secondly, Barden's role in the collection of data should be questioned as he was Heidi's support tutor prior to the study and therefore it is likely that some of his findings are unintentionally blurred by his own interpretations of Heidi's progress and his part in the process (Avison and Wood-Harper, 1991). As a result of these methodological issues, I have intentionally drawn my research from a larger number of participants (29) with whom I had no prior relationship at the beginning of this study.[9] Lastly, it is important to remember that Barden was conducting his research from his perspective as a specific learning difficulties (SpLD) practitioner with no background in performance either as a practitioner or theorist. Whilst I cannot claim to have Barden's expertise in regard to SpLD support, my experience as an actor may enable me to more precisely pinpoint the correlation between dyslexia and performance.

Barden's study provides a useful insight into the potential relationship between identity and performance whilst highlighting a number of methodological considerations. In contrast, the work of Whitfield (2009) addresses the relationship between deficit theories of dyslexia and actor training methods. Whitfield (2009) uses three dyslexic students as case studies from her practice-based Shakespeare module at

[9] For a detailed breakdown of participants see appendix 2a and 2b.

Bournemouth University. She uses the methodology of action research,[10] applying specific Western-based actor training methods in her group pedagogy and evaluates the efficacy of the methods in consultation with several experts in the fields of neurology, linguistics and cognitive psychology.[11] Whitfield's work is useful to this research for three major reasons. Firstly, it reveals a variety of dyslexic behavioural characteristics, which include a lack of reading fluency (particularly for sight reading), disconnection to Shakespeare's verse, visual stress, remembering what has just been read, misreading of familiar words and poor pronunciation, all of which indicate the multi-faceted and highly individualistic nature of dyslexia. Secondly, it attempts to apply and evaluate actor training techniques with the hope of facilitating dyslexic learners in a training environment. Thirdly, one of the case studies reveals that the learner has developed instinctive strategies for text which incorporate visual and multi-sensory approaches: a finding which I incorporate and explore in both my interview questions and practice.

Despite these strengths, limitations of Whitfield's research remain, particularly in relation to methodology and theoretical orientation. Firstly, the number of cases are small, and so the findings cannot be taken as representative. Secondly, Whitfield's position as lecturer-researcher in the meaning-making process should also be questioned, particularly as there is no reference to the application of reflective practice or acknowledgement of potential bias (Avison and Wood-Harper, 1991). Thirdly, the students' patterns of behavioural strengths and challenges during the module may have been inadvertently affected by the assessment process. Fourthly, Whitfield's sample is drawn from drama students on a university drama degree and not from professional actors, which means that their level of training and/or professional experience can be assumed to be minimal. Thus the findings could be

[10] For a full description of action research see Lewin (1948) and Trimingham (2002).

[11] She applies and evaluates a number of Western-based actor training methods and pedagogical tools including side coaching, Lorna Marshall's Ghost Exercise (Marshall 2001), Cecily Berry's Deconstruction Exercise (Berry 1993, 2001) and Stanislavski's method of physical actions (Merlin 2007). Side coaching is a pedagogic strategy frequently used in 1:1 actor coaching where the coach feeds thoughts/images to the actor while they are performing. Lorna Marshall's Ghost Exercise makes one actor read the lines into the other actor's ear, so that the recipient can then process the line, before saying it out loud with their own thoughts or connections. Cecily Berry's deconstruction technique involves the whole group reading a piece of Shakespearean text in a circle, each student reading from punctuation to punctuation point before the next student continues.

viewed in the light of the students' lack of training/experience and might be one reason why specific methods did not work. In contrast my research 'makes use of the expertise of professional actors...[because it is stronger than] using only novices drawn from the university student population easily available to experimenters' (Tribble 2011: 9). Like Tribble, I argue that research which is grounded in the experience of professional actors is the most effective and relevant when attempting to apply research findings to the policies and practices of the wider industry.

Another methodological issue is Whitfield's failure to disclose her theoretical position in her study. For example, Whitfield's decision not to give a student (who struggles with sight reading) the text before class in order to replicate the 'professional expectations of an actor' (2009: 256) contradicts both disability legislation and social disability theory; giving an actor the text before a class/audition is a basic example of a 'reasonable adjustment'. By not challenging these 'professional expectations', the research perpetuates the use of sight-reading as an audition model without questioning the extent to which the practice of sight reading (with minimal preparation time and the emphasis on reading fluency) is at odds with characteristics associated with dyslexia. Consequently, there is no examination of how the socially constructed practices (like sight reading) are a barrier to learning and achievement or how they can be adapted. As a result, the model of support being advocated, albeit inadvertently, is a medical one, with the responsibility placed squarely in the lap of the individual actor. This model is also viewed in the medical language of 'condition' and 'limitations' which implies a medical model approach to disability as located 'within' the individual themselves, rather than in society.

Whitfield's use of the medical model of dyslexia is also seen in her use of biased expert opinion. For instance, Rod Nicolson's advice to Whitfield is limiting as it embodies his own automaticity deficit theory which states that dyslexic people have difficulty in making new skills automatic (1990, 1992).[12] Nicolson argues that this hypothesis

[12] Nicolson, one of the founders of the automaticity deficit theory, maintains that due to problems with the cerebellum, dyslexic children have trouble making new skills automatic (Fawcett and Nicolson 1990, 1992, 2001, 2008).

explains the student's difficulty with processing sounds. However, this theory has been largely contested (Ramus et al. 2003).[13] Furthermore the insight of neurologist Galaburda (1992) is questionable as he uses his now dated autopsy research to justify his view that 'anatomical evidence suggests there are differences in the symmetry of brains of dyslexics' (in Whitfield 2009: 259). However, these findings have largely been disproved through MRI neuroimaging (Brunswick 1999 et al; Leonard et al. 2001)[14]. Despite this, Whitfield uses Galaburda's findings to justify the inclusion of the anecdotal hemispheric specialism theory (as proposed by West 1997) in her explanation of student's progress. The hemispheric specialism theory is drawn upon and critiqued in detail on page X.

Whilst this thesis acknowledges the contributions of individual dyslexia theorists such as Fawcett and Nicolson (1992) and Galaburda (1992), I do not draw on any one singular paradigm; rather I refer to Frith's causal modelling framework (1999) in which she argues that attempting to define dyslexia at any *one single* level of explanation, be it biological, cognitive or behavioural, leads to paradoxes. Like Frith, I believe there is a need for a multi-level approach to defining dyslexia: it is necessary to link together the biological, cognitive and behavioural aspects and also to consider the impact of environmental factors which can alter the characteristics. The experience of 'dyslexia' is made up of a combination of neuro-cognitive processes, behavioural responses and environmental interactions. The definition of dyslexia I apply to my research contains all four levels of descriptive analysis, biological, cognitive, behavioural and environmental,(see page 56-57 for a critical analysis of the definition). This multi-level approach to defining dyslexia is supported by the theory of distributed cognition (Kirsh 2006; Grasseni 2004; Hutchins 1995; Lave 1988) as I will later demonstrate in the section on theoretical rationale. For the purposes of this thesis, therefore, 'dyslexia' is conceptualised as a dynamic pattern of cognitive processes distributed along a continuum, created out of both biological reality and the body's experience of being in

[13] Nicolson also ignores other theories such as the phonological theory (Snowling 1986, 2000) among others. For a wider context of the various dyslexia causal theories see: Snowling (1986, 2000) Fawcett and Nicolson (1992, 2004); Stein (2001); Habib (2000).

[14] Other control studies which contradict Galaburda's findings include: Best & Demb, 1999; Eckert et al., 2003; Leonard et al., 2001; Leonard et al., 2002; Leonard et al., 1993; Rumsey et al., 1997; Schultz et al., 1994.

a literacy-dominated world, dynamically interacting with intervention/support models in the environment. This model avoids the medical view of dyslexia as a cognitive/neurological 'dysfunction' which 'pathologizes people' (Pollak 2009: 6) which would disconnect the research from the lived experiences of the individual actors. Furthermore grounding this research in social disability theory and phenomenology places the lived experiences of the participants at the heart of the study, over and above any one 'expert' voice.

Dyslexia in the context of acting practice is further considered by Eckard and Myers in their analysis of the Improbable Theatre Company (2009). [15] The actors in the company had a variety of disabilities, ranging from physical to cognitive ones, but members found that cognitive difficulties such as dyslexia and short term memory problems were more difficult to work with than physical disabilities because of the lack of predictability that memory problems can bring (2009: 62). This finding points to the potential effects of poor working memory on the actor's rehearsal process and is further discussed in chapter four.

Eckard and Myers also highlight a number of strategies developed by the dyslexic actors themselves in order to improve comprehension and memory. Although the actors struggled with remembering text and movement, over time they devised their own process: one dyslexic actor used 'memory tricks – visualisation, hooks, grouping' to remember lines and blocking (2009: 67). Another company member, who had slow processing speed, found that the repetition of rehearsal was very helpful for understanding the narrative sequence of the text. The cast also put in extra hours and come in early to run lines and go over blocking. In order to improve comprehension the dyslexic actors initially studied the context and meaning of the text, in a similar way to the process used by Susan Hampshire (as described on page 1). Some learners drew picture maps of their roles and other learners recorded their lines, in order to store the textual information in long-term memory. These processes are indicative of

[15] The company is concerned with the lived experiences of disabled artists and reject the medical model of disability, in favour of the social model with emphasis on barriers as the problem rather than the disability itself.

the potential link between multi-sensory learning and memory retention and are further detailed in chapter 4 of this thesis. Such processes also highlight several possible dyslexia-friendly approaches to learning and text: chunking, visualisation, drawing and repetition. Evidence of inclusive practice was also evident in the company's ethos which involved reducing extra stimuli such as sound in order to aid concentration and focus. This final point thus led me to build in questions concerning barriers to learning in my own interview questions with my research participants (dyslexic actors, dyslexia practitioners and actor trainers: see appendix 4, 7, 10).

The previous research into dyslexia and acting practice highlights a number of theories and assumptions concerning actor training, dyslexia and learning style which the remaining research context will now go onto address.

Actor Training Practices

During my Masters research I considered a range of training practices as potential areas for the development of dyslexic learners including the approaches of: Stanislavsky, Chekhov, Meisner, Lecoq, Strasberg and Adler (Leveroy 2009). Nick Moseley, head of acting at the Royal Central School of Speech and Drama (RCSSD), suggested that Sanford Meisner's method was 'ideally suited to dyslexic actors as it doesn't require them to process information through an intellectual filter of the written word' (Moseley, Interview 2009). So, in the Masters practical research I used the Meisner repetition exercise with a dyslexic actor as I wanted to place the actor's focus on physical behaviour and impulse rather than on decoding verbal language (Meisner 1987). Using a line from the scene as the 'text', the 'text' therefore became secondary to the emotions generated out of it. The participants of my Masters-level focus group all talked about their perceived ability to read 'subtleties in body language' and visual detail in the environment due to a reliance on non-verbal communication. This led me to think that Sanford Meisner's approach might engage the dyslexic actor's strengths: that of understanding and responding to the acting partner's behaviour rather than the spoken word. The techniques of Jaques Lecoq were also considered in relation to the development of the dyslexic identity. My MA research found that the actors involved in my research had developed a clown persona, initially as a defence

mechanism. I proposed that some dyslexic learners may be attracted to the clowning and physical work of Lecoq, as in childhood some may develop a clown persona, initially as a defence mechanism in the classroom. Whilst these speculations continue to be of interest to me, for the purposes of my PhD research, I chose to focus on two particular methodologies, those of Konstantin Stanislavsky and Michael Chekhov. The rationale for this choice is outlined below.

The PhD research draws on my own training in the Western actor training practices of Konstantin Stanislavsky and Michael Chekhov. In the PhD workshops that I undertook with dyslexic actors at the Actors Centre, I used Stanislavsky's 'Active Analysis' technique and Chekhov's 'Psychological Gesture and Imaginary Body' with the actors in order to explore the actors' experience with text and non-verbal methods. The discoveries and knowledge gained from these sessions (and my on-going reading into dyslexia and learning style) fed into the later sessions when I started to apply cognitive strategies (Mortimore 2008a) (see page 58 for detailed account of this iterative process). The rationale for these choices is outlined in the following section.

I chose to use the training methodologies of Stanislavsky and Chekhov with the actors in my research, because as a researcher-practitioner they were 'familiar to [myself] as [a] practitioner' (Gray 1998: 3). As Gray suggests, using familiar methods is one element of practice as a research method. During my training at Drama Studio London, I was introduced to Stanislavsky's methods of breaking down text: namely, identifying and applying units, objectives, action and given circumstances in the text (as seen below in figure 1).[16] However, it was not until my Masters course that I became more consciously aware of other methods. I participated in workshops on Stanislavsky's method of Active Analysis, run by Bella Merlin and the Michael Chekhov technique, facilitated by Amanda Brennan. As a result of these initial explorations, I began attending weekly evening classes at the Michael Chekhov studio in London, under Graham Dixon.

[16] Both Carnicke (2010) and Merlin (2009) discuss the differing terms used for the word 'beat'. Carnicke points out that "action begins with breaking down the play into segments, what Stanislavski calls 'bits' and what have come to be known as 'beats'" (2010: 15). Merlin points out that Elizabeth Hapgood's translations used the term 'unit' rather than 'bit' (2009: 71).

At the same time, I discovered that many of my colleagues on the MA course were newly assessed as dyslexic (some well into their 40s) and I began to have conversations with them about the assessment process and their understanding of dyslexia. These experiences sparked my own reflections, and I began to consider the extent to which certain training practices may be more or less accessible to some dyslexic learners. This reflection informed my last research question: whether some training and rehearsal practices are more inclusive for dyslexic learners than others. As such, these methodologies were chosen and used both as a theoretical lens and a practical research method. In the practical element of the research, I used these methodologies with the research participants at the Actors Centre, London in order to facilitate discussion about their process and experiences with text (see pages 25-27 and 31-34 for a detailed account of the sessions and Appendix 11).

As a key characteristic of dyslexia is difficulty processing written and verbal language (Snowling 2000), the use of only language-based research tools (such as interviews) seemed limiting when attempting to explore the dyslexic acting experience. I hoped that by using practical methods, the actors would have the opportunity to produce a different kind of qualitative 'data' that was not reliant solely on verbal processing, using silence, subtext, sound, gesture, key words, movement, the space and emotions. I hoped that the phenomenological nature of practice-based research would allow the actors to explore their experiences of dyslexia beyond the medical labels that had already been ascribed to them by the 'diagnosis' process. I used practical research methods in order to explore the research question relating to whether some training and rehearsal practices are more accessible than others for dyslexic learners.

The methods were also considered in relation to the text-based demands that the industry places upon actors and the characteristic difficulties that dyslexic learners experience with textual sources. My own experience of professional rehearsal practice is articulated by Bella Merlin who points out that 'most of us as actors in the West are going to spend our time performing scripts (for film or stage) where the genre is essentially 'psychological realism' (2009: 17) and that it is

> perfectly usual in most rehearsal situations for the actors to start with their scripts in their hands. This is certainly the case in the first few days while the play is being 'blocked', and probably until mid-way through the second of three weeks; rehearsal period (Merlin 2002: 232-233).[17]

The choice of Stanislavsky and Chekhov is underpinned by the text-based demands that the industry places on actors and the actors' desire to embody scripted material. If commercial Western acting practice is premised on psychological realism and script-based rehearsals and audition methods, then it seemed appropriate to consider the methods of Stanislavsky, who could be considered 'the father of contemporary acting practice, particularly when it comes to the kind of realism which dominates Western theatre and screen today' (Merlin 2009: 3). The actor-participants in my research had all either trained in Western drama schools and/or worked in commercial acting contexts: their training and experience was predicated on psychological realism and script-based theatre. [18] The emphasis on text-based methods and psychological realism was evident in my Masters research and the early stages of the PhD field work (see page 50-51 for account of the nominal focus group method). The majority of focus-group participants had expressed concern with creating character from text-based rehearsal and audition methods, such as sight-reading, reading and analysing text (see chapter 2 for detailed discussion of the actors relationship to text and sight-reading as an audition tool), rather than devising or physical theatre. Therefore I chose to address these concerns and experiences of text-based work rather than devising or physical theatre, as this was a central concern of the participants themselves.

I chose not to use physical theatre methods such as those of Lecoq, Gaulier or Suzuki because they were beyond my direct embodied experience, and I decided it was important to work with methods that I, as the researcher, was familiar with. I also wanted to work with methods that had a direct application to text as I was interested

[17] Merlin suggests that psychological realism can be characterised as 'what the viewer sees is pretty close to life as we know it' (2009: 17).
[18] All participants had either attended a UK drama school, a Stanislavski off-shoot studio in the USA or worked in the industry. See appendix 2B.

in exploring how dyslexic learners experience written text, rather than physical theatre or devising techniques as mentioned above. The dyslexic actor's experience of the devising process is an area of further enquiry, but is beyond the remit of this PhD thesis. As I am concerned with the area of the acting profession which is dealing with text, it seemed appropriate to consider the actors' relationship to text in light of the methods of Stanislavsky and Chekhov, and whether these methods, when applied to text where an enabling or disabling experience for the actors in my research. These methods also served as a facilitating tool: that is, they were used as a means for the actors to explore their experience with text.

Stanislavsky's training practice

For the purpose of the research context, I will provide an overview of the Stanislavsky system, before focusing on the particular methods under consideration in this research. The following diagram, devised by Stanislavsky scholar Jean Benedetti, is a diagrammatic representation of Stanislavsky's 'system' (Benedetti 2008).

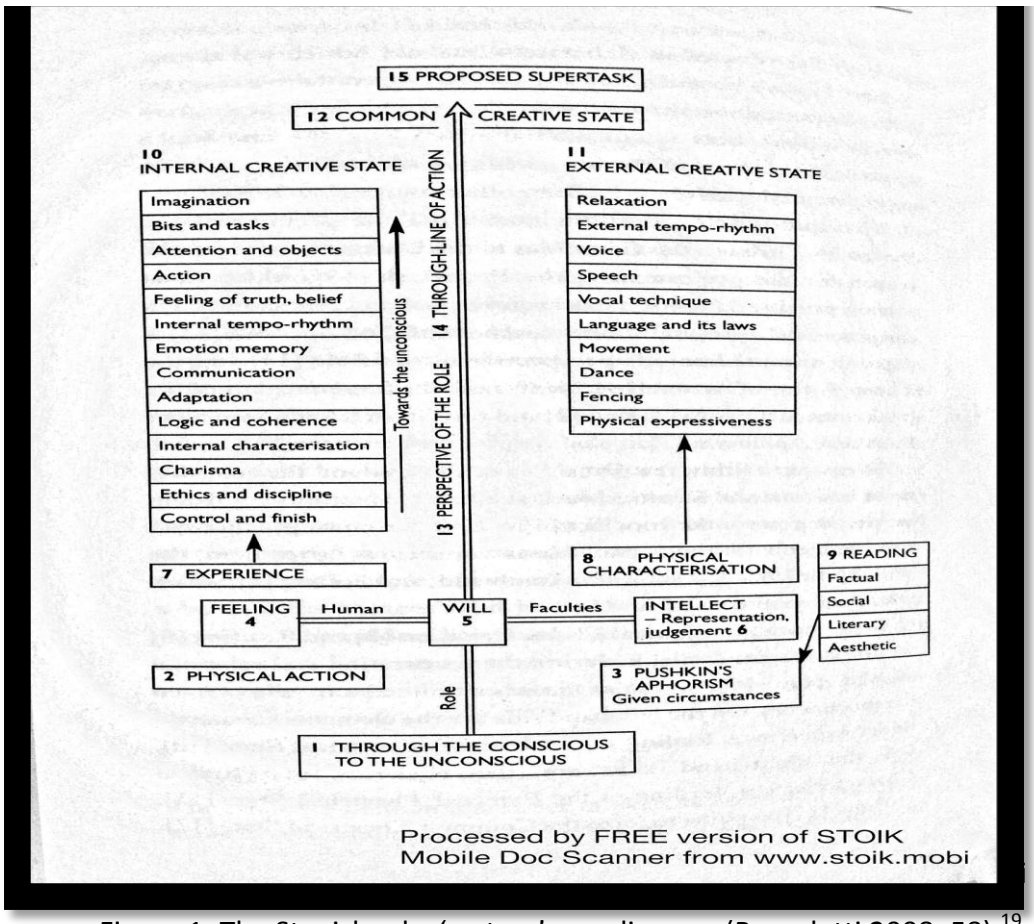

Figure 1: The Stanislavsky 'system' as a diagram (Benedetti 2008: 58).[19]

Stanislavsky's methods emerged from a lifetime of practical exploration and he became 'the first practitioner in the 20th century to articulate systematic Actor Training' and began to develop a 'grammar of acting' (Carnicke 2010: 4). However, when using terms such as 'system' or 'method', it is important to bear in mind that Stanislavsky simultaneously used and resisted the terms, as his principles emerged from a process of practical experimentation (Merlin 2009: 4). Stanislavsky himself 'never deemed his system or his books complete; they remain dynamic, experimental explorations of the unique communicative power of theatre (Carnicke 2010: 6). As such, the diagram is purely representational of the many assumptions and philosophies underpinning his principles. However, for the purpose of my research context, it is important to conceptualise such a 'system' in its entirety and consider the specific elements that my research draws upon and critiques.

[19] Benedetti's diagram comes from Volume 4 of the soviet edition of the *Collected Works* (Benedetti 2008: 57). Other visual representations of Stanislavski's 'system' can be found in An Actor's Work on Himself (Stanislavski 1989).

Benedetti provides an explanation of the various elements of the 'system' alongside the representational diagram (2008: 57). Running through the centre of the diagram, the spine represents the actors' preparation process 'Through the Conscious to the Unconscious', and arriving at the reason for the performance, the 'Supertask', which is determined by the actor's Perspective of the Role and the Through-Line of Action (see chapter 3 for a detailed discussion of the latter). Given that one proposed characteristic of dyslexia is non-linear thinking, my research critiques the appropriateness of this linear approach for dyslexic learners (the relationship between the through-line of action and non-linear thought is discussed in chapter three).

In addition, as Physical Action and Given Circumstances are cited as the fundamentals of the performance in the 'system', it was important to examine what role, if any, Physical Action and Given Circumstances had in my actors' preparation process: if they were enabling or disabling experiences. Within such a 'system', Benedetti (2008) suggests that the actor can utilise a number of strategies during the preparation process: 'Reading', 'Experience' and 'Physical Characterisation'. According to the diagram, the Given Circumstances are gleaned from the Reading strategy. However, this reading strategy is predicated on assumptions concerning literacy ability and could be considered to be unwittingly disabling to certain learners. It is important to question how the reading element of the system impacts on someone who may have difficulty with reading and gleaning information from text-based secondary sources. Such questions are addressed in chapter 4.

Another core assumption of the 'system' is the principle of psychophysical integration. This is represented in the diagram by the two columns on the left and right hand sides which depict the Internal Creative State and the External Creative State of the actor, together making up the Common Creative State. The two columns represent

> Two aspects to the technique of the 'system'; One inner, where the mind and imagination create the thought and feeling of the character, the other outer, where the body expresses and communicates what is going on inside (Benedetti 1998: 13).

The Internal Theatrical State or 'psycho-technique' (Stanislavsky 1979: 271), are techniques which focus on the act of 'experiencing' or 'feeling', rather than a conscious set of choices and their proposal is to enable the actor to 'live through or to live the part' through experiencing it (Gillet 2012: 1).[20] My research touches on a number of these techniques, including Imagination, Bits and tasks, Action, Emotion memory and Logic and Coherence and the role they play in the actors' processing, comprehension and memorisation of text (discussed in chapter 3). Ideas such as 'Bits' and 'Actions' were later adopted into the work of contemporary practitioners such as David Mamet and Max Stafford-Clark, and will be discussed in chapter three. The External Creative State, refers to the elements of Physical Characterisation, which include technical training in areas including voice production, movement and dance, enabling the actor to physically express what is going on inside him or her. Relevant aspects to my research include the elements of Language and its Laws and Movement.

Both Internal and External Creative States combine to form the Common Creative State. Such a 'system' is premised on Stanislavsky's assumption that 'mind, body and spirit represent a psychophysical continuum' (Carnicke 2010: 7), believing that 'In every physical action there is something psychological, and in the psychological, something physical' (Stanislavski 1989: 258). The two areas are therefore interdependent on each other and represent parts of an integrated whole. [21]
Recent translations and revisions of Stanislavsky's original writings by Carnicke (2009, 2010) Benedetti (2008) and Merlin (2002, 2009) have emphasised the psycho-physical nature of Stanislavsky's holistic approach. Chapter three explores the use of Active Analysis as a psycho-physical method, and the actors' experience of this process. The

[20] Gillet suggests that 'This experiencing means to go through an *organic* process, using one's own natural mental, physical, emotional being, as opposed to constructing an external form through a cerebral set of choices. We undergo imaginative and active explorations using *ourselves* to transform into something else during the act of performance' (2012: 1).
[21] However, as Benedetti details, Stanislavsky's writing was not published as an integrated whole, but divided among seemingly separate books (2008). The relationship between the internal and the external states became unclear and fractured, leading to many only reading *An Actor's Work on Himself Part One* (published in English under the title *An Actor Prepares*), which focused on the inner process (Benedetti 2008: 56).

psycho-physical nature of Active Analysis underpins my rationale for its use with the actors in the research for

> Whilst Stanisalvski had always expected actors to use all their faculties equally (mental, intellectual, emotional, spiritual and physical) the alternation of reading and improvising in Active Analysis set the actor up for precisely this kind of holistic work (Carnicke 2010: 19).

During the process of Active Analysis:

> all available avenues of investigation – mental, physical, emotional and experiential - were harnessed together holistically… the 'thought-centre', the 'emotion-centre', and the 'action-centre' – were all drafted into the process simultaneously (Merlin 2009: 197).

My research is concerned with whether such an integrative approach to body-text may positively impact on the dyslexic actor's experience with text, and if it is an enabling or disabling experience (see page X for a detailed account of how the method was adapted in the practical-element of the research process). In Active Analysis, actors explore their characters and the ways in which they relate to other characters through improvisations of key scenes of the play (Carnicke 2010: 18). The process is summarised as follows by Merlin:

1. You read the scene;
2. You discuss the scene;
3. You improvise the scene without further reference to the script;[22]
4. You discuss the improvisation, before returning to the script;
5. You compare whatever happened in your improvisation with the words and incidents of the actual text.
6. You repeat the process (2009: 197).

[22] The first improvisation is a silent etude or improvisation, the second uses key words and sounds, the final stage uses full sentences, until the words of the improvisation are similar to the playwright's words (Merlin 2009).

The point of improvising a scene is that 'the organic link between your scenic movement and the cause or reason that gave birth to that movement can be forged with very little effort' (Merlin 2009: 198). By adopting the method of Active Analysis as a research tool, I hoped it would positively facilitate the actors' relationship with text, whilst also enabling them to articulate their process. Through the method, actors are encouraged to use all their available resources, and explore the text holistically, utilising their thoughts, emotional response and physical action. As Stanislavsky suggests, 'The best way to analyse the play is to take action in the given circumstances' (1991: 332-333).

There is considerable evidence to suggest that dyslexic learners respond well to embodied, multi-sensory practice and indeed a number of mainstream and alternative intervention models believe that learning is best accomplished when it is embodied. Such programmes include the Orton-Gillingham method (Orton 1966); the Developmental Exercise Programme (Goddard-Blythe 1996); 'Educational Kinesiology', (Dennison and Dennison 2001) and The Dore Programme or DDAT (Dore 2004).[23]

I wanted the actors in my research to explore the play's anatomy, not in detailed discussion and extensive textual analysis, but on their feet. Although, during the process of Active Analysis, the reading stage still involves a careful reading of scene in order to identify the facts, main event, and impelling and resisting actions of the scene (Carnicke 2010: 19), the main difference:

> between [Active Analysis] and Stanislavsky's previous rehearsal practices is that the period of discussion and mental reconnaissance [or round-the table analysis] before each improvisation may only last ten minutes – maybe half an hour – but certainly not three weeks (Merlin 2009: 201).

Active Analysis is in stark contrast to the extensive cerebral process of round-the-table analysis which is characterised by an extensive process of text analysis, sometimes

[23] Cognitive performance might be influenced by bilateral coordinative exercise (Budde et al. 2008).

lasting the three weeks suggested above. As a result of this process, actors can be left with a 'stuffed head and an empty heart' (Stanislavski 1991: 325–26), and this feeling was also identified by the actors in the early stages of my research. The resulting sensory overload may have disabling consequences for some dyslexic learners who characteristically have a reduced processing speed and working memory capacity (see page 53-54 for cognitive profile example). I wanted to avoid this disabling experience, whilst acknowledging, as Stanislavsky did, that 'some detective work on the script was absolutely vital, the sooner the actors could start embodying the play physically, the richer the rewards' (Merlin 2009: 179).

I specifically chose to use Stanislavsky's method of Active Analysis rather than his other psychophysical rehearsal method called the Method of Physical Actions (Benedetti 1998). Merlin points out that the two methods are very similar in that:

> rather than using sedentary textual analysis or imaginative visualisations, the actor now accesses a character through experience. In other words, by getting by and doing it through a process of improvisation (Merlin 2002: 4).

However, Merlin points out a 'crucial difference' between the two approaches (2002: 4-5), which form the basis of my rationale for using Active Analysis rather than the Method of Physical Action.[24] Merlin suggests that 'The Method of Physical Action is concerned with finding a *logical line or 'score' of individual actions* through a scene, while Active Analysis is an *holistic system integrating body and mind'* (Merlin 2002: 4-5, my italics). Implicit in the Method of Physical Action is the need for the actor to identify a linear 'score' running though the scene. I wanted to reduce the emphasis on identifying a score as, in my experience I thought it would be disabling given the difficulties dyslexic learners can have with linear processing.

In contrast, although Active Analysis involves linguistic analysis and the identification of action and counter action:

[24] Merlin acknowledges the disagreement between scholars and practitioners and the differences between Active Analysis and the Method of Physical Action.

> the reason why Active Analysis is different from the Method of Physical Action is that it didn't put all its eggs in one ACTION basket: as well as their bodies the actors could follow their EMOTIONS or their fantasies (Merlin 2009: 198).

By using Active Analysis, rather than the Method of Physical Action, I hoped the actors in my study would engage in a more holistic experience that involved more than just identifying action and sequences in the 'action-driven and scientifically logical Method of Physical Actions' (Merlin 2009: 196). Merlin suggests that in contrast to the Method of Physical Action, Active Analysis allows for 'an exciting edge of play and anarchy and a 'Give-it-a-go bravura' that is 'less aesthetically 'anal' than the Method of Physical Actions' (2009: 198). Merlin also suggests that with Active Analysis,

> there's a certain anarchy involved, which renders it far more applicable to the host of performance styles present in the 21st Century that the more action-driven and scientifically logical Method of Physical Actions' (2009: 196).

To me, the process of Active Analysis contains an iterative cycle of enquiry which entails questioning, doing and reflecting, before returning to the initial point of entry (i.e. the questions) and repeating the process (the iterative cycle of enquiry is further discussed by Trimingham 2002). I wanted the actors in my practical research to engage with an iterative process, using all their resources, rather than just focusing narrowly on 'action' and identifying a through-line of action. Like Stanislavksi, I wanted the actors to engage 'all their faculties equally (mental, intellectual, emotional, spiritual and physical)' and allow the 'alternation of reading and improvising in Active Analysis [to] set the actor up for precisely this kind of holistic work' (Carnicke 2010: 19). I hoped that this iterative cycle might enable the actors in my research to create an intentional relationship with the text that comes from a process of questioning and exploring. What follows is an account of how the principles of Active Analysis were applied in practice (see Appendix 11 for coaching plan).

Before first the session, participants were asked to bring along a monologue they wanted to work on. I was keen for the actors to bring their own texts, as I did not want to prescribe texts onto them and increase possible anxiety over reading new material. The actors brought along a variety of texts, both modern and classical. I used an adapted version of Active Analysis (Knebel 2003) as I wanted the actors to explore the text using primarily non-verbal methods and layered improvisation.

To begin the exploratory process, I asked each actor to read the text with the instruction of 'being heard', that is, not to 'perform' it or to understand it necessarily, but just to get used to hearing the words out loud and to get a feeling of it. We then discussed what was going on in the scene, what the character wanted, what they were doing to get what they wanted, what might be in their way and the main event. I then asked the actor to improvise the speech, but without words, using every other resource at his/her disposal: body language, eye contact and non-verbal communication. After this improvisation I asked the actor to reflect back on the experience: what s/he learnt about the character, including any discoveries, thoughts, feelings, actions or memories that arose as a result of the improvisation.

Without the words, Rosa (one of my actor participants) discovered that the character was 'actually enjoying herself much more I thought when I initially read it because the words slightly interfere with that because it's so bitchy… there's an additional layer that I hadn't thought about' (Rosa, Interview 2012). We then discussed what the character was *doing* in the scene. Rosa described how 'She's putting him down. She's putting all of his emotions, all of what he feels right down' (Rosa, Interview 2011). I then asked the actor to return to the text and read the piece again, and then compare what happened in the improvisation with the words and incidents of the actual text.

In the next stage, I asked the actor to read the text again before discussing what the character wanted, what was stopping them from getting what they wanted and what they were doing as well as identifying the main event in the extract. After this brief discussion, the actor did another improvisation, building on the previous silent improvisation, but this time using sounds and key words, either from the text itself or

their own words that represented the essence of how the character was feeling. I told them not to necessarily follow the exact narrative of the speech: they did not need to go from the top to the bottom in a linear manner. After this improvisation, the actor fed back on what was now happening with the character, if they noticed any growth or change, and what they had got from the improvisation. Rosa reflected back on how her character was 'becoming, very threatening. She's becoming more manipulative, within the three things that we've done, she's becoming more manipulative, more threatening and she means business' (Rosa, Interview 2011). At this stage, I again asked the actor to go back and perform from the script, and then reflect on the similarities and differences between the improvisations and the text.

Repeating the above process, the actor returned to the text and read it out loud, taking into account any discoveries from the previous two improvisations. After the reading, the actor discussed what was now going on in the scene and reflected back on what it was like to read the text, having incorporated into the reading information from the previous two non-verbal improvisations. Rosa reflected on the fact that she felt 'much more physically connected to the text' and that her 'gestures felt much more connected to what I was actually saying, because they had previously been built up' (Rosa, Interview 2011). The actor was then asked to improvise the speech again, this time using full sentences and his or her own words. S/he then reflected back on what had been discovered in the improvisation. Rosa felt that in this improvisation, she was 'getting to the essence of what the character was actually doing: belittling her husband' (Rosa 2011). Working this way, Rosa discovered,

> all that subtext going on underneath, which I hadn't picked up on from the initial readings. I am normally too concerned about working out what he words mean and how to pronounce them. I also noticed that I was using a kind of gesture that I had discovered in the previous improvisations (Rosa, Interview 2011).

Rosa also felt 'more connected to her [character] in that final piece, because you're using your own words and getting away from the kind of 1759 text, which I am normally so intimidated by' (Rosa, Interview 2011). I suggest that Rosa was perhaps

able to embody the text using her own linguistic framework which included her word choice and phrasing, rather than relying solely on the playwright's words, meanings and rhythms.

The method is a valuable 'way in' to the given circumstances of the text (Merlin 2009) and reduces the actors' need to use purely verbal communication. In Active Analysis, the improvisations are initially through non-verbal improvisations, gradually building to incorporate the verbal. Improvisations were developed starting from eye-contact, silence, sounds, key words and then full sentences. These improvisations are 'drafts for future performances, each draft embodying and actualising the text better than the last' (Carnicke 2000: 28, see also Knebel 1971). I thought that this approach would help learners who had difficulties with word finding and language processing to establish the meanings, feelings and spatial relationships behind the words first before focusing on the meaning of the individual words. I hypothesised that the technique would be appropriate for dyslexic learners in light of the top/down approach to reading theory (Reid 2009a) which suggests that dyslexic learners anticipate the meaning of text from contextual clues and guesswork before checking for syntax and graphical clues. Susan Hampshire explains that as time went on she 'read books which threw light on the subject of the play, its period, or characters' (1981: 60). Similarly, with active analysis, actors are exploring the overall context of the scene, their emotions and relationship to space and body before they focus in on the text at a semantic level and this will be discussed in chapter three.

Michael Chekhov

In addition to Stanislavsky, I also used techniques from Michael Chekhov and considered his use of non-analytical, non-verbal, and visual processes in relation to text. Based on my own experience and that of those I had interviewed in the early stages of the research, I hypothesised that Chekhov's emphasis on the non-analytical, non-verbal and three-dimensional, had similarities with the suggested ways in which dyslexic learners characteristically process information (see chapter four for an account of this). During my own training at the Michael Chekhov Studio in London, I experienced a revelatory sense of creative freedom and lightness: the exercises producing in me 'immediate sensations and visceral imagery' whilst being encouraged to avoid 'the intellectual, conscious process of interpreting a command' (Powers in Chekhov 1991: xxxix). I believe Chekhov's focus on a non-analytical process and non-verbal communication enabled me to access scripted drama without the need to intellectualise my process or think in words. Thus the need to process verbal information was reduced and consequently the load on my working memory. As Chekhov suggests, 'The actor must not rely on the words. He must express those indescribable, unspeakable things that the actor has accumulated in his soul' (Chekhov, 1991: 116). The focus on non-verbal communication is also evident in the way he communicated with actors. As Powers points out (Chekhov 1991: xviii) visceral imagery was the primary tool of communicating with actors in order to 'short-circuit… complicated and secondary mental processes'. Instead of telling the actor 'to relax', Chekhov asked them to do an activity with *a feeling of ease.*

In relation to the intellectualising of text, Chekhov also encouraged actors to 'have to fight it mercilessly… we must become in this first part of the work somehow foolish' (Chekhov 2004). Chekhov's insistence on a non-verbal and non-intellectual process is interesting in the light of Simon Callow's suggestion that Michael Chekhov may have been dyslexic because he was 'always [seeking] the subtext, the emotional life behind the word, rather than engaging with the words themselves, which he was notoriously given to paraphrasing' (Callow in Chekhov 2002: XIX). The question of whether Chekhov was dyslexic is speculative and for the purpose of this thesis is of secondary importance. However, what is of interest is that Callow connects Chekhov's style of

language processing (non-verbal) with characteristics of dyslexia. There is considerable neurological, cognitive and anecdotal evidence which indicates that dyslexic learners have difficulty with verbal processing (Snowling 2000, Brunswick et al. 1999). Therefore, it may be that techniques which focus on the 'life behind the word' and the subtext may be particularly suited to learners with dyslexic characteristics.

As with Stanislavsky's psycho-physical work, Chekhov's methodology is premised on the principle that 'the actor must strive for the attainment of complete harmony between the two, body and psychology' (Ashperger2008: 78). Actors are 'transforming the outer thing into the inner life, and changing the inner life into the outer event'(1992: 81). As with Stanislavsky, implicit in this is the continuum between the inner and outer body and the connection between body and emotion in psycho-physical acting (Chekhov 1992). However, Chekhov, a student of Stanislavsky, rejected his teacher's early focus on personal memory and experience (Powers in Chekhov 1991). Instead, Chekhov developed his own technique which utilised the imagination and fictional imagery as a primary tool to inspire emotions, imagination and to create character. He also developed the idea of a 'divided-conscious' or higher ego, aiming to achieve a conscious distance between the actor and his personal experiences and emotions and more broadly, between the actor him/herself and the character. It has been suggested that Chekhov's focus on the imagination and integration of the whole is routed in his interest in the romantic philosopher Goethe and the teachings of Rudolf Steiner (Pitches 2006).

Chekhov's focus on visual imagery in many of his techniques is interesting in the light of research which indicates that dyslexic learners may be visual and holistic thinkers (West 1997; Brunswick et al. 2011). Indeed a small number of researchers have suggested that dyslexic learners have a superior three dimensional ability (Von Karolyi et al. 2003, Von Karolyi 2001; Winner et al. 2001; Vail 1990).

The Michael Chekhov technique is outlined below in the 'Chart for Inspired Acting' (Figure 2:

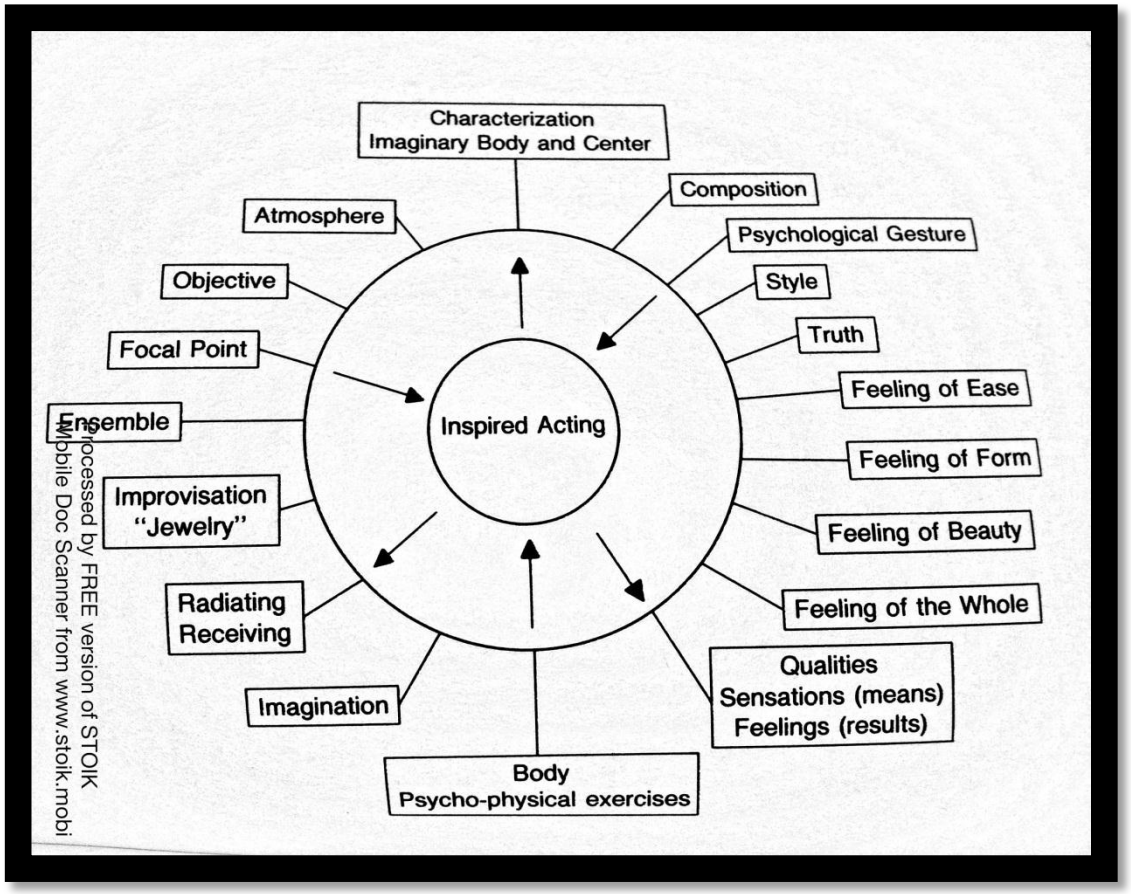

Figure 2: A Summary of the Michael Chekhov Technique: 'Chart for Inspired Acting' (Powers in Chekhov 1991).

The chart gives an over-view of the techniques within Chekhov's method. Each technique mentioned on the chart is 'like light bulbs on the circle's circumference… when Inspiration "strikes", all the light bulbs are instantly turned on, illuminated' thus leading to a great performance (Powers in Chekhov 1991: xxxvii). Chekhov suggested that 'Inspiration' could not be 'commanded', as it was 'capricious', and so there needed to be a technique to master it (ibid). Through conscious exercise, each technique is mastered and summoned up at will, eventually triggering other techniques and creating a chain reaction, leading to 'Inspiration'. Pitches suggests that Chekhov's circular chart is in contrast to the linearity of Stanislavsky's system, which uses a largely linear model of thinking (2006). Chekov's system is 'non-hierarchical':

each element is dependent on another and contributes to the whole (Pitches 2006: 162). The holistic nature of Chekhov's system may be more suited to dyslexic learners than a linear model, as such learners are said to be predominately holistic and non-linear thinkers (Cooper 2009).

Evidently Chekhov's individual techniques form part of a whole due to their inter-connected nature and they are intended to be explored as a method in its entirety. However, I used only the 'Imaginary Body and Psychological Gesture' techniques in my practical research, partly because of the time-constraint of the practice sessions but mainly because of my own personal experience. During my training at the Michael Chekhov Studio, these had been the techniques that, for me, had the clearest application to text and had most resonated with me. I felt it was important to work with methods with which I personally had a connection

The methods were used as a research tool with the actors in order to access text-based material through visual-spatial, non-verbal ways of working. As with the active analysis process, each actor brought in his or her own monologue to explore in the session. I set the 'Imaginary Body' exercise up by guiding the actors through a visualisation process, encouraging them to vividly imagine the body of their monologue character: this was external to the actor's body and in their mind's eye. Gradually the actor's physical body begins to inhabit the imaginary body's characteristic movements. Chekhov's imaginary body exercise uses holistic, three-dimensional visualisation in order to create 'another body – the body of your character – which you have just created in your mind' (Chekhov 2002: 79). The actor then 'play[s] with the imaginary body, changing and perfecting it' (ibid), until s/he embodies the imaginary body in three-dimensional reality by clothing themselves, 'as it were, with this body' and putting 'it on like a garment' (ibid).

Exercise: Imaginary Body

What follows is a breakdown of the visualisation process I used with the actors in my research. Each actor was asked to do the following:

- Close your eyes and take a minute to become aware of the breath in the body.
- Picture in your minds your character, where s/he is, the area s/he's standing: is it outside? Is it inside? Is s/he standing on gravel or on a pavement? Is s/he standing on carpet or on lino or something much harder? Whatever the environment, be very clear about that space, the objects and the colours.
- Picture the character standing out in front of you: s/he's looking you directly in the eyes.
- Look down to the character's feet and notice how the feet are placed on the floor. How is the weight distributed?
- Look up the character's hips: have they got even hips? Are they leaning on one side more than the other?
- Observe the character's shoulders: are they drooping or rising? Are they quite tense?
- Observe the character's arms: are they relaxed and loose or are they tense? Are the arms held at right angles or are they dropped by the side?
- Pay attention to the character's neck: is the neck sticking out in front or is it backwards or is central to the body?
- Take a minute to really observe the character's whole posture: for example are they bent in the middle at the abdomen? Or are they collapsed or quite straight?
- Look up and see the character's face. What part of the face do you see first? What's the most striking thing about the character? What are the hands doing?
- See the character turning their back to you and starting to slowly walk away.
- Observe now how they move: what's the rhythm? Where's the centre of the movement? If the character was an animal, what animal might they be?
- See the character turning around again and looking back at you. They stop moving about a foot in front of you. How does the character look at you? Are they looking at you hard in the eyes or distantly and softly? See the character turn their back again to you.
- Take a step forward, open your eyes and take another step forward into the character.

At this stage, I asked the actor to walk around the space, inhabiting and embodying this imaginary character that they had seen in the mind's eye. I asked them to pay

attention to all the little details that were picked up in their imagination: where the character's weight is centred, how s/he walks across the room, before immediately asking the actors to go into their text and perform their monologue. After they had performed the text, I asked them to reflect back on what had happened in the exercise, what they found out about the character and what affect, if any, the visualisation had on the final reading of the piece (the response to this exercise is discussed in chapter four. Imagination was used as the primary means to access the text and unlock the given circumstances. I hoped that these discoveries would feed into their performance of the text itself and make the text more accessible.

Similarly, Chekhov's psychological gesture also uses imagination as the way into the text. In this technique, the character's objective or desire is found through visual imagery and physical exploration rather than through purely a verbal and intellectual process (as in round-the table analysis). Chekhov suggests that 'the best way to fix, refine, and exercise the Objective is by means of the Psychological Gesture' (1991: 109). He believed that the objective, purely

> captured by the intellect cannot be of use to the actor. All that he undertakes on the stage with such an intellectually understood Objective will become artificial, thought out, poor, and surely misleading (Chekhov 1991: 108).

Rather the objective is found through visual imagery and intuition. The actor makes an initial guess about the character's main desire, and then starts to build the Psychological Gesture (PG)

> step by step starting with your hand and arm only…. Having once started this way, you will no longer find it difficult (in fact it will happen by itself) to extend and adjust your particular gesture to your shoulders, your neck, the position of your head and torso… Working this way, you will soon discover whether your first guess as to the main desire of the character was correct. The PG itself will lead you to this discovery without too much interference on the part of the reasoning mind (2002: 67).

Exercise: Psychological Gesture

I set up the exercise by asking the actor to:

- Close the eyes and take a moment to connect to the breath.
- Keep the eyes closed, keeping in mind the objective of the character.
- Visualise what this objective might be, how it might look, and create any images, forms or pictures of the character and the objective.
- Repeat and continue to go over the image in the mind once a picture of the character's objective becomes settled.
- Start to physicalize this image… this objective… through the body… to play around with it and see if there are other gestures that might embody the character. To play with the image until one is found that feels really right.
- Repeat the gesture, becoming aware of where the gesture begins and ends and where the middle of it is. To become aware of the form and structure of the gesture.
- Open the eyes when ready, still repeating this gesture.
- Begin to act out the text, still overtly physicalizing the gesture.
- Try to act the speech, with the gesture in the back of the mind, intoning the gesture, so that it is not so visible to the audience.

At the end of the exercise, each actor reflected back on the experience examining what happened when the eyes were closed, how clear the images were and whether exploring the objective physically and visually differed from identifying the objective through intellectual discussion (the response to this exercise is discussed in chapter four). The exercise was a useful tool in facilitating discussions with the actors on their use of the 'objective' as a technique and the diverse ways in which it can be accessed: visually, physically and intellectually. I hoped the technique would be a way of connecting to the dyslexic imagination, thus giving the actor an imaginative space with which to frame the spoken word and removing the need to cognitively process verbal information in the moment.

Dyslexia and Hemispheric Processing theory

The thesis also draws upon neuro-cognitive paradigms of dyslexia in order to inform a social model of dyslexia. These are not contradictory positions; as Frith's causal model suggests, 'dyslexia' encompasses social, biological, cognitive and behavioural aspects. The neurological aspect of dyslexia and its relationship to cognitive, social and behavioural characteristics of dyslexia has been the source of much research. MacDonald, although an advocate of the social model of dyslexia, argues that the neurological aspects of dyslexia should be acknowledged alongside the social (2009b).

An individual's interest in drama and performance as both a discipline and a profession may have a neurological origin. Embodied and extended theories of cognition have sought to 'put cognition back in the brain, the brain back in the body, and the body back in the world' (Wheeler 2005: 11). There is anecdotal evidence surrounding the neurological origin of a dyslexic processing 'style'. One of my actor-participants, Dela, thinks that people 'who have dyslexia… have a big imagination and it is because we constantly have to find another way to express ourselves outside the left brain' (Interview 2011). The theatre director Ann Parnell-McGarry explicitly attributes her creative vision to her dyslexia, and believes that dyslexia is the reason she become a theatre director (1996). Drawing on the Hemispheric Specialism theories, which I go onto discuss, Parnell-McGarry argues that as dyslexic learners tend to be 'right brain' orientated, and so, highly visual and creative, they make very good directors. As a result, she suggests that most dyslexic learners are at their best using improvisation, abstract or visual theatre rather than text-based approaches and that communicating on an elemental and intuitive level without words is second nature to her. Although anecdotal, her insight has helped me to form my own hypothesis in relation to dyslexia and best practice actor training and practice. She states that

> The first thing I do when I pick up the script is to visualise from page to stage in my head… It helps me to get a general idea of design and later I can quickly plot the cast's movements with them (1996: 142).

Others, like West (1997) have used hemispheric specialism theories to suggest that in dyslexia 'the ability to think three-dimensionally is so strong that it may prevent the ability to process information in other ways' (Ehardt 2009: 365). A number of artists, designers and architects have also attributed their creative and visual abilities to their dyslexia (this is discussed in detail in chapter four).

Some neurologists and dyslexia theorists have argued that dyslexic strengths can be attributed to the structure of the hemispheres of the brain and specific structures within them (Chakravarty 2009; West 1997; Geschwind and Galaburda 1985). Such theories are based around Sperry's 'split brain' theory (Sperry et al. 1968, Sperry 1969), in which he devised a number of perceptual tests to determine hemispheric function in patients with severed hemispheric connectivity. Ornstein's 'Two Mind Theory' (1972) drew on Sperry's research, to propose that the two hemispheres process information in opposing ways: the left hemisphere processing it in sequences while the right processes visual information as a whole.

However, this theory has been heavy criticised by a range of researchers, who have suggested that attributing particular functions to specific hemispheres is over-simplistic and rigid (Goswami 2004; Coren 1993; Dimond 1972). Coren, particularly, criticises the misappropriation of Sperry's research which underpinned Ornstein's theory (1993) and Goswami (2004) suggests that such a binary designation of hemispheric functionality is a 'neuro-myth'. These 'neuro-myths' have been adopted by educators who frequently use terms such as 'right-brained' to describe cognitive processing (see Goodwin & Thomson 2004). The hemispheric specialism theory in popular culture and education is shown in figure 3 below:

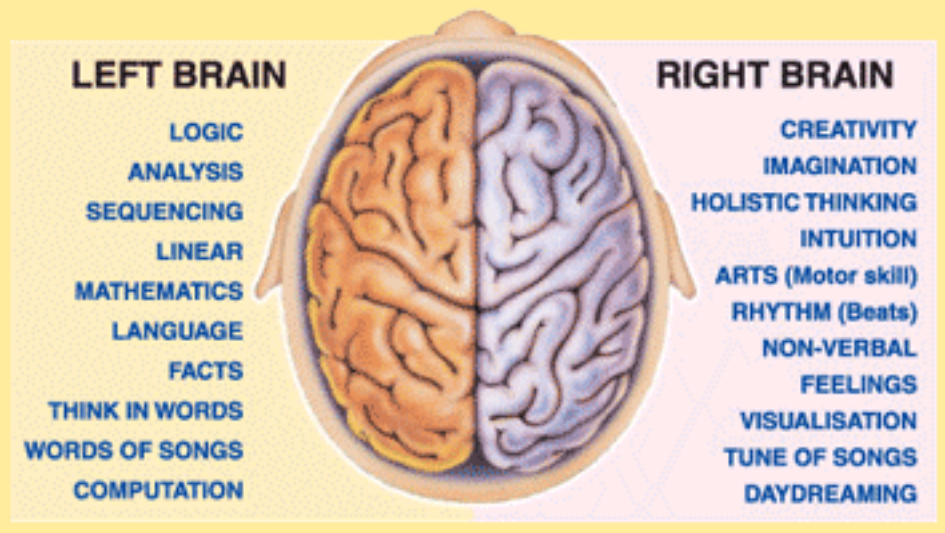

Figure 3: Universal Concepts of Mental Arithmetic System's representation of the 'Left' and 'Right' brain (UCMAS n.d.)

The figure presents the left ('dominant') and right ('non-dominant') hemispheres as having separate functions.

Research has been published questioning the hemispheric specialism theory. Such research indicates that both hemispheres play a part in processing all areas of human activity, including language processing (Robertson and Bakker 2002; Riding and Rayner 1998). However, there are 'very striking' differences in the information-processing abilities and the tendencies of the two hemispheres (Hellige 2001: 168). Beeman (2005) found that when the 'neurotypical' human brain is presented with a word, the semantic fields in the left and right hemisphere perform an analysis in significantly different ways, with the left hemisphere focusing on the literal or 'dictionary' definition meaning of the word and the right hemisphere engaging with the inference connections of the word (relying on word association, figurative meanings, connections and context).

In the 1980s and early 1990s Galaburda conducted autopsies on dyslexic and non-dyslexic brains and found that the dyslexic brain had a smaller left hemisphere than the non-dyslexic brain (1993). Other studies also have suggested that the brains of dyslexic children appear to have symmetric hemispheres: the left hemisphere was

smaller, in contrast to the majority of non-dyslexic brains which were asymmetric and larger to the left side (Haslam et al. 1981; Galaburda 1993). However, since the introduction of imaging technology in the late 1990s, these findings concerning the relative sizes of the two hemispheres of the brain have been heavily disputed. Neuro-imaging technology has enabled neuropsychologists to examine the functionality of specific structures within the hemispheres, rather than just structural differences. These studies have revealed that the size of the two hemispheres are indeed the same, but it is the functions that potentially operate differently (Shaywitz et al. 2003; Shaywitz & Shaywitz 2005; Brunswick et al. 1999; Leonard et al. 2001; Best & Demb 1999; Eckert et al. 2003; Leonard et al. 2001, 2002, 1993; Rumsey et al. 1997; Schultz et al. 1994).

Specifically, Snowling believes that there are 'inherited differences in speech processing mechanisms located in the left hemisphere' (2000: 157) with Shaywitz, Mody & Shaywitz (2006) finding that left-hemisphere posterior brain systems demonstrate functional difficulties during reading (see also Price & Mechelli, 2005; Shaywitz & Shaywitz, 2005).[25] These neural systems are explained in Figure 4:

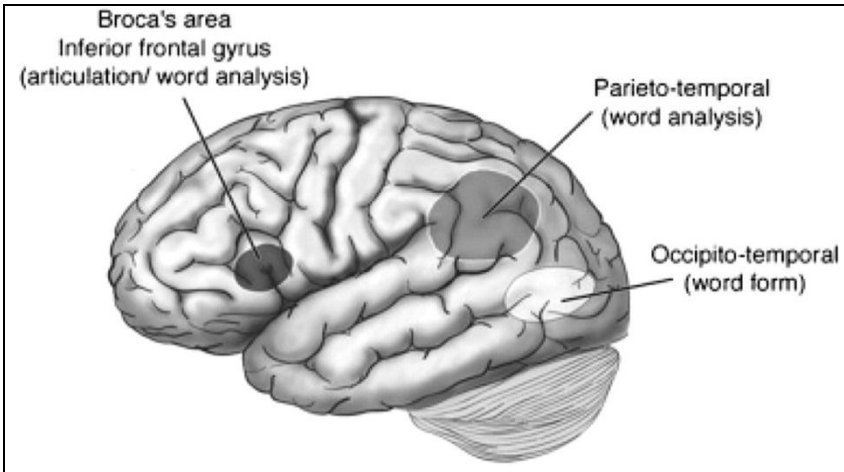

Figure 4:
'Neural systems for reading in the brain's left hemisphere. An anterior system in the region of the inferior frontal gyrus (Broca's area) is believed to serve articulation and word analysis. A system in the parieto-temporal region is believed to serve word analysis, and a second in the

[25] See also Brunswick et al. 1999; Helenius et al. 1999; Horwitz, Rumsey and Donohue 1998; Shaywitz et al. 2003.

occipito-temporal region (termed the word-form area) is believed to be responsible for the rapid, automatic, fluent identification of words' (Shaywitz 2003: 78).

As seen in Figure 4 above, Shaywitz (2003) found that during reading, typical readers activate the three language areas responsible for the 'dictionary' definition of words, for the automatic fluent identification of words and for word analysis. However, dyslexic readers show relative under-activation in the posterior area responsible for word identification and analysis, and an increased activation in articulation and word analysis in the Broca's area, which Shaywitz and others have referred to as a neural signature of dyslexia (Shaywitz, Mody and Shaywitz 2006).[26]

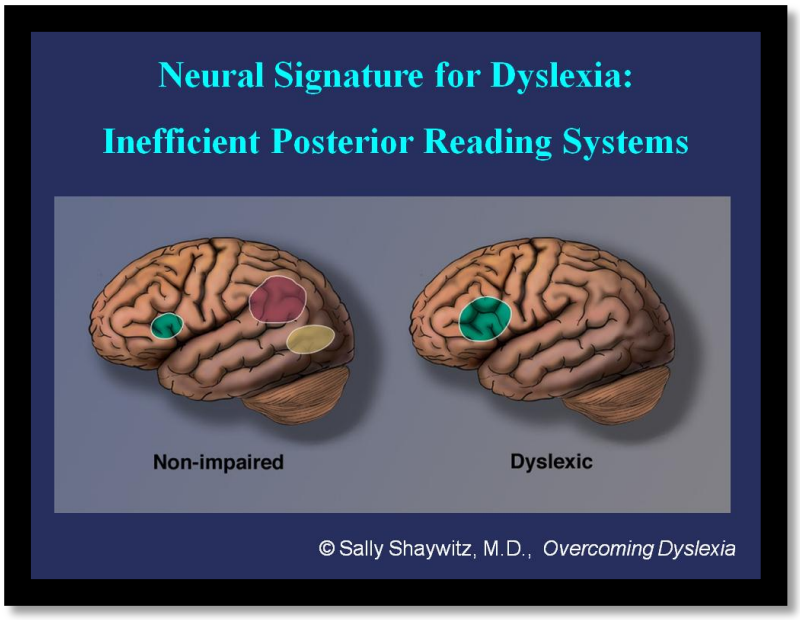

Figure 5: Shaywitz, (2003) Brain activation maps in non-dyslexic and dyslexic readers engaged in phonological processing during the pseudo-word rhyming test.

Neuro-imaging studies reveal that dyslexic learners use more right hemisphere processing when reading (Paulesu et al. 2001; Shaywitz et al. 2003; Shaywitz & Shaywitz 2005) and as a result of this McGilchrist suggests that dyslexic learners have a 'partial inversion of the standard pattern, leading to brain functions being lateralized in

[26] Brunswick et al. (1999) also find brain activation during reading.

unconventional ways' (2011: 12)[27]. Wolf suggests that 'the dyslexic brain consistently employs more right-hemisphere structures (for reading and its component processing activities) than left-hemisphere structures' (2008: 186) and as a consequence there is a bias towards a right hemispheric processing style termed holistic or global processing (Casanova and Williams 2010).

The unconventional lateralization of the brain in dyslexic individuals might help to make sense of Einstein's description of his mental processes as an interplay between 'playing with images' (right hemisphere) and 'laboriously' looking for words (left hemisphere) (Einstein in Hadamard 1949: 142-3)[28]. Einstein's use of the verb 'laboriously' provides an insight into his troubled relationship with 'words', in comparison to his 'play[ful]' connection with images. The suggestion is that as a dyslexic learner his left hemisphere was not specialised for language in the way that a neuro-typical brain is.

McGilchrist questions whether the existence of language functions in the right hemisphere leads to 'language being reinterpreted according to the characteristic mode' of that hemisphere, which may explain the 'rich network of associations… [and] substitutions' which are a characteristic feature of dyslexic people's thought patterns (Eide and Eide 2011). Additionally, Einstein's description of his thought process in which 'words do not seem to play any role' but are channelled into 'associative play' of 'more or less clear images' of a 'visual and muscular ideation' would support the idea of a dyslexic 'reinterpretation' of language (Einstein in Hadamard, 1949: 142-3).

Some researchers have even suggested that a delay in development of the left hemisphere may be responsible for the right hemisphere becoming highly specialised (Geschwind and Galaburda 1985). As a consequence of such a delay, Chakravarty believes the right hemisphere is 'disinhibited', leading to development of artistic talent

[27] This 'inversion' might also go some way to explain the high prevalence of synaesthesia in dyslexic learners (1 in 25) (Grant 2010: 94).
[28] Einstein's brain was studied for medical research in order to understand the brain's role in creativity, (Witelson, Kigar and Harvey 1999; Critchley 1971; Miller 2008) and provides a neuro-anatomical clue to his dyslexia.

(2009). According to this theory, the actors in this study could be perceived as having a differently inflected relationship with language, as a result of a dynamic brain-body-world continuum.

Dyslexia and Learning Style Theory

Despite the controversy, the 'right brain' theory continues to dominate dyslexia literature (see, for example, Saunders & White, 2002) and the neurological research outlined above has been used to justify the development of Learning Style Theory which has been applied to dyslexic learners as a distinctive group. The construct of cognitive or learning styles was first suggested by Allport (1937) and referred to the way in which an individual characteristically processed incoming information (i.e. perceived, thought and problem solved). Riding and Rayner (1998) have built on this definition by suggesting that learning style is the application of cognitive style in a learning setting, encompassing the way an individual uploads, stores, remembers and expresses information. Learning style theory has become prominent in pop-psychology, teacher-practitioner guides (Given and Reid 1999; Reid 2005) and referred to in government policy in both the Department for Education and Ofsted documentation (Mortimore 2008a). The growing awareness of learning style theory is a reflection of the educational inclusion agenda which is concerned with changing the environment and removing barriers to learning which draws on the social model of disability.

Mortimore (2007) is critical of the construct of style theory in general and suggests that the result is that once the individual has been labelled with a style it becomes a strait jacket from which the individual does not attempt to develop. She also suggests that a lot of style theory is based on 'neuro myths' which have taken a simplistic interpretation of the complex nature of hemispheric specialism. Yet she believes, as do I, that the application of style theory can enable individual learners to become more aware of how they learn (Flavell's concept of 'meta-cognition' 1976) and can offer people the language to discuss learning as a process. The individual is therefore

empowered to actively engage in their own learning process and explore strategies to assist them with any difficulties. [29]

A major source of controversy cited in the 2004 Coffield report commissioned by the Learning and Skills Development Agency found over 70 different models of learning style, and inconsistencies with definitions and assessment methodology (Coffield et al. 2004). The major models attempt to describe and diagnose 'style' based on specific disciplines and theoretical perspectives: Jungian theory, education theory, hemispheric specialism theory and computerised cognitive models among others. Riding (1997) argues that all these models are describing the same processes, but in a different language.

Riding and Cheema (1991) condensed the models down to two cognitive style groups: the first construct is the holistic-analytic dimension and the second construct is the imager-verbaliser dimension. This two dimensional model is used as a method with which to analyse an individual's 'style' and is based on an information processing model of cognition which is concerned with how the individual processes information (Riding and Rayner 1998).

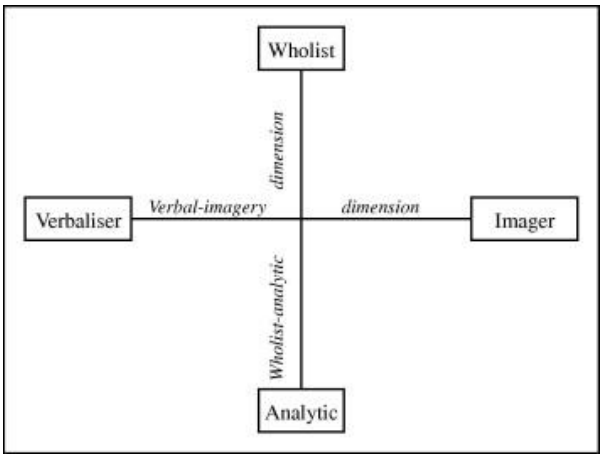

Figure 6: Wholist-analytic and verbal-imagery style model (Riding and Rayner 1998).

[29] However, it is important to acknowledge the controversial aspects of style theory particularly surrounding the origin of style and the ability of style to change depending on environment and age (See Mortimore 2008a and 2007 for a review of the debate).

The wholist-analytic continuum reveals the extent of an individual's preference for structure: that is, whether they prefer overviews of material or to prefer to begin with focused and detailed work. The verbal-imagery scale reveals the extent of the preference for verbal or visual ways of processing and storing information (Riding and Rayner 1998).[30] Combining the two continuums shows preferences towards both structure and type of presentation.[31]

This is the model I applied to my practice and it was a useful tool both for analysing people's learning preferences and developing strategies (see page chapter 4). In the practical sessions with the actor-participants in my study, I adapted and applied a number of strategies from the practice of Tilly Mortimore (2008a). Mortimore's learning schemas (or frameworks) were originally intended to be used for academic purposes by a wide range of students at secondary school and beyond in order to support and develop memory and sequencing skill. Her methods are premised on the two-dimensional cognitive style model developed by Riding and Rayner (1998), as discussed above. The range of strategies incorporates aspects from the holistic-analytic dimension (that is one which analyses a person's preference for holistic or analytic thinking) and also from their mode of expression, whether that be (for example) visual or verbal. I adapted a range of learning materials which incorporate holistic, analytical, verbal and visual methods and which were further developed in the workshops. These included an active reading technique for scripts and research material; mapping and imaging to explore character and learn lines and the use of time-lines to plot the play structure and/or character history (see appendix 14 for all worksheets). They encompass a range of learning style approaches and were chosen so that the participants could explore them if they had a preference for structure (holistic/analytical) and presentation of information (visual/verbal) and to support memory and sequencing skill. The active reading technique will form the basis of chapter 5.

[30] The individual can be placed anywhere along the two continuums resulting in a number of combinations such as wholist-imager, wholist-verbaliser, analytic-imager or analytic-verbaliser.
[31] The research is supported by Riding and Mathias (1991) whose research provided the groupings of the models within 2 constructs. This is also supported by Schmeck (1988) who reviewed cognitive style models, concluding that they fall into global versus analytic.

As is evident from Mortimore's work, Style theory has been applied to dyslexic learners as a distinctive group of learners. West (1997) has adopted the hemispheric specialism theory to suggest that dyslexic learners are gifted in visual-spatial tasks such as architecture and painting. He also cites anecdotal evidence from individuals with dyslexia (such as David Bailey) who ascribe a visual-spatial talent to their dyslexia. Chakaraty (2009) uses the hemispheric dis-inhibition theory to suggest that a developmental delay in language function located in the left hemisphere activates the right lobe which unmasks creativity. Brunwick et al. (2011) draw on empirical evidence from statistics to suggest that the high numbers of dyslexic art students indicate a positive correlation between dyslexia and visual-spatial ability (Wolf and Lundberg 2002). However it must be noted that West's evidence is purely anecdotal and the hemispheric specialism theory has been increasingly discredited by the work of Goswami (2004). Furthermore the comparative control studies conducted by research groups (Brunswick, Martin, and Marzano 2010; Brunswick et al. 2011; Von Karolyi et al. 2003; Winner et al. 2001) remain inconclusive and questions over sampling and methodology remain.

Further research remains inconclusive: Mortimore (1998) looked at the relationship between cognitive style and dyslexia in higher education conducted though a small scale study. She used a small-scale matched control study, and administered the Cognitive Styles Analysis (Riding and Rayner 1998). The results indicated that the dyslexic students showed holistic and imager preferences. However when Mortimore conducted further large scale research she found no evidence of any difference in cognitive style between dyslexic and non-dyslexic learners (2006) and she does not support the idea of a dyslexic 'style' in higher education. She also argues that the distribution of style preference across the dyslexic population is random. She found that whilst dyslexic learners found visual methods useful, there was no evidence for its effectiveness. She did find that the dyslexic students performed far worse than their non-dyslexic participants in the tasks of remembering and applying information.

However, despite the controversy, I believe that learning style theory is useful in so far as it has enabled me to view learning as a process, specific to the individual and the cognitive task at hand. The process of learning is individual and can encompass the full range of visual/verbal and sequential/holistic preferences: therefore it was important for the purposes of my research that a range of learning strategies were developed, in order to account for the potential range and diversity of processing 'style'.

Drawing on a wide range of disciplines and approaches has helped me to generate my research questions, devise a distinctive methodology and inform my analysis of the research findings. As the research context demonstrates, there are several unanswered questions in our knowledge of dyslexia and performance. Why do dyslexic learners choose to enter a profession which places heavy demands on reading and memory? What, if any, barriers to learning do actors experience within training pedagogies and professional rehearsal practice? Are some training and rehearsal practices more inclusive for dyslexic learners than others? This thesis hopes to address these questions in the light of previous research and areas of enquiry. The next section of this chapter will discuss the methodology used to address these research questions and the theoretical approaches used.

Methodology

Ethics

A number of ethical issues were considered prior to, during and after the fieldwork that I conducted. Research ethics 'refers to the moral principles guiding research, from its inception through to completion and publication of results and beyond' (The Economic and Social Research Council, Framework for Research Ethics 2010: 40). Israel and Hay suggest that whilst individual codes of ethics vary, most ethical principles are concerned with obtaining informed consent; the protection of participants from harm and risk and the ensuring of confidentiality and anonymity (2006). I considered these issues alongside others, namely participants' access to research data and data protection. The University of Kent's Code of Ethical Practice for Research stipulates that 'All research involving human participants, their tissue or data must undergo ethical review before initiation' (University of Kent 2013). The above ethical considerations were therefore addressed in an application for ethical approval which was sought and obtained through the University of Kent's Humanities Research Ethics Advisory Group (see appendices 16 and 17).

Informed consent was obtained from the prospective participants prior to commencing the interviews and workshops. As Bryman suggests, 'the principle [of informed consent] means that prospective research participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study' (2012: 121). In the first instance, information was provided in an initial call for participants in the Actors Centre course brochure which outlined the purpose of the workshop (for a PhD project) and the research questions (covering the periods July 2011, December 2011, February 2012, March 2012 and May 2013: see Appendix 6). Secondly, once participants had registered their interest in attending the workshops, they were sent a copy of the informed consent form via email (see Appendix 18 and 19 for examples of forms). These forms were emailed in advance of the scheduled workshop so that the participants could read through and digest the contents and this gave them an opportunity to change their mind about participating as a result. At the start of each workshop/coaching session, I

talked through the contents of the form and invited questions from the participants. If the participants were in agreement, they then signed the forms. The consent form outlined the purpose of the research, what they were being asked to take part in, and then notified them of their right to withdraw, the potential risks, benefits, costs and payments involved in participating in the study and outlined issues of confidentiality and anonymity, data storage, the uses and publication of research and areas of further support. I was also aware of the need to protect participants from undue intrusiveness. All participants had the right to refuse to answer a question, participate in the workshop, or disclose statistics. The consent form made it clear that if potential participants decided they did not want to take part, or decided to withdraw from the project, their education (for those recruited from drama schools) would not be affected.

I also considered whether there were risks of harm to the participants of the research, and took steps to minimise this risk. 'Harm can entail a number of different facets: physical harm; harm to participants' development; loss of self esteem; [and] stress' (Bryman 2012: 118). As a dyslexic learner myself, I am aware that the act of disclosing dyslexia in itself can be difficult for the individual and can result in feelings of embarrassment and exposure. Some people may not want their dyslexia to be known by others out of embarrassment or fear of the impact on their career or reputation. The individuals who took part in the research did so because they made an informed choice to discuss their dyslexia although one actor who expressed an interest in joining was unable to attend due to feelings of shame and embarrassment. I attempted to militate against potential harm that may result in exposure by ensuring that the data would be anonymised. I also provided the participants with sources of further information or help that could be accessed if necessary. In relation to physical harm, a risk assessment was conducted prior to each workshop as a standard feature of Health and Safety procedures.

Reducing the risk of harm was also addressed by maintaining confidentiality of records. Names of individual schools are omitted from the thesis, and participants' names were anonymised during the transcribing process. Care was taken that the

combination of two or more pieces of information in the findings (e.g. location / film, theatre or TV production / drama school) will not mean that identities can be extrapolated. All transcripts and audio-visual material will only be viewed by myself as the researcher although my supervisors would have access if they requested. Another aspect of confidentiality concerns the protection of personal data collected and stored as a result of the research. To this end, the information gathered from the workshops, questionnaires and interviews were stored in a locked filing cabinet in my office. Digital copies are stored on a password protected hard-drive. The key for identifying participants in documents anonymised using a pseudonym is stored separately from the rest of the data. Participants were able to access their own research materials as requested. As requested, all transcripts were sent to the participant for approval prior to analysis. Participants were also able to access a copy of audio-visual recordings made of their interviews for their approval.

Research methods

In order to address the research questions outlined above, I have adopted a range of methods, using both qualitative and quantitative sources of information at different stages of the research process (Hanson et al. 2005). I chose to use both qualitative and quantitative methods as they complement each other and can 'uncover some unique variance which otherwise may have been neglected by a single method' (Jick 1979: 603; Goodyear et al. 2005; Beck 2005). Furthermore the mixing of methods reflects the range of research questions asked: for instance, quantitative data collection was necessary in order to address the question 'how many dyslexic learners are training to be actors'. On the other hand, the question of what barriers to learning actors experience in training and practice addresses the underlying meaning and phenomenological nature of human experience, and therefore a qualitative method was appropriate. Whilst the mixed method approach has its origins in social sciences, performance theorists such as Schechner (1973) and Camerino et al. (2012) have long since advocated the mix of quantitative, qualitative and artistic methods. My choice of research tools draws on methods from the performative field such as actor training methods and cognitive strategies and principles from the qualitative tradition including phenomenology, interviews and action research. It also uses elements of quantitative

enquiry such as statistics and the participants' psychometric results. The research was conducted in four stages: semi-structured interviews with acting teachers, directors and dyslexia support staff; a nominal focus group with dyslexic actors; collection of statistics and a series of one-on-one workshops with dyslexic actors.[32] The following will discuss the research process in that order.

Firstly, the research process began with a period of personal immersion in the area of my research, as advocated by Moustakas (1967, 1990; Douglas and Moustakas 1985; Glaser 1978). This involved conducting a number of semi-structured interviews with dyslexia tutors, acting teachers and directors.[33] The interview sample was collected through 'snowball sampling' which Noy (2008: 330) argues is '…the most widely employed method of sampling in qualitative research'. Snowball sampling takes place when 'the researcher accesses informants through contact information that is provided by other informants' (Noy 2008: 330). Using this process I built up a list of interview-referrals from professionals in the fields of actor training and dyslexia. [34]

If Kvale and Brinkmann (2009) are right, and we live in an 'interview culture', then the interview method is a useful tool as it is familiar to both researcher and participant. In addition, interviews are appropriate tools for the theoretical paradigms I am working with: the phenomenological approach emphasises the lived experience of the research participants, and secondly the social model of disability argues that the voices of the individuals are central to this research (Oliver 1990). Semi-structured interviews were conducted as these provide a guide which later assisted in the process of thematic analysis and also because the questions could be tailored to each individual respondent (Bryman 2012).[35] The interview questions (appendix 4) were devised with

[32] This field work builds on the primary research originally conducted as part of my MA thesis 'Dyslexia and acting: synonymous or antithetical? An investigation into the training of dyslexic actors' submitted to the Royal Central School of Speech and Drama 2009 (see Leveroy 2009).
[33] Moustaskas emphasises the fact that this process is vital for good qualitative research and requires a degree of waiting and patience. The researcher should be open and ready for surprises and go on a personal journey of discovery using the full range of their cognitive and emotional resources. In this process, the researcher is aware of their emotional reactions associated with the research (Gilbert 2001) and that the feelings themselves reveal what is important.
[34] See appendix 2a and 2b for list of interview participants.
[35] See appendix 4 for interview questions.

the research questions in mind, in order to ascertain the respondent's view of dyslexia within the context of actor training institutions and the industry at large.

The second stage of the research process consisted of conducting a focus group of dyslexic actors at the Actors Centre in London (see appendix 5a and 5b for a description of the Actors Centre and the membership criteria). I chose to use a focus group as I wanted the twelve actors to interact with each other and generate dialogue in response to each other, rather than just in response to me as the interviewer (Reason 2010). The participants were recruited from an advert in the Actors Centre course brochure (see appendix 6). As I was not using an empirical research design or conducting an intervention study I chose not to include a non-dyslexic control group. Due to the phenomenological nature of the research, I was concerned with describing individual perception and focusing on the dyslexic learner's lived experience, rather than drawing correlates with such a group.

I used the Nominal Group technique (a variant of the traditional focus group) which combines focus group questions with other strategies such as brainstorming and pictures (Delbecq, Van de Ven and Gustafson 1975). The questions were closely linked to my research questions (see appendix 7 for focus group questions and scheme of work) and participants responded either verbally or through visual methods. For example, the participants visually drew their response to the question 'When I say dyslexia and acting what do you think of?' and their drawings were then used to facilitate the participants' verbal responses. Similarly to Reason (2010: 395) I did not want to read information into the pictures using projective techniques derived from psycho-analysis, using the art to diagnose or interpret the participant's experiences, but rather wanted the individual to be the main interpreter of the visual artefact created. Because of the problems that dyslexic learners can have with language, the use of images can be more accessible. Visual strategies[36] were chosen as a non-verbal way of exploring the actors' experiences. The technique is particularly relevant for dyslexic learners who frequently report difficulty in remembering words (Snowling

[36] Visual methods has been used widely in qualitative research in recent years (Harper 2008; Rose 2007; Hodgetts et al. 2010).

2000)[37] and so 'images can be used to capture the ineffable, the hard-to-put-into-words' (Weber 2008 in Reason 2010: 397). In addition, the method allows participants to think visually and produce different kinds of knowledge. As a result, the actors' produced 'texts that move beyond the purely representational and towards the presentational' (Denzin 2003: xi). This is potentially useful in the light of several dyslexia learning style theorists who argue that dyslexic learners are visual thinkers (Pollak 2005a&b).

The third stage of the research involved collecting figures on the numbers of dyslexic learners in three year BA acting courses, accredited by Drama UK (see appendix 1a and 1b for result tables). The data was collected in order to address the research question of how many professional actors are dyslexic. Currently neither Drama UK nor Equity publish figures on the number of dyslexic learners in the profession.[38] I contacted all 18 schools which run three year acting courses accredited by Drama UK, eight of which provided historical figures from 2007/08 to 2010/11.[39] Descriptive statistics are a useful tool in identifying the size of the population of dyslexic student-actors and in this case also revealed considerable variability between institutions, which is in itself an area of further enquiry.

The final stage of the research process involved a series of one-on-one workshops at the Actors Centre in London. In total I worked with 14 actors who were all members of the Actors Centre with a variety of training backgrounds (see appendix 2b for a breakdown of the participants' training backgrounds). Prior to the workshop, all the actors provided evidence of a dyslexia identification in the form of their assessment (See appendices 8 and 9 for anonymised report samples and appendix 3 for report analysis).[40]

[37] Formally referred to as rapid automatised naming (Snowling 2000).
[38] They do collect these figures as part of equality and diversity monitoring but they are not made available to the public.
[39] Students identified as dyslexic were in receipt of the Disabled Students Allowance and had gone through a formal identification assessment.
[40] For an overview of the various methodologies used for diagnosis see Reid (2009a: 57-80).

It was vital that all participants had undergone a professional diagnosis as the very existence of dyslexia is still a contentious issue (Hitchins 2009, Stringer 2009). Since the first recorded case of dyslexia by Doctor Rudolf Berlin in 1876 (Wagner 1973), the attempt to define dyslexia has long been problematic (Miles 1995; Frith 1999) (see page 60-61 for a historical overview). Practitioners and academics from the various fields of education, psychology and medicine have all attempted to explain the causes of dyslexia through their own paradigms of knowledge, creating both consensus and confusion.

Some, in the field of education, have adopted an anti-labelling approach and have argued that it is impossible to distinguish a 'dyslexic' learner from a learner with general reading difficulties (GRD). As the methods of intervention are the same, they argue, these two groups should be subsumed into one category (Elliott 2014; Elliott 2005; Rice & Brooks 2004; Elliott & Place 2004). Elliot suggests that the term 'dyslexia' has been over-applied in teaching and research communities, has become meaningless, and is critical of the efficacy of diagnostic testing. Ho (2004) suggests that the label of 'dyslexia' removes blame from the parent and enables access to otherwise unobtainable technologies. Gillies (2005) views dyslexia as a middle-class phenomenon, one which enables middle-class children to be labelled as 'special', and separating them from working-class children with similar difficulties. Current educational theory suggests that dyslexia 'is not one thing but many... a conceptual clearing house for a variety of difficulties with a variety of causes' (Rice and Brooks 2004 in Backhouse and Morris 2005: 16) Moreover Burden (2002) maintains that 'dyslexia' is a convenience term, embracing a number of different types of difficulties and that the term 'dyslexia' is not helpful.

Yet for the purpose of this research neither Rice and Brooks, nor Burden's analyses are useful; by evading the issue of definition, they make appropriate intervention impossible (Reid 2005). Whilst acknowledging the existence of these criticisms, my thesis aims to question the 'anti-labelling approach' by revealing commonalities in the lived experiences of actor-participants (See MacDonald 2009b who also takes this approach). Ensuring that all participants had a formal assessment by a suitable

professional such as an educational psychologist or an accredited practitioner enabled me to refine my participant sample and use the assessment reports as part of the methodology. Having access to the individuals' dyslexia reports before the workshop, allowed me to glean a sense of their lived experience of dyslexia and their cognitive abilities, enabling me to build up a working definition of dyslexia which I will now outline. The following three components of the report were utilised: the scores from the psychometric test; the individual's personal history and the definition of dyslexia used by the assessor.

The results of the psychometric tests were a useful tool in gleaning an overall picture of the individual's cognitive abilities, which included attainment in the following areas: processing speed, perceptual organisation, verbal processing and working memory. The work of diagnostician David Grant (2010, 2009) is useful in this context, as he uses the results of his client's psychometric tests to discuss the underlying cognitive landscape of dyslexia (Grant 2010). Grant cites the following graph (Figure 7) to represent a typical dyslexic profile.[41] Indeed out of the 14 participants taking part in the one-on-one workshops, 9 demonstrated a similar 'spiky' profile.

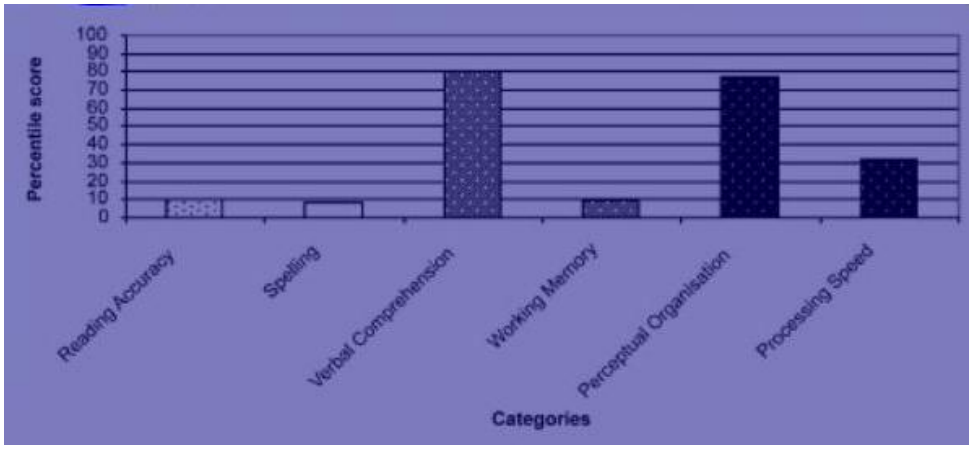

Figure 7: Jane's Reading and Spelling scores, plus 4 WAIS-III Index scores expressed as percentile scores (Grant 2010: 30).[42]

[41] This pattern has also been reported by Ramus et al., 2003; Ingesson, 2006.

[42] Grant (2010: 30) explains that this type of profile scores very highly in verbal comprehension, which measures oral communication and covers general knowledge, long term memory, verbal reasoning (i.e. explaining how two words are alike) and vocabulary (explaining the meaning of words). High scores too in perceptual organisation, which deals with the ability to solve problems using non-verbal, visual materials (i.e. attention to visual detail, spatial processing, and map reading). However these scores are in stark contrast to the low score in working memory, which results in a difficultly in storing information in memory for a few seconds whilst carrying out a task such as carrying out mental arithmetic, repeating information in the same or reverse order. Lastly the processing speed is weak, which affects how quickly

The typical exemplar profile is a useful tool in itself, providing an overview of the typical dyslexic pattern of strengths and weaknesses. The profile helped me to generate research questions concerning barriers to learning and inclusive rehearsal/training practices. For example, the weak working memory scores may indicate that performance practices which rely on a fully functioning working memory (such as text analysis, linear narrative, line learning and sight reading) are a barrier to learning for dyslexic learners. However, the high verbal comprehension and perceptual organisation scores may imply that performance practices which utilise context, visualisation and improvisation are more inclusive to dyslexic learners. These hypotheses were then addressed in the interview and practice sessions with the actors.

The results of the psychometric tests were viewed in light of the personal history provided in the report (Grant 2009: 39) which details the reason for the assessment referral, a personal history (such as birth difficulties, experiences at school or employment history) and the participant's recorded difficulties. The personal history builds up a holistic picture of the individual's lived experience and connects the cognitive results with the individual's reported behavioural characteristics. For example, Ross, one of the research participants, reported to the assessor that as a child he had difficulties with 'spelling, reading aloud, silent reading comprehension, and handwriting'. Also, during his actor-training course he reported the following challenges: 'absorbing information from text in silent reading… expressing ideas clearly, organising information… following spoken and written instructions… concentration when studying or working' (for anonymised report see appendix 8). These behavioural characteristics are indicative of his borderline scores in working memory and processing speed, placing him in the bottom 8% of the population of his age.[43]

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and efficiently auditory and visual information can be processed. Participants with this type of profile reported difficulties with memorising lines and blocking, remembering verbal directions and taking a long time to read and understand a new piece of text.

[43] The weakness in working memory means that reading comprehension is problematic as he often forgets what he has just read and he needs to re-read scripts several times. The vulnerability in working

The results of the test and the personal history complement each other: the personal history provides a phenomenological account of the individual's lived experience of dyslexia and the cognitive profile reveals the underlying cognitive landscape (explanations) behind the experiences. Furthermore the phenomenological nature of the personal history avoids a purely medical-model assessment and labelling process. The lived-experience evidenced in the personal history can also explain variations of the exemplar 'spiky' profile. For example Sammy's profile revealed high working memory results:

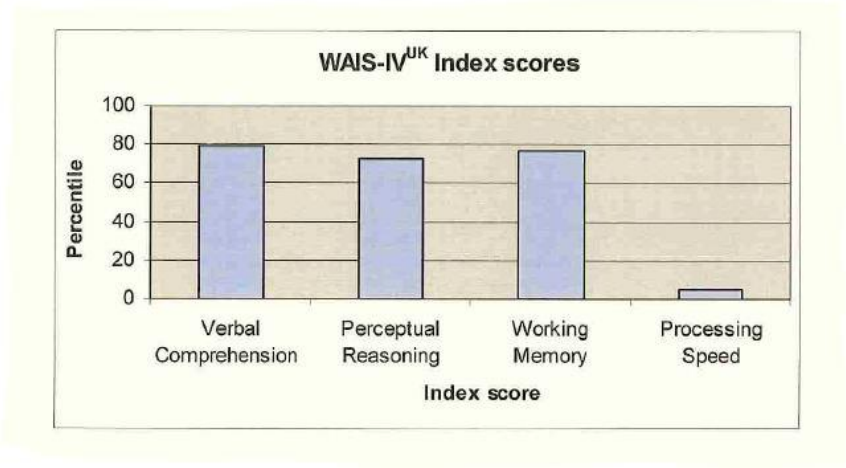

Figure 8: Sammy's WAIS-IV indexing scores expressed as percentile scores.[44]

Grant suggests that strong working memory scores may be the result of successful compensatory skills in visualisation and synaesthesia, and are revealed in the individual's personal history (2009: 47). This all shows that the lived-experience evidenced in a subject's personal history is vital when explaining variations in cognitive profile, and this helped the research to move beyond the surface level of the test results, revealing other cognitive processes such as visualisation. The individuals' personal history and the scores from the psychometric test reports were a useful tool

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memory also compromises his ability to retrieve words in conversations, and affects his ability to communicate his thoughts clearly. Furthermore the processing speed means that the speed at which he can processes instructions is slow and he needs time to decode verbal direction and follow a sequence of instructions.

[44] The assessor acknowledges variation in the subtest scores forming this working memory index, suggesting that the overall high score may be an indication of Sammy's successful compensatory strategies, which mask working memory difficulties. Other reasons for variability include concurrence with other processing differences such as dyspraxia and ADHD. For Sammy's anonymised report see Appendix 9.

in building up a picture of the behavioural characteristics and cognitive processes behind the term 'dyslexia'.

The third component of the report is the definition of dyslexia the assessor uses within it. Grant suggests that the identification of dyslexia is dependent upon which definition is applied. The participants' reports contained a variety of definitions, which highlights the historically diverse range of theories concerning definitions of dyslexia.[45] The range of causal explanations and definitions will be discussed later on page 60-61, however my definition of dyslexia is drawn from the educational psychologist and consultant Gavin Reid, who, like Uta Frith, believes that 'dyslexia' consists of interacting biological, cognitive, environment and social processes:

> Dyslexia is a processing difference experienced by people of all ages, often characterised by difficulties in literacy, it can affect other cognitive areas such as memory, speed of processing, time management, coordination and directional aspects. There may be visual and phonological difficulties and there is usually some discrepancy in performances in different areas of learning. It is important that the individual differences and learning styles are acknowledged since these will affect outcomes of learning and assessment. It is also important to consider the learning and work context as the nature of the difficulties associated with dyslexia may well be more pronounced in some learning situations (2005: 17).

This quotation forms the basis of my own definition of dyslexia which includes social disability theory, cognitive theory and a biological account of dyslexia. It is appropriate to my thesis because it is grounded in both social disability theory and cognitive theory. Firstly, the social model of disability is implied as dyslexia is defined as a 'processing difference' rather than a deficit. It then goes on to suggest that dyslexia is partly created out of environmental factors such as the learning environment and the work context. Secondly, cognitive theory is used to move beyond the traditional association of dyslexia as defined solely by the behavioural characteristics of literacy and it acknowledges cognitive areas such as memory and processing speed. This is in contrast to the anti-labelling approach by those who view dyslexia as purely a reading problem, and ignore underlying cognitive processing. In addition cognitive theory is

[45] For an extensive overview of the defining dyslexia debate see Miles 1995; Elliot & Place 2004; Rice & Brooks 2004.

evident in the 'discrepancy in different areas of learning' which complements the cognitive discrepancy model as evidenced above by Grant (2010). Lastly the importance of 'individual differences and learning styles' uses the information processing model of cognition to suggest there is no one standard dyslexic learner. The definition encompasses the theoretical perspectives I am using, which are outlined in the theoretical rationale section.

Due to the many levels of descriptive analysis advocated by both Reid (2005) and Frith (1995, 1999) it is clear that 'dyslexia' is not one 'condition' that affects everyone in the same way: dyslexia has been called 'developmental' dyslexia because it changes and develops throughout the course of an individual's life and is affected by the learner's individual neurological make-up and interaction with the environment, both educational and social. Whilst a common pattern of strengths and weaknesses is evident from Grant's diagnostic chart, the behavioural characteristics can differ. The consequent variation of behavioural characteristics, includes the fact that, for example, some dyslexics may have poor auditory working memory whilst others may have a strong visual working memory. Behavioural characteristics change with age and are affected by the learner's interaction with the environment; they also change depending on the task the learner is engaged in at any given moment. However, as Macdonald points out, despite the disagreement surrounding the medical-labelling of dyslexia and the anti-labelling debate, there are common experiences and life-histories which are revealed in qualitative research (Macdonald 2009b). These reveal a common narrative of non-linear thinking, difficulties with short-term memory and phonological processing (Snowling 2000; Macdonald 2009b).

1:1 Sessions

The one hour sessions consisted of one-third unstructured interview and two-thirds practice-based work. I used an unstructured method of interviewing and used a brief set of prompts as an 'aide memoire' for myself in order to address a range of topics (Bryman 2012: 471). The prompts can be found in appendix 10. This type of interviewing is similar in nature to a conversation (Burgess 1984). This method gave

the interviewee considerable freedom in responding and I was able to follow up on relevant points discussed (Bryman 2012: 471). Often the prompt questions were not necessary as the interviewees discussed relevant topics without any prompting. However I continued to revise the prompts between each workshop session, taking into account the effectiveness of the previous set of prompts and develop more relevant prompts.

I prepared mini-coaching plans in light of the pre-circulated assessment reports in anticipation of working on text which I asked each participant to bring along to the session (see appendices 11, 12 and 13 for sample coaching plans). The one-on-one workshops used the action research enquiry cycle, originated by Lewin (1948) and enabled me to plan and enact a change, observe the process and consequences of the change, before reflecting and planning for the next session (this cycle is further discussed by Trimingham 2002). The iterative approach of inquiry and practice allowed for a diversity of methods to be used which were tailored to each individual, and for the sessions to develop over time. In the early workshops I used Stanislavsky's Active Analysis technique and Chekhov's Psychological Gesture and Imaginary Body in order to explore the actors' experience with text and non-verbal methods. The knowledge gained from these sessions (and my on-going reading into dyslexia and learning style) fed into the later sessions when I started to apply cognitive strategies (Tilly Mortimore 2008a). The iterative cycle moving between practice and theory helped me to refine my way of working. In this iterative process I learnt that applying schemas, context and embodied practice was potentially beneficial for the actors in this research. However, the research is not an intervention study, therefore I was not measuring impact over time: rather the methods were used as a tool to understand potential enabling processes and for the actors themselves to explore and discuss their experience.

Using interdisciplinary methods from cognitive theory and actor training allowed for a degree of merging of approaches. An example of this was the application of Stanislavsky's six fundamental questions to the active reading technique. My aim was to analyse the actor training methods through the lens of learning style theory and

reflect on what learning styles were evident within specific acting methods. Learning style theory enabled me to view the acting methods through the visual/verbal and analytical/holistic perspectives. For example, some methods, such as Stanislavsky's actioning, were viewed along the analytic-verbal dimension, and others, such as Chekhov's imaginary body can be seen on the holistic-visual spectrum. The participants' experience with the acting methods fed into the development of the cognitive strategies, which were designed to reduce the reading and memorisation load. For example, when working with the training methods, I identified the fact that the majority of the actors liked to approach the text using context and an overview. I drew on this new knowledge and applied it to the development of the reading strategy (as discussed in chapter 4).

However, I recognise that the learning pedagogies of Mortimore and actor training methods are not of the same weight and significance. Both approaches are designed for different purposes and for a different kind of learner. It is therefore problematic to equate the learning pedagogies of Mortimore, intended for dyslexic learners in a school environment, with the professional training approaches for actors. There is also a historical weight to the actor training methods which is lacking in the cognitive approach. There are therefore problems that arise from such a merging of interdisciplinary approaches, not least the fact that learning pedagogies are designed as intervention tools for specific learners in an education setting, in comparison with acting methods which aim to craft the skill of an actor, and which are a creative endeavour in themselves. Despite these points of caution, I believe that cognitive theory has an enabling role to play, both in the actor's process and in the actor trainer's method.

Having given an overview of the methodological approach and methods used in this thesis, the following section will outline the phenomenological approach of embodiment as a research tool, and as a theoretical and epistemological approach, in order to critique cognitive deficit theory and its use in the area of dyslexic actors, and outline my rationale for applying an embodied model of cognition to the experiences of the participants in my research.

Theoretical Rationale

The practice, as the project as a whole, was viewed through the lens of Merleau-Ponty's phenomenology of embodiment, with emphasis on the subjectivity of the physical body of the perceiver (Garner 1994) and an 'understanding of consciousness as embodied, as itself, a response to the lived-in body within a lived-in world' (Hart 2006: 30). The frame of phenomenology enabled me to understand the enabling process and explore 'the experiential level of dyslexia that lies behind scientific approaches to dyslexia research' and expose the limitation of a positivist paradigm (Philpot, 1998: 1). applying Merleau-Ponty's phenomenology of perception to dyslexia, it enabled me to understand the enabling process and encourage the actor-participants to explore the dyslexic lived-world experience. This philosophical lens allowed me to view the participants' dyslexic experience as 'a radically different manner of Being-in-the-world, and not, as might be interpreted, an incomplete manner' (Philpott 1998: 11). By embracing the 'different' and rejecting the 'incomplete' body, I hoped that the actors would 'assert a positive identity… [and] embrace a positive pro-active notion of their (dis)ability' (Swain and French 2000: 578) and challenge the deficit model of dyslexia.

Using a phenomenological approach allowed me to challenge the neuro-cognitive deficit models of dyslexia, which have dominated dyslexia discourse since the first recorded case of dyslexia in 1876.[46] Research into the field of the visual 'deficit' remained in the medical world from the 1890s until the phonological theory gained popularity in the 1980s as the dominant discourse in understanding cognitive routes of dyslexia. The visual deficit theory can be attributed to the first documented account and medical model of dyslexia by Pringle-Moran (1896) published in the British Medical Journal and Hinshelwood (1917) who speculated that difficulties in being able to read and spell (despite normal intelligence) were likely due to a form of 'word blindness' whereby the primary disability was in visual memory for words and letters.

[46] The three major theories within the cognitive deficit paradigm view dyslexia as either cognitive and/or neurological dysfunction and cover phonological deficits (Snowling 2000), automaticity/cerebellum hypothesis (Fawcett and Nicolson 2001) or visual/magnocellular deficits (Orton 1925; Stein 2001).

This work was continued by Orton (1925) who described individuals with dyslexia having difficulty associating the visual forms of words with their spoken forms.[47]

In the 1980s and 1990s the phonological deficit theory became the overriding theoretical framework for dyslexia research. Since the seminal work of Bryant and Bradley (1985) there has been a growing acceptance of the crucial link between phonological skills and learning to read and spell. The research priorities were to investigate more fully the causes of phonological processing and key teaching priorities were to introduce better methods of assisting children to acquire phonological awareness (Backhouse and Morris 2005). Snowling's research argues that dyslexia is a developmental disorder extended across a lifetime and that the cardinal symptoms of dyslexia (reading and spelling problems) plausibly stem from oral language problems (2000).[48]

However Fawcett and Nicolson (1992) believed that the phonological account did not fully capture what Miles (1983) had called the 'profile of difficulties'. There were many skills not related to literacy, such as motor skills. Therefore they formulated and tested the automatization deficit hypothesis – which implied that dyslexic children may not readily consolidate new learning and therefore find it difficult to change inappropriate learning habits and that this is a problem which results in making any skill automatic - not just reading. Dyslexic children fail to automate the reading skills they possess (Nicolson and Fawcett, 1994; Yap and van der Leij, 1994).

The medical paradigm has attempted to define dyslexia by identifying the causes. For the purposes of this research it is necessary to place the individual learner and learning environment at the core of the research whilst recognising that dyslexia is on a

[47] Other visual research has found abnormalities in the magno-cellular sub-system of the visual cortex in dyslexic children (Eden et al. 1996); binocular instability and convergence difficulties (Stein 2001); the use of coloured overlays to mitigate visual processing difficulties (Wilkins 1995). Yet Orton observed that reading difficulties in dyslexia were not solely attributable to visual deficits, believing rather the cause of the difficulty was the failure to establish hemispheric dominance in the brain. (Orton 1963).

[48] This interest is reflected in the development of assessment and teaching materials such as the Phonological Assessment Battery (Fredrickson, Frith and Reason 1997) Phonological Abilities Test (Muter, Hulme and Snowling 1997), and various phonological teaching approaches such as Sound Linkage (Hatcher 1994), the Phonological Awareness Training Programme (Wilson 1993) and the Multisensory Teaching System for Reading (Johnston, Philips and Peer 1999).

'continuum' (The Northern Ireland Task Group 2001). By applying the lens of phenomenology it becomes clear that these deficit theories are based on the Cartesian mind-body split advocated by Descartes: the dyslexic learner is reduced to a series of cognitive and neurological dysfunctions, divorced from the body's experience of being in world. Applying the lens of phenomenology enables this research to reject the Cartesian deficit theories of dyslexia and embrace a description of the embodied, lived experience of dyslexic learners.

Philpott (1998) and Tincher (2005) also use phenomenology to reconnect empirical data with the human experience, offering another perspective on dyslexia which goes beyond the medical label and neuro-cognitive functions. Thus, a phenomenological approach believes that 'the body is the vehicle of being in the world' (Merleau-Ponty, 1962: 82). Using phenomenology as a research tool, and as a theoretical and epistemological approach, this thesis is able to place an emphasis on describing the nature of human experience with particular emphasis on the perceiving subject and his or her consciousness in world (the way in which people feel, perceive and think). This approach allows the project to gain deeper understanding of how dyslexic actors perceive the world and performance, going beyond the medical label, the diagnostic process and cognitive deficit models. This understanding can then be used to inform future performance practices.

A phenomenological approach was also applied to the data analysis of this thesis. After completing the interviews, the transcripts were examined using thematic analysis (Braun and Clarke 2006). Such an approach to thematic analysis:

> Should be seen as a foundational method for qualitative analysis. It is the first qualitative method of analysis that researchers should learn, as it provides core skills that will be useful for conducting many other forms of qualitative analysis (Braun and Clarke 2006: 78).

The method involved careful reading and re-reading of transcripts in order to generate codes, which were then examined to look for common themes or recurring patterns.

These themes were then further examined to determine super-ordinate themes (Attride-Sterling 2001). The quotes included in this thesis are those which represented the super-ordinate themes and so were representative of the data as a whole (see appendix 15 for themes).

A thematic analysis (discussed by Bryman 2012) was used because it enabled me to identify the participants' perceptions of both their subjective 'body as it is lived' and the objectification of the (dyslexic) body through diagnostic process. Merleau-Ponty (1964) is concerned with the ways in which bodies are experienced both at a subjective level (that is, on a personal level) and a relational level, not simply as a passive object done to, but something in itself which is active in the world and perceiving. The body is 'both an object among objects and that which sees and touches them' (Merleau-Ponty 1964: xiii). The objective body is the body known by others which is observed and objectified by others and ourselves. In contrast, the subjective body is the body as it is lived or, as Merleau-Ponty remarked: 'I do not simply possess a body; I am my body' (1962 [1945]).

Participants viewed the dyslexic acting experience using both objective and subjective accounts of their bodies. A number of themes were generated which relate to the 'deficit' model of dyslexia and reveal the objectification of the (dyslexic) body and these include: the affect of the diagnostic process and label on the individual's self-concept and the participant's use of medical language to describe his or her own process. In contrast, themes which emphasised the participant's 'body as it is lived' include his or her lived experience of reading and performing text, a preference for non-verbal improvisation and the use of context (holistic methods) (see appendix 15 for thematic analysis).

Merleau-Ponty's phenomenology of embodiment (1962) is useful both as an epistemological approach and a method of analysis. However, contemporary performance theorists have suggested that the theory of embodied cognition, an offshoot of phenomenology, is central to an understanding of the acting process

(Lutterbie 2006). Embodied cognition is a movement in cognitive science which rejects Descartes' mind-body split and embraces a phenomenological account of being in the world, granting the body a central role in shaping the mind (Anderson 2003 Wilson 2002). The stance broadly argues that 'the mind must be understood in the context of its relationship to a physical body that interacts with the world' (Wilson 2002: 625).[49] For the purposes of this thesis I will refer to two accounts of embodied cognition: a systems based account of cognition which argues that 'to understand cognition, we must study the situation and the situated cognizer together as a single unified *system*' (Wilson 2002: 630) and the concept that cognition is *distributed* across the mind, body and environment. Both accounts foreground the belief that cognition is highly embodied and situated (Anderson 2003: 91).

Performance theorists such as Tribble (2011) and Lutterbie (2011) draw on a system-based approach to cognition. Clancy suggests that 'the system that is operating – the processes being studied, modelled, controlled, and/or designed – cannot be understood in its development or function as strictly localized within one level of analysis' (2009: 17). Cognition is not limited to the individual's internal neuro-cognitive mechanisms, rather meaning is a dynamic process, located within 'interactive behaviours of cultural, social, biological, and physical environment systems' (Clancey 2009: 28). The theory has enabled performance theorists such as Tribble and Lutterbie to view performance as 'a dynamic model that attends to the art of playing at a range of levels' (Tribble 2011: 2). For Lutterbie, the actors are themselves a dynamic, non-linear system, interweaving cognitive functions with social and cultural interactions. Actors are 'capable of responding to internal and external cues, aware of change in the performance (self-generated or an effect of the work of others), and in tune with the ebb and flow of audience involvement' (2011: 14).

A dynamic, non-linear systems account of cognition is useful for this thesis for three reasons: firstly it highlights the complexity of the participant's experience (Lutterbie 2011: 84), taking into account the participant's internal cognitive mechanisms (such as

[49] Wilson (2002) provides an overview and critique of the six diverse claims of embodied cognition. See also Varela (1999).

perception and memory), the participant-researcher dynamic, the participants' experience of training/rehearsal, and compensatory strategies, amongst other factors. Secondly, the participants are viewed as always in a state of disequilibrium: as *open* systems their patterns of behaviour are in constant flux and constantly being remodelled (Lutterbie 2001: 84). Thirdly a system-based account can accommodate descriptions of dyslexia on various levels such as biological, cognitive, behavioural and environmental. For example, Lutterbie argues that the actor as dynamic system has six tools at his disposal: movement, language, gesture (all physical manifestations of behaviour), memory, attention and executive control (cognition) (2011: 14). Incorporating dyslexia as an additional element that informs and relates to each of these tools is fundamental to a better and more nuanced understanding of how dyslexia interacts with performance, and creates a dynamic model of atypical cognition in performance practice. Applying a dynamic system based approach to the participant's experiences accounts for the highly individual nature of dyslexia.

This dynamic system is 'distributed – stretched over, not divided among – mind, body, activity and culturally organised settings' (Lave 1998: 1). According to the theory of distributed cognition, the 'immediate and social resources' outside the actor 'participates in cognition, not just as a source of input and a receiver of output, but as a vehicle of thought' (Perkins 1993: 90). Cognition takes place not solely in the mind of the actor, but is distributed across interacting components of the system, including mind, body and environment. The immediate and social resources of the actor, such as cognitive artefacts like text, training and support models will be discussed throughout the body of the thesis. [50]

This approach can help increase our understanding of the relationship between culture and cognition, and thus how medical and social models of disability have informed the lived experiences of dyslexic actors. A second benefit of this theory is that it endeavours to answer the question of 'how the elements and components in a

[50] McVee, Dunsmore and Gavelek define cognitive artefacts as 'collective tools with histories and functions that are continually modified within social practices—to mediate human cognition" (2005: 543).

distributed system – people, tools, forms, equipment, maps, and less obvious resources – can be coordinated well enough to allow the system to accomplish its tasks' (Kirsh 2006: 258). In other words how can the components which make up the participants' experience, that is the individual's neurocognitive mechanisms, methods of training and pedagogy, teachers, directors, casting directors, support tutors, institutions, industry and society, be coordinated effectively to reduce dyslexic actors' barriers to learning?

Distributed cognition is also compatible with disability theory as they both view dyslexia as constructed from both a neurological basis and in interaction with the social environment. A good example of this process is that barriers to learning are constructed by the literary based society but support and adjustment can only be applied once a medical difference is identified in the assessment process (Macdonald 2009b: 273). Using a distributed cognition model enables me to apply disability theory to dyslexia and allows me to engage with issues surrounding the location of responsibility (individual vs. societal) and thus to address a key research question of what, if any, barriers to learning do the actors experience within training pedagogy and professional rehearsal practice? For example, if as MacDonald argues, 'disabling barriers are constructed for people with dyslexia by the rise of a text-based information society' (2009a: 359) then it follows that text-based training and rehearsal practices are a disabling barrier to dyslexic learners. In other words, if dyslexia is a socially constructed 'problem' created out of society's preoccupation with the 'early learning of literacy, good personal organisation and working memory' (Cooper 2009: 66), it follows that it is training institutions and the industry (not the individual actor) which need to adapt.

On this basis I argue that the medical and social models of dyslexia provision should be understood in the context of a dynamic/distributed systems account of the dyslexic actor. By integrating a disability theory within an account of a dyslexic actor as a dynamic-distributed system, the role played by training institutions and the industry in the construction of the participants' dynamic experiences is highlighted. This enables

me to highlight training and rehearsal systems which are disabling to the dyslexic learner as, due to their predication 'on an ideal body, such methodologies can invalidate the impaired body' (Lewis 2009: 184) such as that of a dyslexic individual.

The thesis argues that the dyslexic actor can be enabled in training and rehearsal practice by working with the following three principles: the use of top-down approaches to text and training such as layered improvisation, the adoption of multi-sensory and holistic techniques and the provision of cognitive schemas and frameworks. These approaches are intended to be integrated into the practices of the various agents who constitute the dynamic/distributed system outlined above. These are: the individual actor, the methods of training and pedagogy, individual teachers, support tutors, training institutions, and also industry professionals including directors and casting directors.

The following outline represents the structure of the thesis: chapter two will discuss the participants' relationship to text in light of cognitive theories of cognition, reading and dyslexia, and the impact on identity and body image. Chapter three will propose that training and rehearsal techniques which are predicated on linear sequencing, working memory and literacy are disabling to dyslexic learners, in contrast to methods which use non-linear, non-verbal and spatial cognitive processes.[51] Chapter four will explore the actor's holistic meaning-making processes, using multi-sensory and holistic techniques, in the light of learning style theory and visual-spatial research. Chapter five will discuss the actors' experience of chaos and control, the role of body schemas in the acquisition of skill and the use of learning materials, drawing on schema theory and the work of Mortimore (2008a). The thesis will conclude by discussing how the various medical, social and affirmative models of disability have impacted on dyslexia support and provision. It will provide a summary of inclusive practice recommendations and discuss the implications on the values and practices of both training institutions and the wider industry.

[51] Here I will draw on the work of Stanislavski as discussed by Merlin (2007), in addition to Stafford-Clark (2007), Mamet (1999) and Bruder (1986).

Chapter Two: The phenomenology of dyslexic identity, reading and creativity

Polonius: What do you read, my lord?

Hamlet: Words, words, words.

Polonius: What is the matter, my lord?

Hamlet: Between who?

Polonius: I mean the matter that you read, my lord.

Hamlet Act 2, Scene 2

Shakespeare's pun on the word 'matter' reveals the complex relationship dyslexic learners have with 'Words, words, words'. For the dyslexic learner, 'Words, words, words' are both the dominant cognitive artefact or 'matter' of communication involving reading and verbal language, and a main source of dyslexic difficulty (Snowling 2000).[52] This chapter will discuss this dichotomy in the light of participants' lived experience of both verbal and written language, and will reflect upon aspects of their dyslexic identify and creativity. It describes these lived-experiences through the lens of Merleau-Ponty's phenomenology of embodiment which anchors perception in the body-subject of the perceiver. I describe the body, as both a body-subject and a being among beings or 'object'-body. As I suggested in chapter one, Merleau-Ponty's notions of the ambiguity innate in all human perception and the role of the lived-body can shed light on the heightened 'indeterminacy of perception' for the dyslexic learner in relation to text (Philpott 1998: 1). Insights from cognitive science suggest that consciousness is embodied, and is 'a response to the lived-in body within a lived in world' (Hart 2006: 30). The lived experiences of the actors in this research is framed by examining the nature of the material and the environmental 'lived in world' that the actors operate within and amongst, as well as the biological ontology of dyslexia.

[52] Norman defines cognitive artefacts as "those artificial devices that maintain, display, or operate upon information in order to serve a representational function and that affect human cognitive performance." (1991: p.17).

This chapter begins by outlining the social and behavioural characteristics of dyslexia. The relevance of the potential role of reading and performance in constructing a dyslexic identity is then considered. Cognitive theories of dyslexic reading, dyslexic strengths and the neurological origin are discussed and contrasted with the ways in which the actors in my research read. Lastly, theories of meta-cognition and distributed cognition are used to explain these experiences.

The social aspects of adult dyslexia

> I went to an audition [and they gave me] a monologue they wanted me to read over. And some of the words, I can't pronounce big words and that frustrates me. It's embarrassing going over to like the receptionist and saying 'Sorry, you couldn't tell me what that says can you?" and I'll go into my phone and Google what it means (Sean, Interview 2012).

Sean's concerns with pronunciation and vocabulary reveal an uncertain relationship with the spoken and written word, a common adult dyslexic experience described by sociologist McDonald (2009b). Historically, research priorities focused on the literacy aspects of dyslexia on children, in the areas of reading, spelling and writing (Backhouse and Morris 2005). However recent definitions of dyslexia have included the cognitive processing aspects of verbal language, that is memory and organisation.[53] Macdonald's work rejects the psycho-medical approach which objectifies dyslexia as a 'condition', and seeks to 'understand social phenomena by analysing individual perceptions' (Macdonald 2009b: 272).[54] Taking this perspective, he finds that for the adult participants of his study, verbal difficulties such as mispronouncing, forgetting words and problems with working memory are a key social problem in adult dyslexia (2009b: 276). Macdonald's participants also suggest that these verbal difficulties often cause more stigmatisation and embarrassment than literacy difficulties, which to a

[53] The British Dyslexia Association defines dyslexia as 'a specific learning difficulty that mainly affects the development of literacy and language related skills. It is likely to be present at birth and to be life-long in its effects. It is characterized by difficulties with phonological processing, rapid naming, working memory, processing speed, and the automatic development of skills that may not match up to an individual's other cognitive abilities' (British Dyslexia Association 2007).

[54] Although MacDonald suggests that the impact of the social should be acknowledged alongside neurological reality (2009b).

certain extent can be hidden through the use, amongst other things, of technology (2009: 275-76):

> I still do get frustrated with not being able to say things… not being able to pronounce things properly… I think it's probably more embarrassment, associated with sort of my speech due to the fact it's so much more obvious. When I do a piece of work it just goes to one person and they'll read it… with speech, it's like you're usually speaking to like a group of people… My worst bits of dyslexia… would definitely be either the speech or short-term memory' (Elizabeth, in Macdonald 2009: 276).

Elizabeth asserts that the 'worst bits' of her dyslexia, her speech and short-term memory, are exposed in public interactions, over and above her reading and writing difficulties, which can be more hidden. Drawing on the work of Merleau-Ponty and his notion of the 'objective body' (1962), and in order to understand the enabling process, it could be suggested that Elizabeth views her body through the objective gaze of medical deficit theorists, as she scrutinises from a distance her cognitive mechanisms (the 'speech and short-term memory'). Psycho-medical labelling of dyslexia has dominated the discourse since the first recorded case in 1876 by Doctor Rudolf Berlin, an ophthalmologist. McDonald (2009b) himself acknowledges the biological ontology to learning differences (alongside environmental factors).

Yet, Leder argues that modern medicine is predicated on Descartes' notion of the 'body' as being dead or inanimate (2001: 117). The threat of death both motivated Descartes' investigations and became part of his methodology (for example his use of dissection). As Leder suggests 'At the core of modern medical practice is the Cartesian revelation: the living body can be treated as essentially no different from a machine' (121). The medicalisation of dyslexia has resulted in the dyslexic learner being placed into a 'in a position of corpse-like passivity' (Leder 2001: 121), subjected to interventions and treatments by the psychology community. When the dyslexic body 'misperforms, this can be explained with reference to mechanical forces' such as working memory deficit, or phonological processing dysfunction (ibid 2001: 122).

However, as Leder points out, twentieth century phenomenologists such as Merleau-Ponty rejected the 'dead body' for a model of the 'lived body' (Leder 2001: 122). This 'lived body' has an intentional relationship with the world. It is an

> intending entity… [meaning] it [the body] is bound up with, and directed toward, an experienced world. It is a being in relationship to that which is other; other people, other things, an environment (Leder 2001: 123).

Elizabeth's objectification of her body is a response to the lived-in world: she refers to the people in the world who will 'read [her writing]' or the 'group of people' who may hear her speech. As Merleau-Ponty suggests:

> Once a body-world relationship is recognised, there is a ramification of my body and a ramification of the world and a correspondence between its inside and my outside and my inside and its outside (1968: 136).

Elizabeth feels that her engagement with the world, Merleau-Ponty's notion of 'bodily intentionality' (1962), is affected by her speech and memory.[55] According to phenomenologist Philpott, dyslexic learners should be understood as having a 'profoundly different intentional relationship with language, relationships which are marked by the peculiar style of dyslexia' (Philpott 2000: 32). This 'peculiar' experience of 'being in the world' can create a sense of alienation and of being exposed, and this may explain Elizabeth's feelings of frustration and embarrassment.

The actors in my research described the social aspects of adult dyslexia in a similar way. Peter is 'always stuck for things to talk about' and he is constantly thinking 'should I talk about that or about that?' (Interview, 2011). Dela is aware that her dyslexia means she avoids particular activities and is more likely to engage in others:

[55] Leder (1990: 123) points out that the term 'body intentionality' has its origins in medieval thought but was revived by Brentano (1973) in the nineteenth century and is central to twentieth century phenomenologists such as Merleau-Ponty (1962, 1968).

> I think that the social cues [in life] can be difficult. Like, if you're at a party and often people have long academic conversations and what I try and do is avoid all of that by looking around or dancing. You know that's how I do it so I'll try and demonstrate in another way. I may not be able to talk about certain things at length but I will demonstrate that actually I'm very good at something else so I always get to dancing; that's what I always do (Interview, 2011).

Dela's choice to engage with the world by 'demonstrate [ing] [what] I'm very good at' reaffirms her identity in relation to the world:

> The body, aware of itself in being aware of the world, stands in a relation 'of embrace' with the world... Each morning I awake to 'that blending with the world' that recommences for me... as soon as I open my eyes' (Wider 1997: 138).[56]

Dela has a set of beliefs about her body: she perceives she is unable to 'talk about certain things' but is a 'very good' dancer. According to Merleau-Ponty, body image is a conscious representation of the body. The body image forms part of the lived body's dialogue with the world. Gallagher suggests that 'A body image consists of a system of perceptions, attitudes, and beliefs pertaining to one's own body' (2005: 24); Dela's body image is revealed because she has consciously thematised her abilities and difficulties.[57]

The impact of social aspects on the individual's lived experience, is key to understanding the participants' reality. Macdonald describes these experiences (with spoken language) as the 'social symptoms' of dyslexia, which distinguish them from other general reading difficulties (Macdonald 2009b: 276, 2009c, 2009d), for, as Rosa suggests:

> the people who have never had a problem with it have no conception what it is like to see words look a mess across the page, your eyes going like this [cross eyed] out of

[56] This is a paraphrasing of Merleau-Ponty's notion that 'the body stands before the world and the world upright before it, and between them there is a relation that is one of embrace' (1968: 271).
[57] Gallagher (1996) discusses how the terms 'body image' and 'body schema' have been conflated by 20th century psychologists.

> sheer panic, and also trying to receive the information the director's giving you. Doing this [reading a script whilst following directions] is like multi-tasking (Interview, 2011).

Rosa's description of her lived experience of dyslexia is inherently sensory and Hollingham describes each individual as living in their own sensory world (2004). Rosa perceives dyslexia as 'it', something apart from herself, and out of control, just as the words are 'a mess across the page' (2011). With her visual and auditory processing difficulties, her body-world unity is disrupted. Her relationship to the world, her body intentionality, is in a perpetual changeable state, subject to 'flux, oscillating within and between modes of perceptual orientation' (Garner 1994: 51) and Philpott calls this the volatile body-intentionality of the dyslexic learner (1998). Rosa is spatially dislocated and there is a sense of 'bodily alienation' as if the sensory world is out of control.

On a pre-reflective level, Rosa's sensory difficulties can be understood in relation to Merleau-Ponty's account of the body schema. The body schema is defined as a 'system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring' (Gallagher 2005: 24). As a dyslexic learner, Rosa's body schema is unsteady in the context of communication and therefore the fluidity of her reading and processing activity is impaired (Philpott 2000: 87).

Philpott explains the result of this unsteady body schema by explaining that activities

> such as blurring or moving words, the inability to recognise words, and the passing over single words or sometimes whole lines of text, can be interpreted as a peculiar slackening of the tensional arc or fold that brings an object and body together in the form of a co-existence and presence (2000: 142-143).

Philpott uses descriptive phenomenology to interpret what is happening at a pre-objective level for the dyslexic learner: a slackening of tension between the body and object (text) (2000: 132-133). He suggests that dyslexic learners can be susceptible to an insufficiency of involvement with the text which results in a diminishing of meaning. The objects of the text (letters, words and syntax) become undifferentiated so that 'all

objects are equally important' (Merleau-Ponty 1962: 287). Rosa experiences verbal and written words as vague, unfixed meanings rather than specific significances. The result of this diminishing of meaning is a disequilibrium (or 'slackening of the tensional arc') between the body (the dyslexic learner) and the object (letters, words and syntax). The learner has overpowering freedom over the objects in the text, and fails to recognise or settle on the fixed meaning of a word, a process which Philpott refers to as a 'dys-location' (2000: 132).[58]

Reading, education and the construction of the dyslexic Identity

Based on Merleau-Ponty's phenomenology of embodiment, the lived experiences of the actors in this research are shaped through dynamic mind-body-world interactions and indeed he 'posited a consciousness caught up in the ambiguity of corporeality, directed toward a world of which it [consciousness] is inextricably and materially a part' (Garner 1994: 27). In a similar way, Frith argues that 'dyslexia' should be conceptualised on four interconnecting descriptive levels: the neurological, cognitive, behavioural and environmental (1999). The combination of the neuro-cognitive mechanisms, 'caught up in the ambiguity of the corporeality' and the print literate environment 'which [the learner] is inextricably and materially a part of', have had a significant effect on the dyslexic individual's identity including his or her sense of self and self-esteem.[59] Identity in education is important because it 'shapes or is an aspect of how humans make sense of the world and their experiences in it, including their experiences with texts' (McCarthey and Moje 2002: 228). In my research, Steve's identity as a dyslexic learner shapes his experiences when reading scripts. Although he understands that, 'when you've got a script, you've got to trust yourself in terms of saying it correctly' he does not trust himself 'to say the line correctly. Not word for word, [being able to] pronounce the word' and is not sure 'What happens when I come across a word and I don't know what the word is in that line?' (Interview, 2011).

[58] This can be taken as a play on words 'dyslexia' and 'dislocation'. It is an extremely useful term which I will use throughout the thesis as a short-hand term for the dyslexic learner's experience of spatial dislocation.

[59] Edwards (1994: 142) depicts the self-doubt and alienation common among dyslexic teenagers and Mortimore and Crozier (2006) reveal the emotional consequences of dyslexia including withdrawal, lack of confidence and being sensitive to criticism.

Steve's question reveals a lack of confidence in his abilities to say the words 'correctly' and he freely admits to not trusting himself to do this (Interview, 2011). He feels that his ability to say the words correctly is beyond his control, revealing a similar sense of body alienation as described by Rosa. It is this alienation which has resulted in his lack of trust and poor confidence in his abilities, a phenomenon which Rosa attributes to the dyslexic learner's common experiences of failure in the classroom:

> I think with dyslexics, or I certainly have this air of low self-esteem when it comes to the written word, and what you read, think and portray. It's from education. When I was discovered to be dyslexic, no one really knew anything about dyslexia, they thought I was naughty, they thought I was lazy, wilful…I was in the corner of the room for most of my school education until the age of eleven when we found out there was a problem (Interview, 2011).

Rosa explicitly links her low self-esteem with her early school experiences.[60] These early interactions with educational professionals had her assessed as 'naughty…lazy…wilful', and in doing so objectified her dyslexic body as something dysfunctional. Rosa reflects upon her early experiences of failure through labels derived from others and this can be interpreted through the notion that, as a child, she conceptualised her body image, thematising it as 'lazy' and 'wilful' through concepts originating from her teachers.

Rosa is conscious too, of the stigmatising affect of the illiterate label (Street 1995), having been exposed to it 'in the corner of the room' during her school years (Rosa, Interview, 2011). The sociological construction of the deviance label was first discussed by Becker, arguing from an symbolic interactionist perspective that

> social groups create deviance by making rules whose infraction creates deviance, and by applying those roles to particular people and labelling them as outsiders. From this point of view, deviance is not a quality of the act the person commits, but

[60] For studies of dyslexia and self-esteem see Glazzard 2010; Humphrey 2001, 2002 & 2003; Humphrey and Mullins 2002a; 2002b; Riddick 1996).

> rather a consequence of the application by others of rules and sanctions to an 'offender.' The deviant is one to whom that label has been successfully applied; deviant behaviour is behaviour that people so label (1963).[61]

Solvang suggests that the use of the deviance label in educational settings has been largely influenced by the medical system (2007: 81). It is Rosa's teachers who applied the deviant label to Rosa, which has resulted in a damaging body image and low self-esteem as an adult. Indeed, previous studies have found a positive correlation between academic achievement, self-esteem and self-concept (Humphrey and Mullins 2002a; Lawrence 1996) and such lack of self-esteem is evident in Connor's picture (Figure 3).

Figure 9: Connor's picture

In contrast to the other participants taking part in the focus group, Connor chose to draw on a small piece of A4 paper, rather than the large A0, perhaps a symptomatic reflection of his lack of self-esteem. He revealed that his portrait, 'actually… says a lot, because I hadn't got the confidence to expand big. I was inward, always, and I found

[61] Interactionism is defined by Abercrombie, Hill & Turner (1988: 421) as an approach which "has its intellectual roots in the concept of the self as developed by G.H. Mead who argued that reflexivity was crucial to the self as a social phenomenon. Social life depends on our ability to imagine ourselves in other social roles, and this taking the role of the other depends on our capacity for an internal conversation with ourselves. Society was conceived by Mead as an exchange of gestures which involves the use of symbols. Symbolic interactionism is thus the study of the self-society relationship as a process of symbolic communications between social actors". The relationship between interactionism and phenomenology is discussed by the University of Strathclyde (2013) and by Lee Bryant (2013).

that with this drawing… I suddenly realised that [I was]'. By not 'expand[ing] big' out into the world, there was a disunity between his body and the world, and an experience of 'inward'[ness].

Barden's case study of 'Heidi' also reveals how poor reading ability can affect a person's identity which includes the individual's sense of self and his or her relationship with others (2009: 294). For some participants in my research, like Rosa and Connor, their early negative experiences with texts and literacy led to a damaging sense of self. For Heidi, her identity was partly constructed out of her membership of a group, the members of which included people who were not technically skilled readers. Another of my participants, Mark explained that:

> when I was at school I used to drink and take drugs and that was when I struggled mostly with dyslexia and I felt like, in those circumstances, all I wanted to do was just get totally off my head and disappear (Interview 2011).

So for him, his struggle 'with dyslexia' led not only to poor self-esteem but also then to alcohol and drug abuse. Due to his volatile body schema, his experience of his dyslexia at school was one of being out of control, in other words, there was a disunity between his mind-body-world. This bodily shift was further compounded by his response which was to take drink and drugs, which led to further disengagement with the world leading to him 'disappear'[ing] as he put it (2011). His desire to 'get totally off my head and disappear' can be interpreted as an escape from the growing sense of disunity between his body-world intentionality, culminating in body alienation and dislocation from the world. Some researchers have argued that the result of years of academic failure is a perceived inadequacy and a reduction in young people's self-respect 'to the point where they 'erase' their 'self'' (Goldfus 2012: 57; See also Goldfus 2007; Burden 2005).

Tim has also built up a sense of self through his body's relationship with the world and this is reflected in his picture below (Figure 10):

Figure 10: Picture by Tim (2011)

He explains the glitter shown in the squiggly line as representing the 'chaos' in his life and continues to explain that:

> I had lots of low self-esteem I suppose and I felt sort of very lonely and I suppose I masked all that and guarded, protected myself and sought solace in heavy drinking and things like that (Tim, Interview 2011).

Tim's response to the 'chaos' and lack of control caused by dyslexia is similar to Mark's, who also sought to protect himself from the consequences of a disrupted mind-body-world engagement; there is a desire by both subjects to desensitise themselves and to become spatially dislocated. In doing so their pre-reflective lived subjective bodies are further disconnected, as their body schema becomes more volatile.

The actor's experience of education and texts has profoundly affected their body image. Barden suggests that such an

> exclusion from the community of readers affects not just behaviour but also identities: the 'otherness' becomes a part of the 'identity kit' in the largely middle-class, print-literate cultural model of school and academic success (2009: 294).[62]

[62] See also Gee 2001; Alvermann 2001; Williams 2003, 2006.

Solvang also refers to an alienation from a particular group when he suggests that 'dyslexics are understood in an 'us and them' discourse, representing a valued social position suppressed by a labelling and pathologising medical system' (2007: 88). My participant, Marcus expressed this exactly: 'Sometimes I feel like I don't sort of fit in, I think that's a big deal that I've always had, I feel sort of on the outskirts of stuff' (Interview, 2011).

Despite these 'other' identities, there are many examples of adult dyslexic learners either studying in Higher Education or working in the professions, who like the research participants, take on the paradoxical label of 'literate yet disabled' (Fassett & Morella 2010: 140).[63] Difficulties with decoding and fluency do not necessary prohibit dyslexic learners from reading or from constructing positive dyslexic identities, however, Grant cites 'several students whose reading skills are so poor that they find travelling difficult because they cannot read the names of stations or roads' (2010: 33). Although most of the students that he meets as an educational psychologist, 'can read [and]… It is not true that dyslexics cannot read', he points out that 'Probably [only] 10 per cent choose to read for pleasure [and]… their reading ability is well below expectation' (2010: 33).

These early negative experiences with education may go some way to explain why dyslexic learners choose acting as a career. Singer (2008) argues that children who are labelled as 'struggling readers' can respond by either lowering their ambition to the level of attainment, or can 'use initially negative experiences to construct identities for themselves as successes by overcoming the obstacles reading puts in their path' and are therefore able to reconceptualise their body image from being 'other' to being 'us' (Barden 2009: 295). [64] In fact a study by Anderson
suggests that empowering reading experiences may play a crucial part in the construction of positive dyslexic identities (2007) and Fink piloted a study of dyslexic

[63] Other studies which identify high-functioning dyslexic learners include: Ben-Dror, Pollatsek & Scarpati, 1991; Bruck, 1990; Gallagher et al. 1996; Lefly & Pennington, 1991.
[64] Solvang (2007) highlights the potential "social danger" of medical labelling of dyslexia.

learners who actually had an avid interest in reading including a number of highly literate dyslexic adults and one Nobel Prize winner (1995).

Supporting this point, Barden's case study examines the paradox of Heidi, a dyslexic learner and drama student who despite being labelled as a 'struggling reader', loved reading (2009). Barden argues that Heidi transformed her identity through a combination of experiences, the first of which was her on-going perseverance and determination, which is a well-known attribute of dyslexic individuals (2009). Secondly she used her lack of confidence and early experiences of failure to identify with the vulnerabilities of the characters she played in her on-stage experiences. She also adopted a pro-active notion of her identity, continually making conscious decisions about her identity and body image, both rejecting public criticism whilst exposing herself to it, and positioning herself as a successful actor.

Heidi's vignette is peppered with references to and metaphors of performance, suggesting that it is performance itself which enabled her to transform her identity. For example, her early attempts to improve her reading are related to acting:

> I remember the warm and cosy feeling I had with my audience of teddy bears, all gathered around me, ready for my 'story time' to begin. I always arranged my audience with care (Barden 2009: 298).

Here she describes her early reading attempts as a young child as performative: from a young age she sets up her 'story time' with an 'audience of teddy-bears' and described the attention she took over arranging her 'audience with care' (Barden 2009). In this scenario, the audience, although inanimate objects, are integral to Heidi's ability to 'perform' or read. The audience of teddy-bears gives her the opportunity to 'play the part of a reader', suggesting that she is engaged in performing the role of a skilled reader (2009: 298).

As a teenager Heidi continued to equate reading with performing, describing an 'exhilarating reading experience, playing the part of Mary Warren in the play *The*

Crucible' (Barden, 2009: 298). The narrative indicates that her lived experience of reading had become 'exhilarating' due to her experience of performing and, in this instance, she had constructed her identity (body image) as a proficient reader through the experience of acting out the role of Mary Warren. However, this positive identity was initially 'road-tested' in her bedroom with her audience of teddy bears. Although Heidi used metaphors of performance to describe her relationship to reading, such as 'audience' and 'playing the part of a reader', these metaphors are in fact literal for her as she acts out 'skilled' reading to her audience of teddies, and later, transforms her identity from a poor to skilled reader by playing the part of Mary Warren (2009: 298). Although it could be that other children, dyslexic or not, act out the storytelling ritual to their toys, the different intentional relationship dyslexic learners have with reading and texts, may mean that Heidi's ritual is perhaps more significant because of it. As Heidi states herself she 'played the part of a reader and in that way I developed a coping strategy' (Barden 2009: 298).

Performance and dyslexic identity

Heidi's narrative suggests that it is not solely reading ability that can have a positive impact on identity, but the experience of performing in itself. In addition to my previous point, this may also help to explain why dyslexic learners become actors, even though they are entering a profession which places heavy demands on the key dyslexic difficulties of memory and reading. Mark, for example, found that acting and perseverance helped him to 'overcome' dyslexia. He drew a dragon (see Figure 11), because he sees 'dyslexia as being [like] a dragon' which acting has helped him to conquer (Interview, 2011).

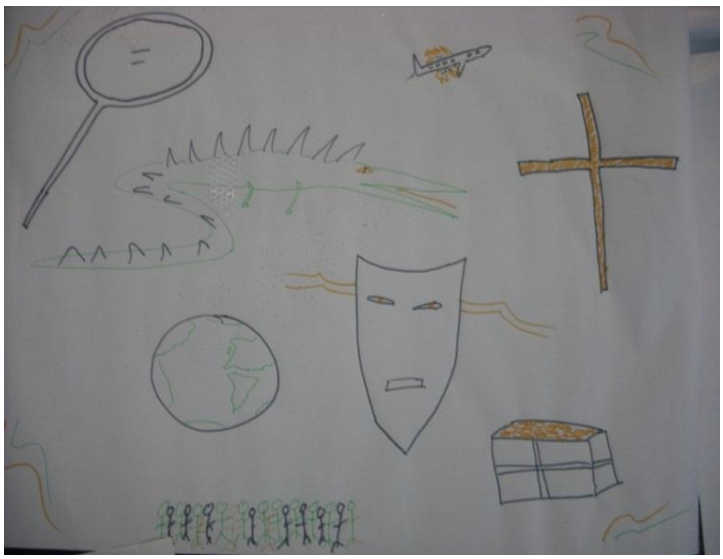

Figure 11: Picture by Mark (2011)

In addition, Rosa talks about the transformative power of acting training to create positive identities. She was an awkward and shy person 'before I did my drama training. That was the person I was and the acting has changed me into the person I am today' (Interview, 2012). Drawing on the work of Hutchins (1995), Tribble describes theatre and performance training as 'dynamic, cognitively rich working environment[s]' (2011: 22), and it is these acting environments that have given Rosa and Mark a new body intentionality or way of being in the world as may be seen in these extracts from their interviews.

According to Zarilli, theatre training is an effective experience which has the capacity to create new modes of extra-daily embodiment (2005). For him the body is not 'a' body or 'the' body but rather:

> A process of embodying the several bodies one encounters in everyday experience as well as highly specialised modes of non-everyday experience or 'extra-daily' bodies of practices such as acting or training in psychophysical disciplines to act (2005: 48).

Garner uses the term 'Embodiedness' to describe such a state of transformation and bodily flux and believes that this

> embodiedness is subject to modification and transformation, [has] multiple and varying modes of disclosure, and… the forms of ambiguity that characterise the phenomenal realm represent experience in flux, oscillating within and between modes of perceptual orientation (1994: 51).

It could be that the actors in my research are oscillating between multiple modes of embodiment. In everyday experience they experience a disrupted body-world engagement, characterised by Leder as the absent body when, 'one's own body is rarely the thematic object of experience', to illustrate which he gives the example of 'reading a book… [and] pay[ing] little heed to my physical sensations or posture' (1990: 1). However the extra-daily practice of acting enables actors to experience 'subtler levels of awareness' (Zarilli 2008: 55) and unify the disrupted body-mind. Zarilli calls this mode of embodiment the 'aesthetic inner body-mind' and suggests that the experience of long-term, in-depth immersion in psychophysical practices like actor training and performing result in

> a shift in one's experience of the 'body' and 'mind' aspects from their gross separation, marked by the body's constant disappearance, to a much subtler, dialectical engagement of body-in-mind and mind-in-body… Over long-term practice, the result is that one's experience of the body and mind aspects of experience can be fundamentally altered, i.e., a subtle inner body-mind is revealed and can be cultivated aesthetically through specific practices (2005: 55).

Taking an embodied approach to biological research, the neurobiologist Joseph LeDoux suggests that such change is made possible due to neural patterning which is a process born of experience and made possible by the plasticity of the embodied brain (2003: 68). In this way we demonstrate that the brain is essentially plastic and not fixed for life. Marcus reveals how acting gives him a new way of being in the world, as there he feels a sense of calmness and control not felt in everyday life: 'when I'm actually performing and acting [I feel I have] succeeded and there is sort of that calmness and all is one, all is right with the world' (2011). In his picture (Figure 12) Marcus reveals himself as being on top of the world:

Figure 12: Picture by Marcus (2011)

This feeling of calmness may be the result of an increased awareness of the body and specifically the breathing and respiratory system, which Zarilli suggests is used to 'stay [more] present in the moment of practice' enabling the performer to attain a 'non-ordinary, optimal inner awareness to be deployed in one's practice' (2005: 57).

Tim also feels that 'once I'm on stage, I feel very safe and very secure in that space and I feel – that's where I feel I'm actually living, alive' (Interview 2011). Such performative experiences enable these dyslexic actors to re-connect with their bodies' experience of being in the world and embrace their bodies' subjective identity as being part of them and part of the world. On stage, the body is 'aware of itself in being aware of the world, [and it] stands in a relation 'of embrace' with the world' (Wider, 1997: 138).

This new mode of embodiment may give the actors in my research a degree of control not experienced in everyday life. For, as Gerber suggests, control is the ultimate key to success for the adult dyslexic, anticipating where the 'dyslexia wild card' will manifest itself, and preparing and strategising for every potential situation, so that the individual is not taken by surprise (Gerber, Ginsberg and Reiff 1992; Gerber 2011). Kat described her on-stage experience as a situation in which

> your reality becomes honed down and you know how many steps to the chair and you take a little route round it and you are going to pick up a cup… you're not surrounded by the chaos... you know how you are doing it... and you know the words you are going to speak – so you don't need to think of the next word and get in a muddle – [in real life] I have great trouble trying to think of words (Kate, Interview 2009).[65]

Thus Kat suggests that her on-stage life is less stressful than her actual life and expresses relief that the challenges of word finding and spatial memory that she is confronted with in everyday life do not exist on the stage. In a situation such as Kate's the rehearsal room and performance space can become places of security for the dyslexic actor. As Philpott suggests in relation to the dyslexic lived-experience:

> What is at stake is not only what modes of experience are primarily dislocated for a dyslexic person, but how they are able to go onto make meaning out of a linguistic situation that is of a more inter-subjective nature, indeed how the dyslexic is able to relocate themselves (2000: 67).

Training and performing have enabled the actors in this study (and presumably others) to relocate themselves within a linguistic environment and make meaning out of it. They have transformed their lived-experience of the objectification of their dyslexic body through early school experiences to subjective experiences of the body on stage. Whilst many of the lived-experiences in everyday life are dys-locating for the actors in this research and add to the sense of a volatile body-intentionality, on stage some of them are able to relocate their body intentionality with the world.

Cognitive accounts of dyslexic reading

The actors' lived experience of their reading and performance process can be further understood in the light of cognitive theories of reading. As Clark suggests 'brain, body, and world are united in a complex dance of circular causation and extended

[65] This interview was originally conducted for and included in my MA thesis 'Dyslexia and acting: synonymous or antithetical? An investigation into the training of dyslexic actors'.

computational activity' (1997: back cover). These conceptual theories describe the cognitive process of knowledge transfer and acquisition. While Barden's qualitative case study points to a number of social factors influential in becoming a skilled reader, control studies by psychologists aim to determine what cognitive processes literate dyslexic readers are using when they read, and if these are any different to those used by the non-dyslexic control groups. According to such empirical research, dyslexic learners have difficulty in decoding many bottom-up, data driven language processes such as phonology (the sound structure of spoken words), orthography (the written rules of language such as punctuation and spelling), graphology (the written symbols) and semantics (the meaning of words).

Early studies by Stanovich and West proposed that lower level processing difficulties (such as phonological processing) are compensated by high-level processes such as contextual facilitation (1981; 1983). This theory is based on the interactive-compensatory model of reading (Stanovich 1980b; Perfetti and Roth 1981), which argues that reading is an interactive process of both top-down and bottom-up processes operating simultaneously during reading. At different stages readers may rely more heavily on some levels of processing than others, and a reader's weakness in one area may be compensated for by his or her use of other processes.

Stanovich (1980a,b) and Perfetti and Roth (1981) found that fluent readers use primarily bottom-up, data driven processing skills; they are able rapidly to decode written words, meaning there is little time or need for contextual facilitation. However, as Philpott suggests, dyslexic learners have 'a different, but still intentional, relationship with the lived world during tasks which involve the use of the written word' (2000: 29). For example, they use greater contextual facilitation than non-dyslexic fluent readers (Nation and Snowling 1998; Corkett and Parrila 2008), using context to compensate for partial decoding. These readers are more likely to be anticipating the meaning of the text before checking the syntax and graphical clues. The meaning of text is absorbed from the descriptive clues available in the context of the passage such as the syntactic context (the structure of the sentence), the semantic

context (the anticipated meaning of the passage) and graphical information such as the look of the word (Reid 2009a: 107).

Eide and Eide suggest that dyslexic learners are particularly skilled at 'gist detection' or finding core meaning in passages of text as they are skilled at detecting the broader context from a concept or message (2011). This skill is not confined to reading, but is something that is utilised in everyday life, and is evident in the actors' use of context, which will be discussed in chapter four. The use of context is one cognitive strategy used by dyslexic learners in order to 'make meaning out of a linguistic situation that is of a more inter-subjective nature… [and] relocate' itself in a linguistic environment (Philpott 2000: 67).

Yet, Galaburda suggests that the use of descriptive clues and guesswork in reading can often result in mispronouncing and misunderstanding familiar looking words and could, according to Philpott be interpreted as an experience which is primarily 'dys-locating' (2000). Galaburda suggests that top-down reading can result in the reader:

> not really reading the word, but only picking up on some visual feature of the word and completing it based on context. If he makes an error in the context, then he 'reads' the words incorrectly. For instance, take the words 'symphony' and 'sympathy'. The words looks similar, especially to one who will not read it letter by letter. If the story in which it appears has a picture of a man in a tuxedo holding a baton, the reader will read the word as 'symphony' even if it says 'sympathy'. Dyslexics rely more on contextual clues, especially visual ones, and sometimes they trip because of it (Galaburda in Whitfield 2009: 261).

By 'not really reading the word' there is a substantial lived-distance between the reader (the body) and the text (object). By 'only picking up on some visual feature of the word and completing it based on context' (Galaburda in Whitfield 2009), the learner is distanced from the text and so the individual meanings of the words 'symphony/sympathy', in this example, and the words 'whole' and 'hole' in the next,

become diminished. The tensional arc between the reader (body) and the text (object) becomes lost and there is a 'dys-location' (Philpott 2000: 133).

Tim also describes what happens when he uses visual clues:

> when I'm learning text - symbols, words, letters, certain chains have natural blocks… certain symbols block my flow, so the rhythm isn't always there and I have to find a way round it. [A] typical example, which really brought it home to me was the word 'whole' in 'someone ate the whole cake' I had to go through the text and change 'whole' to 'hole'. I had to actually physically change it. It broke my rhythm every time. Coz it was visually going across the front of my eye (Tim, Interview 2011).

Tim is 'blocked' by certain visual objects ('symbols, words, letters') and therefore has to 'to find a way round it' by changing the spelling of 'whole' to 'hole'. For him, 'all objects are equally important' (Merleau-Ponty, 1962: 287), as he operates outside the rules of speech-sounds and so spelling rules have no influence on him. Tim's decision to change the text reveals that he has an 'overpowering freedom' over the objects in the text (Philpott 2000: 133).

Deep language processing

Galaburda (in Whitfield 1999) and Snowling (2000) argue that misreading is due to problems with visual and phonological awareness. However, Eide and Eide suggest that misreading is symptomatic of a dyslexic processing strength in perceiving relationships between words, ideas and concepts, which are connected either through similarity, association or cause and effect (2011: 83). This ability could be one mode of experience which enables the dyslexic learner to relocate meaning in an otherwise 'dys-located' linguistic environment (Philpott 2000). Eide and Eide suggest that words or concepts are surrounded by 'a rich network of association and that these associations can become overwhelming and give rise to unintended substitutions' (2011: 95). Examples of substitutions which are structurally similar, involving similar-sounding or looking words, called malapropisms, are evident in Tim's need to

substitute the spelling of ‘whole’ with ‘hole’ and in Rosa’s similar-sounding and looking substitution of ‘blossom’ with ‘bosom’:

> I was doing this play reading, and the line was ‘How beautiful the blossoms are on the trees’… but I kept saying ‘How beautiful the bosoms are on the trees’… It was quite embarrassing! (Rosa, Interview, 2011).

Eide and Eide also suggest that there is a strength in perceiving distant conceptual relationships, called conceptual substitutions. Examples include substituting the word ‘menu’ for ‘itinerary’ in ‘so where are you going next on your menu’? (Steve, Interview 2011). These conceptual substitutions are called paralexic or paraphasic errors or deep substitutions in reading (Eide and Eide 2011: 95-97). A series of control studies found that dyslexic groups had a greater ability to find similarities and likeness amongst visual patterns or verbal concepts than the non- dyslexic control group (Everatt, Steffert and Smythe 1999; Everatt, Weeks and Brooks 2007). Again, the above theory suggests that dyslexic actors have a different intentional relationship with the text.

A positive implication of such a relationship is described by my participant Marcus:

> I like to find other words to express the words that you can't find… the amount of times I've not been able to spell a word and just had to find other words that lead to the word that I'm trying to spell. [This] has made me have a wider vocabulary than a lot of people that I went to school with that didn't have dyslexia (Marcus, Interview 2011).

Such a ‘rich network of associations’ is also evident in the experiences of Kay, who identifies an underlying tapestry of associations beneath the semantic level of words:

> We were doing Restoration here and we did an improvisation session and I found it easier than everyone else to find the bigger character rather than the words if you know what I mean... I always seemed to find the meaning rather than just know the

> words - find the meaning behind it... rather than just reading words (Kay, Interview 2009).[66]

This actor suggests that she is not interested in the literal word, but more in the subtext and associative meanings. For a similar reason Simon Callow has suggested that Chekhov may have been dyslexic as he was

> always [seeking] the subtext, the emotional life behind the word, rather than engaging with the words themselves, which he was notoriously given to paraphrasing (Callow 2002: xix).

Such an approach may suggest a degree of deep substitution that can be characteristic of dyslexic people (Eide & Eide 2011).[67] The strength of being able to perceive distant conceptual relationships was analysed in a recent interview on Radio 4, in which Mark Lawson discussed with dyslexic comedian and actor Eddie Izzard the link between dyslexia and surrealism, and speculated that

> There have been suggestions of a link between dyslexia and surrealism and some people have suggested that poets may be on the spectrum of dyslexia because they go for one word and get another. But there is possibly a connection in your comedy (Front Row 2010).

Eddie Izzard responded by stating that he believes there certainly is

> a relationship between dyslexia and creativity. I believe that dyslexia tends to make you go off in a weird direction. And then you go: 'Oh, that's nice'. And that could well lead to that (Front Row 2010).

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[66] This interview was originally conducted for and included in my MA thesis 'Dyslexia and acting: synonymous or antithetical? An investigation into the training of dyslexic actors'.

[67] These substitutions could also be indicative of the prevalence of synaesthesia in dyslexic learners (1 in 25) (Grant 2010). Ramachandran and Hubbard define synaesthesia as "a condition in which an otherwise normal person experiences sensations in one modality when a second modality is stimulated" (2001: 4). They also suggest that metaphors may also be based on a cross-activation of neurons, as with synaesthesia (2001).
These metaphors could be the "deep substitutions" of dyslexic learners.

This ability to 'go off in a weird direction' may be the key to Izzard's success as a stand-up comic and improviser. It may also imply that specific theatre skills such as devising and improvisation are particularly suited to dyslexic learners. Such learners are thought to have strengths in higher order thinking and reasoning skills such as analysis, evaluation and synthesis (Patterson 2011, West 1997).[68] Indeed, statistics at the Central School of Speech and Drama reveal that 30% of students on the BA Collaborative and Devised strand of the acting course in 2009/10 were dyslexic, a figure significantly higher than the numbers on the BA Acting course for Stage and Screen (8%) (Reynolds, 2010).[69] However, this hypothesis is beyond the remit of this research, as the focus is on text-based rehearsal methods (see research context for rationale).

Jan attributes her story-telling skills to her ability to perceive distant conceptual relationships, and sees a link between herself and other dyslexic actors (the 'we' of the quotation) and believes that such skills:

> made me a very good improviser... we think very quickly... we're very random 'cause we get 'there' and everyone else is still over 'there' and they don't know how we got 'there' (Jan, Interview 2009).

For Jan, improvisation has enabled her to exercise her higher order thinking skills: making connections between concepts and ideas. For Steve, drama was an attractive option at school because

> there [were] no rules. In English, maths you had to do it this way – you had to be good at numbers... with drama you could do improvisation and you were free… you could actually express yourself without anyone telling you were wrong and it was just nice to be in that element (Steve, Interview 2011).

[68] Higher order reasoning skills defined in Bloom's Taxonomy (Anderson et al. 2001)
[69] These figures include those studying on the BA Devised & Collaborative Strand across years 1,2 and 3 during the year 2009/10. Figures for 2008/09 & 2010/2011 reveal the same pattern.

The freedom to 'express yourself' in the context of the drama class was thus liberating for Steve. Without the constricting binary 'rules' of 'right' and 'wrong' in subjects such as maths, he could be free to express himself knowing that there would be no judgement, either from peers or from the drama teacher. In the drama classroom, Steve was able to transform his identity as a dyslexic learner from, being, in Barden's terms, 'other' to being part of an 'us' group (2009).

Similarly Lyn Darnley[70] believes that

> the drama class for children who are dyslexic is very, very freeing because [of the lack of] boundaries... it's learning that is book-less. I have this theory about improvisational skills of dyslexic people and I think if they have strong improvisational skills that would certainly be something that led you into acting. The world is your oyster. I think that dyslexic children learn to improvise. It's a guessing game. And they improvise, it's what they have (Interview 2011).

High psychometric scores in perceptual reasoning and verbal comprehension (as discussed in chapter one) suggest that dyslexic learners have a wealth of general knowledge, gleaned from the physical environment (Grant 2010). This empirical evidence backs up Darnley's point that 'dyslexic children learn to improvise', however this skill is not confined to the drama class but is also evident in the life narratives of my participants. Having atypical relationships with texts has led them to derive meaning from non text-based sources in the environment such as visual, auditory and physical clues.

[70] Lyn Darnley is the Head of Text, Voice and Artist Development at the Royal Shakespeare Company.

Bound by the word: The actors' upside-down models of reading

> In order to understand classical text one has to be able to negotiate long, written thoughts, before they can be made into long, vocal thoughts; and I think dyslexics have a lot of trouble with that negotiation of a long thought, because they become word bound rather than phrase bound (Darnley, Interview 2011).

Despite the evidence to suggest that dyslexic learners frequently make use of top-down, concept driven language processes to aid in comprehension, the participants in my research frequently adopted a bottom-up, data driven approach to text in sight-reading contexts. This approach means that they were, as Lyn Darnley suggests, 'word bound', focusing on the component parts of words, letter-by-letter, and were more concerned with pronunciation, exact meaning and phonological issues than with deriving gist and context. In sight-reading tasks, they reported that they often found it difficult to progress beyond the letter-by-letter approach, and so they were not able to make guesses based on the whole phrase. This is problematic, bearing in mind that dyslexic learners may show greater comprehension for longer passages as they contain more contextual clues than shorter passages (Eide & Eide 2011: 92).

Rather than using the whole phrase and context to create meaning, the actors in this study were 'bound' by individual words. For example, the sense of being constrained by the written word is evident in Rosa's choice of netting material in her picture, (Figure 13 below) which, she explains, was used 'because it represents a cage; the words and the letters are like being in a cage or prison' (Rosa, Interview 2011).

Figure 13: Picture by Rosa

Rosa describes how the written word both 'cages' her and disrupts her body-world connection. In this context, the words on the page have become 'restrictive potentialities' (Merleau-Ponty, 1962: 165), and appear inaccessible for the dyslexic learner. The disconnection between Rosa and the (written) world adds to a sense of body-world alienation for her.

The bottom-up approach to text is expressed in this image of being 'caged' by the words. It is also evident in Sean's description of his audition process (quoted in part earlier):

> I went to an audition [and they gave me] a monologue they wanted me to read over. And some of the words, I can't pronounce big words and that frustrates me. It's embarrassing going over to like the receptionist and saying 'Sorry, you couldn't tell me what that says can you?' and I'll go into my phone and Google what it means. I would not even worry about the character, didn't even know what it was about, I would just go through it and see what the hard words are and try and pronounce them. And I would spend that 10 minutes trying to pronounce them and then I'd be like 'oh, what's the character again' you know? (Sean, Interview 2011).

Cognitive theorists such as Snowling (2000) and Fawcett and Nicolson (1992) would suggest that Sean is stuck on the 'big words' due to cognitive difficulties with phonological awareness and a difficulty in making new words automatic. However, his identity as an 'other' or unskilled reader is such that it stops him from thinking about his character or gleaning information from the context of the script. In relation to this problem Salter suggests that

> if you have got dyslexia and you are worried about reading, and you are worried about getting it right you can get lost in being stuck on the language instead of being stuck on the drama… And I think that this sort of being very stuck on what the exact words are on the page feeds right into a dyslexic difficulty (Interview 2011).

Similarly, Steve is overly focused on the phonological and semantic level of text:

> any time I get given a new piece of writing, or text [in an audition] the first thing I do is I see how many difficult words there are, how long the script is, how long my part is… I think okay it's not too bad, I can handle that. So I think to myself - what does that word say? And I get my iPhone and check my word and then I think all right good, right, I'm ready! (Interview 2011).

Taking case studies of patients with aphasia, otherwise known as 'acquired dyslexia', Merleau-Ponty sought to describe the way in which the patients experience a loss of action, in this case the loss of expression.[71] Philpott argues that Merleau-Ponty's aim was to try and describe

> how the aphasic's use of language presents itself in a way which has profoundly different lived meanings from non-aphasics, i.e. as problematic, difficult, uncertain etc. (2000: 29-30).

[71] Merleau-Ponty discusses aphasia in the chapter 'The body as expression and speech' in *Phenomenology of Perception* (1962). The NHS define aphasia as "a condition which affects the brain and leads to problems using language correctly. People with aphasia make mistakes in the words they use, sometimes using the wrong sounds in a word, choosing the wrong word, or putting words together incorrectly. Aphasia also affects speaking and writing in the same way. Many people with the condition find it difficult to understand words and sentences they hear or read… Aphasia is caused by damage to parts of the brain responsible for understanding and using language" (National Health Service (NHS) 2012).

For Sean and Steve, there is a similar loss of expression in not being able to 'pronounce big words' or know 'what it means'. The participant's relationship with text is characterised by an underlying uncertainty, which is a particular dyslexic style of being in the world. In addition, Philpott suggests that dyslexia can be related to Merleau-Ponty's account of spatial attunement where

> in a textual linguistic situation,… there is a slackening of the tensional arc between body and world and hence a peculiar deprivation of meaning for the dyslexic (2000: 131-132).

He argues that:

> dyslexia seems to be marked by a loss or loosening of location. This tendency is characteristic of an overpowering freedom which results in the dyslexic failing to settle upon a fixed meaning which is representative of the previously mentioned 'common property world'. I interpret this as such: the dyslexic has a style of engaging with the linguistic world that suffers from a lack of fixity, and the inter-subjective correlate of such a style is such that the dyslexic falls outside of the rules of speech-sounds, spelling, grammar and syntax encompassed by a 'common property world' (Philpott 2000: 133).

Meta-cognition and distributed cognition

Up to this point in the chapter I have used a largely phenomenological-based approach to describe dyslexic actors' experiences with both verbal and written language and their identity. In order to examine the possible causes of these experiences, I will now turn to causal theories of meta-cognition and distributed cognition. As previously outlined, the participants in my research frequently adopted a bottom-up, data driven approach to text in sight reading, which although they acknowledged as problematic, they continued to employ. This way of working is contradictory to the majority of dyslexia and reading research which indicates that 'literate' dyslexic readers often rely on top-down concept-driven processes such as context in order to compensate for

poor decoding and working memory function. In order to explain this 'bottom-up' phenomenon I will refer to research in the field of dyslexia and meta-cognition.

'Meta-cognition' was first defined by Flavell as the process of consciously knowing about the ways in which we think and learn and a taking control of these cognitive processes (1976).[72] Meta-cognition is thought to be a key factor in understanding the learning development of students with learning disabilities (Wong 1991; Butler 1998; Perfect and Schwartz 2002; Sodian and Frith 2008). Research into dyslexia and meta-cognition suggests that dyslexic children do not spontaneously develop the meta-cognitive skills of self-monitoring and regulation and some have argued that this is due to early experiences of failure which have undermined their motivation to take control of tasks (Reid 2005). This history of failure can be self-perpetuating and result in a pattern of learned helplessness (Ellis and Larkin 1998) and in academic settings, this can result in the body image of a 'misfit' (Williams et al. 2001). A lack of meta-cognition may go some way to explain the actors 'upside-down' approach to reading text: they have been adopting the wrong strategy for themselves.

Yet, social disability theorists may view the meta-cognitive explanation as symptomatic of a medical model of disability, which places the responsibility on the individual, rather than on wider social structures. It is, however, the use of a distributed account of cognition (as outlined in chapter one) which indicates that the immediate environment may further account for the participants' bottom-up approach to text. According to embodied/extended cognition theorists, the actors' cognitive processes are not isolated from their internal cognitive and neurological mechanisms. In a systems-based account of cognition, dyslexia 'cannot be understood in its development or function as strictly localised within one level of analysis' (Clancey 2009: 17). Similarly, Frith argues for a multi-level descriptive analysis of dyslexia which encompasses neurological, cognitive, behavioural and environmental levels of description (1999). For, as William Clancey suggests:

[72] For an overview of key definitions of meta-cognition see Goldfus 2012).

> we cannot locate meaning in the text, life in the cell, the person in the body, knowledge in the brain, a memory in a neuron. Rather, they are all active dynamic processes, existing only in interactive behaviours of cultural, social, biological, and physical environmental systems (2009: 28)

Similarly, the actors' intentional relationship to text should take account of the immediate environment they work in (the industry) and the social surround (society at large). This account of cognition builds on Merleau-Ponty's focus on the significance of the subject-body in perception and expression and the body's relationship to the world. According to distributed cognition, cognition is both embodied and extended out into the world:

> the immediate and social resources outside the person – participates in cognition, not just as a source of input and a receiver of output, but as a vehicle of thought (Perkins 1993: 90).

In contemporary Western society, the 'immediate and social resources outside the person', that is written and verbal language, are the dominant cognitive tools or 'vehicle of thought'. Stafford suggests that there is a,

> cultural bias, convinced of the superiority of written or propositional language, that devalues sensory, affective, and kinetic forms of communication precisely because they often baffle verbal resolution (1999: 23).

Similarly, Barry argues that there is a 'prejudice for the verbal and against the visual' (1997: 139). Some dyslexia theorists have attributed this cultural bias to the cause of dyslexia, for

> In order to be able to speak of dyslexia, we need to live in a society based on reading and writing. In this sense, Gutenberg can be said, not only to have invented the art of printing, but also conditions for dyslexia (Danermark 2001: 58).[73]

[73] Danermark also acknowledges that "the brain dysfunctions and the characteristics of our society constituted necessary conditions for the phenomenon we call dyslexia" (2001: 58).

Inclusive learning practitioners such as Riddick have argued that dyslexic restrictions or barriers to learning are created partly by a literacy-based society (2000). MacDonald terms this the rise of the 'text-based information society', implying that in Western culture knowledge is communicated primarily through written text (2009a: 350). Moreover, Cooper states that society privileges certain cognitive skills over others, such as the early learning of literacy, linear sequencing and working memory, and has mistaken them as a sign of intelligence (2009). This cultural bias is evident in the economic market, as general employment now requires some degree of literary skill (Macdonald 2009b: 275; Perrin 1997).[74]

For modern-day dyslexic learners, the privileging of the written word has led to the creation of disabling barriers and the exclusion of other types of 'literacies' such as the visual and kinaesthetic. The term 'critical literacy' has been devised to describe this process of privileging of certain literacies (Reid 2009a).[75] The supremacy of the written word in modern society is also reflected in the principles and practices of the industry that actors work in. These practices are largely text based. According to Lyn Darnley,

> acting is not book-less, acting is very much connected, in the profession, with the very thing that is the problem, with text. But the minute you go into professional acting that is text based, you are actually walking into the lion's den... because the currency is the written word and so you have to get beyond that (2011).

According to Annett the prevalent industry auditioning model is sight-reading which,

[74] Macdonald's participants viewed literacy as a vital attribute necessary to achieve success in modern society, finding that advanced literacy is the foundation of employment and education (2009b: 275).
[75] Ehardt argues that prior to this social change, the visual and kinaesthetic abilities of the dyslexic was an evolutionary advantage in early hunter gatherer communities, as the ability to perceive whole ideas and problem solve, enabled survival skills such as the construction of tools and shelters and the development of navigation skills (2009). He suggests that dyslexia may have been a strategically designed adaptive solution, which has since been undermined by the introduction of the printing press, although is still evident in modern hunter-gatherer communities.

> has become a vital skill for an actor; it is very unusual to be offered a job... without having been asked to read from the script at some time during the [audition] proceedings (2004: 8).

Wyn Jones (Head of acting at the Guildhall School of Music and Drama) agrees with this, making the point that

> Sight-reading – to read a script out loud with little or no prior rehearsal – has become the most usual method in all branches of the media of testing an actor's talent and suitability for a role (in Annett 2004: 9).

The dominance of written and verbal language is also revealed in Steve's picture (see Figure 14 below).

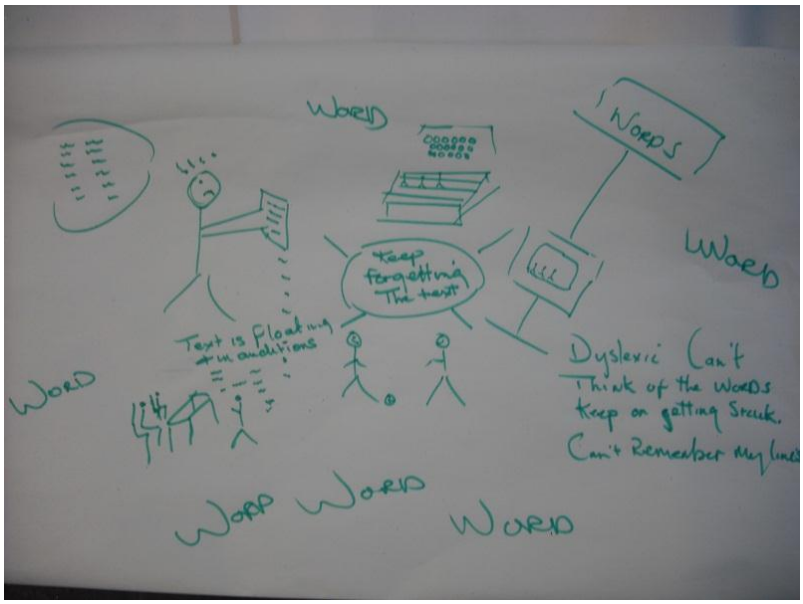

Figure 14: Steve's picture

For Steve, the repetition of 'Word' in the picture indicates the dominance of cognitive tasks involving verbal and written language: reading text, remembering it and retrieving words in spoken conversation. In the picture he writes that he 'keep[s] on getting stuck', which could be described as a breakdown in the pre-reflective subjective structures of perception (Philpott 1998). This breakdown in perception is attributed to his involvement in the profession of acting which is all about

> words... it's just constant, you've got to be constantly learning scripts, constantly reading, you've got to be on top of your reading (Steve, Interview 2001).

For the actors in this study, text and sight-reading has become a 'vehicle of thought' (Perkins 1993: 90). Their bottom-up approach to text is, in part constructed out of the privileging of certain literacies, in this case the written and spoken word. The hierarchy of values imposed on dyslexic actors by a text-based industry, means that they can get 'stuck' on a bottom-up approach to text, with an over focus on the phonological and semantic level of text.

Conclusion

The actors' intentional relationship to text is a result of a dynamic brain-body-world interaction. Social, environment and neuro-cognitive levels of descriptive analysis are evident in their lived experience of dyslexia and acting. These interactions have shaped their relationship to texts and in turn their body image, identity and body schema. Despite examples of 'dys-location' between the written word and the dyslexic learner, performance has enabled them to potentially create a new body intentionality and body image and transform their identity from being 'other' to being 'us'. The next chapter will explore ways in which the actors in this research are able to relocate themselves and make meaning out of a linguistic situation. I discuss the participants' lived experience of the training and rehearsal methodologies of Stanislavsky. Specifically I discuss Stanislavsky's actioning (Merlin 2007) with its emphasis on linear sequencing and language skill in contrast to active analysis (ibid 2007) with its focus on non-linear and non-verbal cognition.

Chapter Three: Approaches to rehearsal: Stanislavsky, actions and temporality

> after a minute Humpty Dumpty began again. 'They've a temper, some of them — particularly verbs: they're the proudest — adjectives you can do anything with, but not verbs — however, **I** can manage the whole lot of them!' (Carroll 2009)

Lewis Carroll's character Humpty-Dumpty suggests that of all words in the English language, verbs are the 'proudest' and perhaps then the most difficult words to make meaning out of. Despite the difficulty he is still able to 'manage the whole lot of them!', and create a meaningful intentional relationship with them. His confidence with verbs and with words in general is in contrast to the actors in my research who describe a 'dys-located' relationship to verbs and to the rules of English grammar in general. Ross describes how he saw

> people when I was at drama school, people going and annotating all their text and doing actions [verbs] and objectives and I'm thinking I need to do that and I'm thinking that's a structured way and I want to do that. But all through my life I've never been a structured person (Ross, Interview 2012).

Ross' frustration with the analytical aspects of Stanslavski's system, namely identifying actions and objectives (Stanislavski 1936) reveals the underlying difficulties with decoding written text, a common dyslexic characteristic identified by Snowling (2000). Ross connects these techniques with 'structured' ways of working, indicating that approaches which require linear structure and sequencing can also create a sense of 'dys-location' for him as an actor.

This chapter outlines previous empirical studies into the cognitive processes of actors and locates these findings within the material and social practices of Stanislavksi (1936). It describes the participants' lived experience with these methods (such as the use of 'beats', actions and goals) and discusses how these techniques are predicated on both linear-sequencing (using Lakoff and Johnson's (1980; 1999) source-path-goal image schema) and literacy and language experience, which are both key areas of dyslexic difficulty. The use of these methods in contemporary practice is outlined, with

examples from the directing practice of Max Stafford-Clark (Out of Joint theatre company) and David Mamet's methodology of 'Practical Aesthetics'. The preferred working methods of the participants in my research are discussed, using the conceptual metaphor of reason versus emotion and there is finally an exploration of the use of Active Analysis, as a training method and methodology potentially more suited to dyslexic learners.

How actors prepare for roles: Stanislavsky as a cognitive artefact

The historical and on-going influence of Stanislavskian-based practice in UK drama schools and the industry is well documented (Moseley 2006; Shirley 2012; Jackson 2011; Gillet 2012). Additionally, a number of Stanislavsky-based techniques are evident in the empirical studies of Noice and Noice, who sought to identify the cognitive processes inherent in an actor's preparation for a role (1996, 1997, 2002, 2006). Their studies revealed that actors firstly process text at a micro-level in order to derive information essential to role interpretation, an approach which has been called 'deep processing' (1996).[76] Micro-level text analysis involves the segmentation of the script into the 'beats' of the scene and identification of the character's objectives (Noice & Noice 1997, 2006). They explain this as follows:

> Actors also determine the goal of every utterance of the character, breaking down the scripts into what they call 'beats' (the smallest goal-directed chunk of dialogue). The beats lay out the entire route as a causal chain. For example, one actor divided a half page of dialogue into three successive beats: 'to flatter', 'to draw out', and 'to allay his fears'. That is, the character first flattered the other character; then, when the flattery appeared to work, she drew him out, which, in turn, allowed her to allay his fears (Noice and Noice 2006: 15).

Underlying Stanslavski's method of determining beats and goals is a linear 'causal chain' of action (Noice and Noice 2006), described by Stanislavsky as the 'through-line of action' (or simply 'through-action') (Stanislavski 1937). He explained this as being:

[76] The next stage is active experimentation which is discussed later in the chapter.

> the active attainment of the super-objective. Thus the super objective and the through action represent creative goal and creative action, which contain in themselves all the thousands of separate, fragmentary objectives, actions in a role. The super-objective is the quintessence of the play. The through-line of action is the leitmotif which runs through the entire work (Stanislavski 2000b: 78-9).

Drawing on the theory of distributed cognition, Tribble argues that the actors in the Noices' study are embedded in specific and historically situated material and social circumstances (2011). The techniques are not innate to the actor's cognitive process, but are based on a number of material practices, namely the historical and socially situated early methodology of Stanislavsky (1937). These methods have become integrated into the Western actor's cognitive process, making these artefacts (beats and goals) invisible.[77] The techniques

> pre-suppose a deep knowledge of the whole play, and in particular of other character's actions and reactions to their character… the psychological presuppositions that underpin these practices are derived from modernist principles and practices that value subtext over text, and that assume that what a character is saying is not what he means (Tribble 2011: 10-11).

Moseley also highlights the socially distributed nature of Stanislavsky's methodology, arguing that he was 'a man of his time, and his thinking reflects that time' (2006: 6). The methodology places almost complete emphasis on the individual mind, on the individual's imagination, emotion and free-will and is underpinned by the ego culture that Stanisavski grew up in. According to Moseley, Stanislavsky's concept of a through-line of action owes much to modernist principles of self-determination and individual free-will, arguing that

[77] Both Carnicke (2010) and Merlin (2009) discuss the differing terms used for the word 'beat'. Carnicke points out that "action begins with breaking down the play into segments, what Stanislavski calls 'bits' and what have come to be known as 'beats'" (2010: 15). Merlin points out that Elizabeth Hapgood's translations used the term 'unit' rather than 'bit' (2009: 71).

> The concepts of 'the through-line of action' and of slipping seamlessly from one objective to the next, from one emotion point to another, all as part of a meticulously planned mise-en-scene, give us the [false] impression of the individual as a coherent and independent whole, whose existence transcends the social environment within which he finds himself (Moseley 2006: 9).

Cognitive philosophers and linguists may view the through-line of action as a source-path-goal conceptual metaphor which has developed out of the body's experience of being in the world (Lakoff and Johnson 1980, 1999). These mental structures help us to structure our understanding of various spatial and bodily experiences which are then conceptualised through metaphor. According to the theory, the source-path-goal schema is created out of the body's early experiences of crawling from a start to an end point and is also evident in life narratives with a beginning, middle and end such as a 'career-path' (McConachie and Hart 2006: 2). Inherent in this metaphor is the image of a linear path, with each event building on from the previous one, towards a final destination. The through-line of action employs a source-path-goal conceptual metaphor: this concept 'thread[s] together all… actions into the unified core of the through-line of action, which is leading [the actor] towards his super-objective' (Knebel [Pushkin] 2003: 27). There is a linear chain of events which leads the character from a start to an end point in the narrative. Using this method, the actor studies the 'source' or given circumstances of the character at the beginning of the play, then determines the character's super-objective or 'goal', and then constructs a chain of causal actions (the path) to achieve this goal.

Dyslexia, temporality and the 'through-line' of action

> I know I have the best of time and space - and that I was never measured and never will be measured. Whitman (2009: 57)

Dyslexic learners are, however, thought to have a different intentional relationship to techniques which employ a linear source/path/goal image schema such as the

'through-line of action'. Cognitive psychologists and neurologists have examined the dyslexic learner's relationship to sequencing with the objective gaze of deficit theories (Merleau-Ponty 1962). Geschwind and Galaburda (1999) suggest that areas of the brain involved with perceptual processing are, in dyslexic individuals, anatomically different to non-dyslexic brains. Non-linear perceptual processing may be the cause of difficulties with linear sequencing as different sensory information is being received and decoded at different or haphazard times, and sensory information often overlaps. From a medical perspective, this has been termed the 'perceptual processing deficit', which is characterised as an interruption in a so-called 'sequence' of steps that begins with the environment and leads to the perception of stimuli and subsequent action; a subdivision of this is auditory processing (Geschwind and Galaburda 1999). Some educational practitioners such as Mortimore (2008a) have suggested that a weakness in working memory, as outlined in chapter one, may make remembering sequential information problematic.[78]

Yet, applying a phenomenological approach, Philpott is able to critique the assumptions about temporality and the nature of time underlying these deficit theories. According to him, deficit theories of memory and perception

> have treated memory as though it were the cognitive equivalent of a physical reality… This notion of memory… falls prey to many of the criticisms we have already seen Merleau-Ponty level at schools of intellectualism, including a notion of time which is linear and spatial (Philpott 2000: 218).[79]

Merleau-Ponty (1968) suggests that remembering past events and the phenomenon of forgetting are examples which challenge the notion of temporality, that is, the nature of time, as ordered sequentially. The notion of time, which is linear, is evident in the

[78] For other empirical studies which examine dyslexia and temporal processing see Share et al. (2002); De Martino et al. (2001); Rey et al. (2002); Tallal (1980). See Ramus (2003) for a literature review.

[79] 'In the first case consciousness is too poor, in the second too rich for any phenomenon to appeal compellingly to it. Empiricism cannot see that we need to know what we are looking for, otherwise we would not be looking for it, and intellectualism fails to see that we need to be ignorant of what we are looking for, or equally again we should not be searching' (Merleau-Ponty 1962: 28).

Stanislavskian-based rehearsal practice of the (non-dyslexic) director, Tom Latter, who I interviewed. Tom begins the process of 'deep processing' text by 'breaking a scene down into chunks [otherwise known as bits/beats/units], and then using those points that we had identified as a group, as markers' (Latter, Interview 2010). He works

> in a linear progression, from the beginning of a scene through to a slightly bigger event, then through to the key event, and then through to the level of the stakes being much higher – it's a graph, as I chart in my way of working (Latter, Interview 2011).

Thus Tom's 'graph' process moves in a linear way from one event to the next, and as with empirical approaches, 'conceives of time as a linear and spatial phenomenon, that is, a chain of discrete moments moving from past to present, and into the future in a serial order' (Philpott 2000: 219). In contrast with such a serial and linear model of time, the phenomenological tradition has, in general, treated time as 'an evolving structure which has a certain depth or spread, a depth which is the co-existence of the past, present, and future' (Philpott 2000: 220). The notion of time as such a structure which 'spreads' past, present and future is evident in the process of a dyslexic actor that Tom Latter worked with, as

> this actor felt that he had never fixed in his mind a linear progression [of the play]… What he wanted to talk about was individual moments, and it was much more scattered. So he would talk about 'this bit relates to this bit', you know, 6 scenes later, and over here… It was useful for him, but it wasn't useful for my processes, my approach to it, so in that specific in-depth text analysis of a scene there was difficulties (Latter, Interview 2010).

For this actor, time had a 'certain depth or spread' (Philpott 2000: 220) which was 'scattered' amongst 'individual moments' of past, present and future (Latter 2010). Merleau-Ponty believes that time is

> not a multiplicity of linked phenomena, but one single phenomenon of running-off. Time is the one single movement appropriate to itself in all its parts, as a gesture

> [which] includes all the muscular contractions necessary for its execution... It is nothing but a general flight out of the Itself, the one law governing these centrifugal movements (Merleau-Ponty 1962: 419). [80]

In contrast to Tom's own linear process, the dyslexic actor who he worked with did not link the phenomena of past and present in a linear narrative. Rather, time was perceived as a 'single phenomenon of running off' (Merleau-Ponty, 1962: 419). According to Merleau-Ponty, time is a 'general flight out of the Itself' and is shaped in the activity of consciousness. Additionally, time does not belong to an objective order, but comes into being through the dynamic and fluid interaction between the world and consciousness (Romdenh-Romluc 2011).

Philpott (2000: 255) argues that 'the dyslexic's style of temporisation is marked by an unpredictable and transient collapse of difference' between the temporal horizons of past, present and future and that

> what is different about the dyslexic's style of temporalisation is a propensity to briefly flatten out the depth of time, a depth which consists of the horizons of our whole past and all our futures to come, and thus such flattening out of time can be understood as dyslexics losing their sense of a past and an impending future (ibid).

The American actor Fred Newman describes how, because of poor working memory, his 'dyslexia forces [him] to continually live in the moment, to be more creative… that's all I have' (Newman 2012). For him, there is a loss of the past and of an impending future. Time has been 'flattened out' and he lives only 'in the moment'. Philpott suggests that this depravation of temporal horizons results in 'a current present existing almost entirely as an autonomous entity' (2000: 256).

[80] Merleau-Ponty was influenced by the earlier thinking of Bergson (1910). However, he rejected Bergson's concept of time and multiplicity which separates time and space. As Deleuze, (1991: 115–118) suggests, in phenomenology, the multiplicity of phenomena is always related to a unified consciousness. In contrast, in Bergsonism, "the immediate data of consciousness" are a multiplicity (Lawlor and Moulard Leonard 2013).

The actors in my research described a similar non-linear way of engaging with the world. Ross perceives time as a 'phenomenon of running-off' (Merleau-Ponty 1962). In Ross' drawing (Figure 15):

> the squiggly lines were kind of representing my thoughts and process, because when I do anything – prepare for a role, write an email, my route to getting where I want to be is always a bit all over the place (Interview 2012).

Figure 15: Ross' picture

Ross describes his process using the source-path-goal metaphor of 'my route' whilst acknowledging that his route is 'always a bit all over the place'. The 'squiggly lines' echo Merleau-Ponty's belief that 'There are neither absolute lines nor points nor colours in the things' (1968: 195). Ross' 'lines' or source-path-goal image schema are not absolute or fixed. Rather, they are determined by his bodily experience of being in the world: his 'body-intentionality'. His engagement with the world is in a constantly shifting state and so there is no one fixed 'route' (Merleau-Ponty 1962). According to the conceptual metaphor theory, the construction of a non-linear source-path-goal image schema is created out of the body's experience of being in the world (Lakoff and Johnson 1999). There is some evidence that dyslexic babies experience a delay in motor milestones such as crawling, and in some cases they omit the stage of crawling

and ‘just get up and walk’ (Foundation for Research and Exploration of Mind Motivation 2012; Schneider-Zioga 2012; Saviour & Ramachandra 2006; Stein & Walsh 1997). In these instances, it could mean there is a lack of bodily experience of the body crawling from a start to an end point (as mentioned earlier) and so the course-path-goal image schema is not constructed. Perception, thought and language is shaped by the body’s experience of being in the world and as Lakoff suggests

> We are neural beings… Our brains take their input from the rest of our bodies. What our bodies are like and how they function in the world thus structures the very concepts we can use to think. We cannot think just anything – only what our embodied brains permit (Lakoff in Brockman 1999).

The actor’s perceptual schema is primarily determined by the body’s interaction with the world. Paul, for example, conceptualises time as a ‘single phenomenon of running-off’ which is spread, stretchable and self-differentiating (Interview 2011). When describing his picture (Figure 16 below) he suggests that he ‘put two squares in the middle just to say that with dyslexia it’s sometimes really bad, sometimes it's not’ (Paul, Interview 2011).

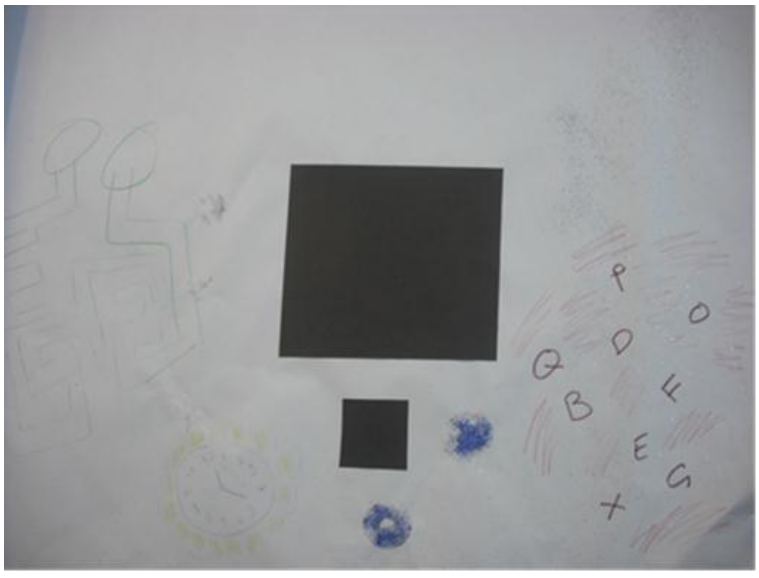

Figure 16: Paul’s picture

For Paul, his experience of dyslexia is unfixed and changeable, and is connected to the perception of time as stretchable and evolving. As a result ‘all these things that

surround the squares are like numbers, like time, being late, structure… they are all floating around and get everywhere' (Paul, Interview 2012). Thus it can be seen that Paul's concept of the nature of time and consciousness is determined by his embodied experience of the 'flux of phenomena' (Merleau-Ponty 1962-49-50).

The participants in my research also described a non-linear and evolving engagement with the world of rehearsal and training. Ross suggests he is

> not good with the script and stuff like that, I think dyslexic people are more like players**,** we like playing… we don't like structure… I've seen people when I was at drama school, people going and annotating all their text and doing actions and objectives and I'm thinking I need to do that and I'm thinking that's a structured way, but all through my life I've never been a structured person so it's like you need to find your own – you really need to find your own way of doing it (Ross, Interview 2012).

Ross' body intentionality, his engagement with the world, is disrupted when he is subjected to the 'structured way'[s]'of using actions and objectives. He believes that such structured methods are the antithesis to 'playing', and describes dyslexic people as being 'more like players' and thus out of step with such structured methods. Philpott is concerned with how dyslexic learners like Ross 'are able to go on to make meaning out of a linguistic situation that is of a more inter-subjective nature, indeed how the dyslexic is able to relocate themselves' (2000: 67). Ross has to 'find [his] own way of doing it' through other modes of experience which relocate him within a structured environment. He suggests he is a 'player' whose process is 'a single phenomenon of running-off' and which is not bound by the 'absolute lines nor points' of beats, goals and actions (Merleau-Ponty 1962: 419, 1968:195).

Paul, like Ross, also perceives actions and objectives as the antithesis of being creative. He points out that 'trying [to prepare for a role] in a very structured way using beats, actions and objectives is really unhelpful, rather I found using all these side-ways, a less structured way, was maybe more creative' (Interview 2012). Paul's description of

working ‘side-ways’ may link to Philpott’s description of time as having ‘a certain depth or spread, a depth which is the co-existence of the past, present, and future’ (2000: 221-220). These ‘side-ways’ enable Paul to relocate himself within the structured environment and established a different, but still intentional, relationship with the lived world and this ‘side-ways’ approach is discussed in the latter half of this chapter.

Dyslexia, language skill, and the use of actions

> I think my actioning was a problem for me. We were given the action book at drama school and they’d say things to me like ‘what action are you using’? And I didn’t know what word I’d use to describe what I was doing, and also when I’d found that word, I wouldn’t know how to find another one, a different action (Ross, Interview 2012).

Philpott (2000: 257) suggests that temporalisation is disrupted for dyslexic learners most notably in situations where use of the written word is required and the actors in my study frequently described a disrupted body-world engagement when faced with applying actions and objectives to text. As already discussed, the dyslexic body has been objectified in the fields of psychology and neurology, through the gaze of cognitive and neurological deficit theories. Some cognitive psychologists would suggest that Ross’ experience of using actions reveals underlying cognitive difficulties with both word finding and vocabulary. Word finding, a discrepancy between knowing a word and being able to access that same word for spontaneous usage (German, 2000; Messer & Dockrell, 2006; Sheng & McGregor, 2010) is a common dyslexic difficulty (Snowling 2000). It has been attributed by some to a difficulty in working memory (Mortimore 2008a; Mortimore and Crozier 2006).

Those working in the field of visual processing, such as Stein have argued that neurological differences in visual processing make reading fluency and decoding difficult (2001). The dyslexia tutor, Claire Salter suggests that for dyslexic actors

> Because of some of the visual processing difficulties there can be restrictions in the vocabulary so they may not understand what those action words mean in the full sense of the word. There is a general sense of what the word means, but without a really deep meaning it is quite hard to act them. [This is] Because what you are acting is coming from some vague version of the word that you are talking about (2011).

Using a phenomenological description, as argued in chapter two, Philpott suggests that there is a slackening of the tension arc between the body (the dyslexic learner) and the object (the action words). There is insufficient involvement with the text which results in a diminishing of meaning. The actor is therefore not able to engage with the 'full sense of the [action] word' (Salter 2011). There is only a 'general sense' or a 'vague version' of meaning, because for the dyslexic actor, all objects (the actions and objective words) are undifferentiated as 'all objects are equally important' (Merleau-Ponty 1962: 287). This diminishing of meaning, may have positive implications for some forms of performance, such as stand-up comedy and improvisation, where the performer is free to make linguistic substitutions or go 'off-text', and create new vocabularies (as discussed in chapter two).

However, during text analysis, there may be disequilibrium between the body and the object: what Philpott calls 'dys-location', leading to a disrupted body-mind-world engagement. Salter suggests that because of the experience of dys-location 'there is that resistance of people with dyslexia to develop a vocabulary because they see language as a difficult area' (2011). Indeed, as discussed in chapter two, those who are labelled as 'struggling readers' in early life can respond by lowering expectations to the level of performance, resulting in a lack of language experience (Singer 2008).

During text analysis, the mind-body-world disruption is further compounded as this technique requires the actor to attend to the exact words of the script (Noice and Noice 1996: 13). As discussed in chapter two, cognitive causal accounts have suggested that dyslexic learners frequently have difficulty when attending to the micro-level of written text. Specifically, there is a difficulty decoding many bottom-up, data driven language processes such as phonology (the sound structure of spoken words),

orthography (the written rules of language such as punctuation and spelling), graphology (the written symbols) and semantics (the meaning of words), which are utilised in the process of scoring the text for actions. Steve interprets this point by suggesting that

> It's the whole thing of sitting down and doing the text analysis. It's the understanding the words, it's reading and then once you read it you're thinking okay, is this is what your character wants? Then there are all these actions, analysing every line and trying to come up with an action. I get stuck. But when you do that you think - should I be doing it like that? Is my action to, to tease? And it's just getting so complicated and I'm just thinking as opposed to just being free and just going with it (Interview 2011).

He describes how he becomes 'stuck' trying to ascribe actions to the lines on the page and that this disrupts his body-world connection. In this context the tasks of actioning the script have become 'restrictive potentialities' and appear inaccessible to him (Merleau-Ponty 1962: 165). It is this disconnection between Steve and the written world of text analysis which adds to a sense of bodily and worldly alienation for him.

Contemporary directing and training contexts

The actor's 'dys-locating' experience with text analysis can also be attributed to the wider practices of the immediate environment. According to social disability theory, disability is caused by the disabling practices of the environment (Oliver & Barnes 1998). As such, analytical and text-based training methods can be seen to be predicated on culturally acceptable standards of literacy and linear sequencing. Riddick argues that a social model of dyslexia needs to challenge such beliefs and assumptions about literacy, whilst acknowledging that few have questioned what these 'standards' are (2001). Cooper, however, does attempt a definition of such standards as valuing reading fluency, contemporary standardised spelling and linear processing (2009).

Rehearsal and training techniques which are predicated on assumptions concerning literacy and linear-processing continue to be employed in contemporary directing practice. As director Max Stafford-Clark describes in his rehearsal diary for *The Recruiting Officer*, he 'begins rehearsal after the first day, by analysing each character's intentions and breaking them down into 'actions' line by line' (2004: 49). He goes on to state that, 'An action has to be expressed by a transitive verb and gives the character's intention or action for that particular thought' (2004: 66). In order to attach an action to a line, the method presupposes that the actor understands the rules of grammar and what a 'transitive verb' is. In addition it requires semantic knowledge of the actions, which in Stafford-Clark's process, are often prescribed by the director himself (McKeown 2008: 16; Merlin 2007).

The following examples show the action words used in Stafford-Clark's rehearsal process:

Example of actioning From *The Recruiting Officer*

Objectives for the scene: Kite wants to seduce Wilful, Silvia wants to fend off Kite.

Kite: **Binds** – The voice too, only a little variation in effa ut flat; my dear brother, for a must call you so, **Inveigles** – if you should have the fortune to enter into the most noble society of the sword, I bespeak you for a comrade.

Silvia: **Halts** – No, sir, I'll be your captain's comrade if anybody's.

Kite: **Praises** – Ambition! There again, 'tis a noble for a soldier; **Encourages** – by that I gained this glorious halberd. **Flatters** – Ambition! I see a commission in his face already; **Grabs** – pray, noble Captain, give me leave to salute you. *Offers to kiss her*

Silvia: **Spurns** – What, men kiss one another!

Kite: **Jollies** – We others do, 'tis our way; we live together like man and wife, always either kissing or fighting **– Focuses** – But I see a storm a-coming.

Silvia: **Dares** – Now Sergeant. I shall see who is your captain by knocking down t'other.

(Stafford-Clark 2004: 67-68)

These words refer to pre-prescribed actions which are restricted to Stafford-Clark's linguistic framework and which is embodied in his vocabulary and semantic

knowledge. However, Philpott suggests that, 'dyslexics fall outside of the rules of speech-sounds, spelling, grammar and syntax encompassed by a 'common property word'' (2000: 133) and in this context, the 'common property words' belong to Stafford-Clark and perhaps not to the dyslexic actors in his company. Indeed, one of my participants, Ken, points out that

> These verbs don't work for me – for a director that's fine for his or her tool but it may not be correct for the actor. For me – the verbs – it's just a word and doesn't do anything for me (Ken, Interview 2011).

Ken describes a sense of dys-location, as his relationship with these alien action words are characterised by an underlying uncertainty, or 'vague meaning' (Salter 2011). The actors are not able to embody these verbs: they have a different intentional relationship to image schemas, which were developed out of non-verbal and non-linear ways of being in the world.

Similarly, the focus on text is evident in 'Practical Aesthetics', the methodology created by playwright David Mamet which is practiced at the Atlantic Theatre School in New York City. 'Mamet felt that the time spent breaking down the script was quite probably the most important investment an actor could make' (Bella 2006: 231) and his approach attempts to demystify the training methodology of Stanislavsky by criticising the concept of 'character', made famous by Lee Strasberg's 'Method' (Moseley 2006). For Mamet

> The actor does not need to 'become' the character. The phrase, in fact, has no meaning. There is no character. There are only lines upon a page. They are lines of dialogue meant to be said by the actor. When he or she says them simply, in an attempt to achieve an object more or less like that suggested by the author, the audience sees an illusion of a character upon the stage (Mamet 1998: 9).

Mamet is attempting what might be considered a direct 'phenomenological' interpretation in the sense that he appears concerned with the essence of the actor's

unfolding consciousness and perception, which is uncluttered from culturally-determined concepts of 'character'. For example, the technique tries to distil the concept of 'action', stating that it must

1. Be physically capable of being done.
2. Be fun to do.
3. Be specific.
4. Have its test in the other person.
5. Not be an errand.
6. Not presuppose any physical or emotional state.
7. Not be manipulative.
8. Have a 'cap'.
9. Be in line with the intentions of the playwright (Bruder et al. 1986: 13-14).

O'States (2007) suggests that phenomenology enables us 'to see through "the film of familiarity" that blunts 'the scene of things' through its reiteration' (2007: 26) and using such a phenomenological approach, Mamet's method could be seen as a 'systematic attempt to unmask the obvious' (Wilshire 1982 in O'States 2007: 13). Mamet's method was developed in response to Lee Strasberg's school of 'Method Acting', which Mamet criticised for encouraging actors to 'summon up set feelings and emotions aimed at conveying a preconceived notion of character' (Moseley 2006: 16) and for the method's reliance on sense memory and emotional memory which 'are ways of *concealing* the truth of that revelation – of that moment' (Mamet 1998: 20; my italics). Therefore Mamet believed that Strasberg's method 'blunt[ed] "the scene of things'' (O'States 2007: 26) and blocked the actors' 'natural and spontaneous response' to the playwright's words (Moseley 2006: 16).

Drawing on Merleau-Ponty's phenomenological description of the paintings of Cezanne (1974), O'States argues that

> The mission of any form of phenomenological critique is to describe what Cezanne called 'the world's instant' by which we mean not simply a paintable instant but also

> any instant that is perceptually 'apprehended' as carrying, or leading to, an intuition about what it *is* and what it is *doing* before our eyes' (2007: 35).

Mamet too, wants to capture 'the world's instant': the unfolding of the actor's consciousness in the moment of 'doing', uncluttered by notions of 'character' and pre-conceived feelings and emotions. However, a criticism of Mamet is that the approach is over simplistic and reductionist: without contextual knowledge of the world of the play, or the voice and movement training needed to embody new worlds and cultures, the actor is left only with the lines on the page (Moseley 2006). Mamet's nine tests of an action may become more of an intellectual exercise in determining the nature of an action, than discovering the conscious unfolding of 'doing'. If the actor's process is reduced down to the literal words on the page, then this is particularly problematic for dyslexic learners who have a different intentional relationship to the written word, and need to employ other strategies such as context in order to re-locate themselves within a linguistic environment (Philpott 2000). Kay, for example, describes how she

> had to find a different process to everyone else 'cause we get taught the transitive verbs and to me I can't do that. I've always gone with my instincts and then worked from character and then to text rather than text to character (Interview 2009).

Kay uses the concept of 'character' as a way into the text, which is in contrast to Mamet's

> approach to the whole notion of 'character' and character preparation. Character, he argues, is an illusion in the mind of the audience, suggested by the fusion of the playwright's words with those aspects of the actor's personality revealed through behavioural signs in the moment (Moseley 2006: 15).

According to Moseley, Mamet reduces the acting process down to words and behavioural 'signs in the moment', and suggests that theatre should be understood as no more than a semiotic system of 'signs' which are read by the audience (Eslin 1987). In this essentialist account, 'character' consists of categories which have an objective

existence. Cartright (1968) suggests that essentialism is 'the doctrine that among the attributes of a thing some are essential, others merely accidental. Its essential attributes are those it has necessarily, those it could not have lacked' (1968: 615). Lakoff suggests that to Plato, an object consisted of 'those properties that make the thing what it is, and without which it would be not *that* kind of thing' (Lakoff 1987: 160). This approach can be extended to Mamet's interpretation of 'character', as this can be categorised and reduced down to the actor's personality, the playwright's words and behavioural signs. However, this essentialist approach to training and rehearsal appears to the dyslexic learner as 'restrictive potentialities', serving to disrupt the mind-body-world engagement (Merleau-Ponty 2002: 165). If dyslexic learners are not able to use other modes of experience such as context or subtext to relocate themselves in the linguistic environment of 'words on the page', then these words may never be embodied.

Mark is a good example of an actor who is frustrated by these 'restrictive potentialities', describing text analysis as

> not too creative, you're not in the moment and you're not finding your own way... you're thinking 'My action is... blah blah...' I mean I know people who can do it in a structured way but it's not for me (Interview 2011).

He describes actions as a cognitive activity ('thinking') which is 'a structured' approach and the antithesis of being 'creative'. Similarly Steve believes that using actions is 'just getting so complicated and I'm just thinking as opposed to just being free and just going with it' (Interview 2012): he is clearly frustrated with the analytical aspects of the method. He suggests that he is 'just thinking' rather than 'being free'. For both Steve and Mark, text analysis involves 'thinking', which is 'complicated' and 'structured' and this, for them, is the antithesis of 'being free' and 'finding your own way'.

The 'just thinking' of this process has been referred to by Carnicke as 'cognitive analysis' (2010). This type of technique has been one of the key traits of British

interpretations of Stanislavskian methodology and has historically prioritised the text over the importance of physical behaviour (Shirley 2012: 56-57). Artistic Director of the National Theatre, Nick Hytner has questioned the intellectualisation of some training practices arguing that he is 'not convinced that time spent on education in theatre theory is time well spent in a drama school' (Baluch 2009).[81] Actor Michael Simpkins goes as far as to imply that Stanislavsky's round-the-table analysis is not drama training: 'any decent actor will instinctively want to study the world of the play to assist his understanding of the job. But that's not drama training. That's common sense' (Simpkins 2009). Thus, in a similar way to the actors in my study, both Hytner and Simpkins express frustration with the analytical aspects of some training methodologies.

Mind – body division

Evident in the above discussion is the concept of a binary division between mind and body, emotions and rationality, thinking and doing. Lutterbie (2006) argues that this binary division, evident in the thinking of Plato and Decartes, is maintained by the tripartite model of the brain which suggests that three structures within it serve separate functions: the brain stem (responsible for stream of movement), the cerebellum (stream of feeling) and the neo-cortex (stream of thought). It was also thought that the neo-cortex was divided amongst right and left hemispheres, with one dedicated to rational consciousness and the other to creativity making the separation of intellect and emotion theoretically possible. The actors in my research employ these divisions when they express a preference for working 'from the body' rather than 'talking about it' as Kieran expresses it:

> working from the body in the sense of a more physical process rather than the text. Just getting up and 'doing' and feeling my way, rather than talking about it – 'cause you know that thing of searching for words is always there (Interview 2009).

[81] He suggests that in order to qualify for government higher education funding, universities and drama schools are under pressure to reduce the practical content of courses and increase the academic components.

Similarly Mark describes how he

> uses actions but not intellectually. I have an objective and the reaction from the other actor on stage makes me do something different in order to get where I want but it doesn't come from a thought process (Mark, Interview 2011).

Both actors perceive their cognitive thought as distinct from their bodies' experience of being in the world. They perceive 'talking' and 'thought process' to be separate from their bodies' experience of 'getting up and doing' and 'feeling'. However, neurobiologists such as Damasio suggest that rather than being separate from our intellectual processes, emotions and feelings are intrinsic to them. Taking an embodied approach to biological research, Damasio rejects the 'typical Cartesian biological reductionism, which places explanation at, and only at, the level of brain mechanisms, genes, and DNA' (Overton, Muller & Newman 2008: 4). Rather he suggests that 'Mind is probably not conceivable without some sort of embodiment' (Damasio 1994: 234). His research reveals the neurological basis of emotions, suggesting that emotions and feelings are an integral part of the thinking process. As the brain consists of interlocking systems, it is not possible to separate the mind from the body because the well-being of any person is dependent on the cooperative interrelatedness of the body's systems.[82]

In a similar way to Damasio, Stanislavsky also attempted to reconcile the division of 'mind from body, knowledge from feeling, [and] analysis from action' (Benedetti 1982: 66). Underpinning his methodology was Théodule-Armand Ribot's psychophysical theory that

> the mind and body are a unit, and that emotions cannot be experienced without physical sensation… As Stanislavski writes in *An Actor Works on Himself*, Part 1, 'In

[82] Damasio has called the separation of mind from body 'Descartes' error': '…the abyssal separation between body and mind... The Cartesian idea of a disembodied mind may well have been the source, by the middle of the twentieth century, for the metaphor of mind as software program... [and] there may be some Cartesian disembodiment also behind the thinking of neuroscientists who insist that the mind can be fully explained in terms of brain events, leaving by the wayside the rest of the organism and the surrounding physical and social environment - and also leaving out the fact that part of the environment is itself a product of the organism's preceding actions" (1994: 249-250).

> every physical action there is something of the psychological, and in the psychological, something of the physical' (Carnicke 2009: 178).[83]

However a binary division between mind and body is evident in the transmission of Stanislavksi's methodology to the United States and within the USSR. In America

> a Freudian-based, individually orientated ethos… privileged the psychological techniques of Stanislavski's system [such as character and emotion memory] over those of the physical [such as the method of physical action and active analysis] (Carnicke 1998: 1).

This individually orientated ethos might be symptomatic of early 20th century American culture's interest in its own identity as a nation, forged out of the struggle of immigrant communities to create new identities in the relatively newly created USA. In the USSR, Stanislavsky's Active Analysis technique, with its emphasis on 'acting, doing, experiencing, [and] playing' (Merlin 2001: 255) was suppressed until after Stalin's death and is still not published in English.[84] It may be that the technique's emphasis on 'playing' was just too politically dangerous for the Soviet authorities.

Rehearsing for a role: active experimenting

Ken's desire to work 'from the body in the sense of a more physical process rather than the text - just getting on with it and 'doing' rather than talking about it' (2009) is what Noice and Noice have termed 'active experimenting' (2006). They found that during rehearsal, the actors use an active experimentation, which follows on from the analytical phase, or deep processing of text. Active experimenting involves the processing of written text, not just cognitively, but also physically and emotively, using

[83] The French psychologist Théodule-Armand Ribot was writing at the end of the 19th century and early 20th century (1987). For a detailed discussion of Stanislavski's interest in Ribot and his research into emotion and memory see Carnicke (2009).

[84] Jackson (2011: 167) points out that Stanislavski never wrote the technique down, and it was disseminated through direct contact between teacher and student. This personal contact was extremely important due to the hostile political climate of the USSR. Maria Knebel's written account of active analysis was censored until after Stalin's death. Although a direct translation of Knebel's work is not published in English, both Merlin (2007) and Carnicke (2010) provide their own interpretation in English.

all three cognitive-emotive-motor processes inherent in all human interaction (Noice and Noice 2001, 2002). In rehearsal and performance, actors use all of their physical, mental and emotional channels to communicate the meaning of the text to another person, up on their feet. For example:

> if the intention is 'to intimidate', an actor might stride over to another actor in a belligerent manner, stare him in the face, and verbally threaten him, using a menacing tone of voice. The most important aspect of this procedure is the reality with which it is executed. The actor does not try to merely look and sound intimidating but actually attempts to intimidate the other actor in the scene (Noice and Noice 2001: 182).

Noice and Noice argue that active experimenting is a perceptual experience, which aids in the actor's comprehension and memory of the literal words and movements (2006). In their research they found that if an actor really meant the words s/he was speaking and had motivation behind his/her movement, this approach produced greater retention of text than deep processing of text or rote memorisation. The findings are consistent with embodied cognition: that memory and comprehension are grounded in bodily action (Glenberg and Kaschak 2002).

In the practice element of my research, I worked with the actors using Stanislavsky's rehearsal technique Active Analysis (Merlin 2007) which is a form of active experimenting. In this method, actors are asked to discover the play's anatomy or structure, not in discussion and textual analysis, but on their feet. As Stanislavsky suggests, 'The best way to analyse the play is to take action in the given circumstances' (1991: 332-333). Actors explore their characters and the ways in which they relate to other characters through improvisations of key scenes of the play (Carnicke 2010: 18). These improvisations are 'drafts for future performances, each draft embodying and actualising the text better than the last' (Carnicke 2000:28, see also Knebel 1971). The point of improvising a scene is that 'the organic link between your scenic movement and the cause or reason that gave birth to that movement can be forged with very little effort' (Merlin 2007: 198). Merlin suggests that Active Analysis has 'an exciting

edge of play and anarchy and a 'Give-it-a-Go' bravura' (2007: 198) and she provides a summary of the Active Analysis cycle which involves a series of 'étude' rehearsals:

1. You read the scene;
2. You discuss the scene;
3. You improvise the scene without further reference to the script;[85]
4. You discuss the improvisation, before returning to the script;
5. You compare whatever happened in your improvisation with the words and incidents of the actual text.
6. You repeat the process (Merlin 2007: 197).

Active analysis is a psycho-physical, embodied way of working and Carnicke suggests that:

> Whilst Stanislavski had always expected actors to use all their faculties equally (mental, intellectual, emotional, spiritual and physical) the alternation of reading and improvising in active analysis set the actor up for precisely this kind of holistic work (2010: 19).

Perhaps because of the 'anarchic' non-linear way of working, Active Analysis enabled the actors in my research to create an intentional relationship with the text that comes from the body: the linguistic framework is built up from silence, eye-contact, sounds and key words to become full sentences. There is considerable evidence to suggest that dyslexic learners respond well to embodied, multi-sensory practice and indeed a number of mainstream and alternative intervention models believe that learning is best accomplished when it is embodied. Such programmes include the Orton-Gillingham method (Orton 1966); the Developmental Exercise Programme (Goddard-Blythe 1996); 'Educational Kinesiology', (Dennison 2001) and The Dore Programme or DDAT (Dore 2004).[86]

[85] The first improvisation is a silent etude or improvisation, the second uses key words and sounds, the final stage uses full sentences, until the words of the improvisation are similar to the playwright's words (Merlin 2007).

[86] Cognitive performance might be influenced by bilateral coordinative exercise (Budde et al. 2008).

Similarly, the actors in my research preferred to work 'from the body in a sense of a physical process, rather than just talking about it' (Ken, Interview 2009). Whilst their lived experience with processing written text was primarily 'dys-locating' and added to a growing sense of a volatile body-intentionality, the use of an embodied approach such as active analysis enabled them to relocate themselves within a linguistic environment and create their own meanings (Philpott 2000: 67). For example Cheryl talked about how:

> With the script, it's all in my head. I'm using my mouth to say words that are on this page that I don't felt connected to, it's just words coming out my mouth and I go back inside my head and get stuck inside, starting to listen to how I sound (Interview 2012).

If the script is explored solely on the page through reading, then, for many dyslexic actors it remains 'all in my head'. The result is that Cheryl, for example, is saying words that are on the page but to which she feels no connection. There is a disconnection between the body ('my mouth') and the object (the 'words') and as a result there is a sense of a volatile body-intentionality. This could be described as a breakdown in the pre-reflective structures of perception (Philpott 1998). Cheryl objectifies her body, viewing it with a critical gaze by describing how she goes 'back inside my head and… [starts] to listen to how I sound'. For Merleau-Ponty, the body is both the thing that is perceiving the object and also the subject of perception; the two things being in constant oscillation:

> If I touch with my left hand my right hand while it touches an object, the right hand object is not the right hand touching: the first is an intertwining of bones, muscles and flesh bearing down on a point in space, the second traverses space as a rocket in order to discover the exterior object in its place (Merleau-Ponty 1962: 92).

In relation to such perception Cheryl suggests that 'the only way I can make it somewhat truthful is if it's really in my body. There is a weird energy reaction thing,

and the words are just carried out by that' (Interview 2012). Embodied practices such as Active Analysis enable Cheryl to reconnect with her subjective body and be 'in [her] body', making the words on the page become 'truthful'. This mode of experience enables her to relocate herself within a linguistic environment and make meaning out of it. She has transformed her objectification of her dyslexic body, where she viewed herself with a critical gaze and started 'to listen to how I sound', to subjective experiences of being 'in my body' where 'the words are just carried [by a] weird energy'.

Cheryl's description of the fact that 'there is a weird energy reaction thing, and the words are just carried out by that' (Interview 2012) is coded in the language of metaphor. McVittie (2007) cites Lakoff and Johnson's Conceptual Metaphor theory to argue that many psychophysical techniques such as Active Analysis use higher order concepts which organise the body of knowledge developed by the actor. A significant aspect of these higher-order concepts is that, even though they appear abstract, they are conceptualised through the application of embodied metaphor. Active Analysis draws on these abstract competencies through the rehearsed embodiment of metaphors such as 'energy' (2007: 160-162) and Cheryl, for one, uses this metaphor of 'energy' to describe her experience of embodiment.

Steve also described a process of embodiment, connecting to the text using all of his physical, emotional, and mental channels. He describes how:

> In that miming part [of the improvisation], the silence was powerful, there were all these thoughts, like an inner monologue. It brings a lot of emotions without words, it makes you realise the words don't really matter at the end of the day. It's just there's so much going on underneath and around the words**.** It felt emotionally driven without the words. Also when I could only use key words and sounds – these would also trigger emotions. It felt freeing. There were certain things in the script I was doing that I've have never explored before (Steve, Interview 2012).

He describes how, 'without words', he was able to connect to his emotions and explore 'underneath and around the word'. Without the cognitive pressures of word finding or decoding written text, Steve was free to explore the character's thought process, which then triggered the emotions behind the words, taking him to a place where he had never been. As Damasio suggests, there is a collection of interconnecting systems in the brain that are simultaneously involved in thinking processes, emotion and feeling (1994, 1999). Emotions are an integral part of the thinking process, and vice versa. By removing the use of both written and verbal text, Steve was able to connect to his own thought process and generate emotional connections. This process is in contrast to Mamet's notion that 'there is no character, there are only lines upon a page' (1998: 9). Rather than being reduced down to 'lines upon a page', Steve explores the emotional, physical and mental connections found 'underneath and around' the literal words, enabling him to embody the text.

In the next stage of Steve's improvisation, mental connections were made and he describes how using his own words generated inner images:

> Exploring my own dialogue, using my own words [rather than the playwright's], had quite a dramatic effect as well, just speaking in my own words… the images kept on coming of seeing my Dad standing there - it was more of a really vivid image in my mind of my Dad in front of me (Interview 2012).

Steve's own words are not part of the 'common property world' with its rules of speech-sounds, spelling, grammar and syntax (Philpott 2000: 133). Instead he is creating his own 'property world' through his own vocabulary and semantic knowledge; using his own words helped him to connect with his inner images. Stanislavsky similarly believed that all speech should be accompanied by an image in the mind's eye, and that every role should have a 'filmstrip' of images (1989: 130). These visualisations can trigger emotional responses (Carnicke 2010: 13) and indeed Damasio suggests that

> images that flow in the mind are reflections of the interaction between the organism and the environment… the mind exists for the body, [and] is engaged in telling the body's multifarious events (2003: 206).

Body sensing areas of the brain reflect not only actual body states, but they can also deal with 'imaginary' or 'as if' body states and such imaginary states are based on a manipulation of body state memories (Damasio 2003: 118). Blair argues that actors are constantly manipulating their own body state (2006) and Steve reflects this point when he describes his own body state manipulation which allowed him to form a 'vivid image in my mind of my father' and thus create a new way of 'being in the world' of the play (Interview 2012).

This alternation of reading and improvising enabled Steve to:

> feed back all the discoveries in the improvisation into the text. When you're picking up emotion in the improvisation and you're embodying the character, you're not worrying about the text as you're improvising, so you're building up even more emotion inside of you. Then, as soon as you've got the text, the words just come out, because the emotion's there. It felt liberating as well, felt free at the same time (Interview 2012).

Using a layered form of improvisation enabled him to build up the meanings, emotions, images and spatial relationships behind the words on the page. These 'draft performances' (Knebel 1971) then fed into the reading of the script, so that 'the words just [came] out' (Steve, Interview 2012). Each improvisation creates a set of what Glenberg terms potential affordances or actions (1997). The meaning of the text is derived from the meshing of these affordances explored in the improvisations.[87]

In addition to aiding comprehension, Active Analysis also helped Steve to remember the lines. He suggests that

[87] These affordances are based on Gibson's notion of 'affordance' (1979), which refers "to possible actions as determined jointly by characteristics of the physical situation and abilities of the body" (Glenberg 1997: 41).

> because you're layering it all the time, you're going from impro to text, impro to text, and it's helping me to remember the lines, because you're kind of embodying the words. Doing gestures helped to create more emotion as well because a lot of the time with me, when I'm learning scripts I'm very static, I don't move enough, I don't feel the character, I don't feel the emotion, whereas I find when I start to move and I start to feel the emotion I start to get into the character (Interview 2012).

By connecting his emotions with his physical gestures and movement Steve highlights the psychophysical nature of Active Analysis. Stanislavsky believes that, 'in every physical action… there is concealed some inner action, some feelings' (1961: 228). This psychophysical practice of acting was an attempt to bridge the Western gap between the physical 'body' and the cognitive and sensory processes of 'mind' (Zarilli 2008: 8) and psychophysical, embodied practice has been linked to memory retention (Glenberg 1997; Glenberg & Kaschak 2002; Noice and Noice 2006, 2002). According to Glenberg's notion of embodiment, memory is comprised of perceptual-motor patterning and specialises in embodied information. Specifically, he views the nature of memory storage as 'the encoding of patterns of possible physical interaction with a three-dimensional world' (1997: 1).

In addition, Active Analysis utilises repetition or 'over learning', which is a cognitive strategy employed by dyslexic learners to anchor information into the long-term memory (Reid 2009a). As discussed in chapter two (pages 52-56), change is made possible due to neural patterning which is a process born of experience and made possible by the plasticity of the brain (LeDoux 2003: 68).

Active Analysis enabled Steve and Cheryl to reconnect with their pre-reflective lived subjective bodies. It gave them a different body intentionality, or way of engaging with the world of performance. They were able to explore the spatial context of the scene and the meanings, feelings and images behind the words first, before focusing on the meaning of the individual words. This way of working is in contrast to Noice and Noice's findings that active experimenting follows on from the deep processing of text

(2002, 2006). Rather, according to the top/down approach to reading theory (Reid 2005, 2009a) dyslexic learners anticipate the meaning of text from contextual clues and guesswork before processing text at a micro level. An embodied layered practice mitigated the cognitive difficulties of such learners with comprehension (the decoding of written text) and memory, therefore enabling them to relocate meaning in an otherwise 'dislocating' linguistic environment (Philpott 2000).

In contrast, Zarilli suggests that text analysis may be 'inadequate or even inappropriate to the realization of dramaturgy and acting tasks that constitute an actor's performance score in a post dramatic text or performance' (2008: 8). Within post-dramatic forms of theatre, according to Lehmann 'staged text… is merely a component with equal rights in gestic, musical, visual etc. total composition' (2006: 46). Postdramatic theatre is also marked by an absence of a central 'character' and a linear singular plot (Ibid 2006: 26-27). Rather it is fragmented, drawing on a range of verbal, visual, filmic, scripted, improvised and devised sources and it may be that this approach to theatre making is more suited to learners who have a different intentional relationship to the written word. In this way post-dramatic modes of theatre-making give dyslexic learners the opportunity to create their own aesthetic, from their non-text and non-linear way of being in the world.

Conclusion

Empirical research has revealed ways in which Western actors have achieved cognitive integration with the analytical aspects of Stanislavsky's system. Inherent in these approaches are a number of socially situated assumptions. Time is conceived through the paradigm of 'Objective Thought', which views it as a linear 'succession of instants' (Merleau-Ponty 1962) and privileges written language as the primary mode of communication, notions which have been critiqued by both phenomenologists and social disability theorists. These paradigms have also been a source of dislocation for the dyslexic learners in my research. Rather, there is a desire with these subjects, to work 'from the body', achieving psychophysical integration, by focusing on an active, as opposed to an intellectual or analytical process. For these actors, time would not be

constrained into a linear narrative past, present and future, evident in the through-line of action. Rather, as Merleau-Ponty suggests, time is a 'dimension of our being' (1945) which sheds light on the nature of consciousness; it is a dynamic and fluid interaction between body and world. 'Anarchic' approaches to rehearsal such as Active Analysis, which are not constrained by linear sequencing and text-based methods, may be more in tune with the actors' own experience of being in the world.

The next chapter continues to explore the theme of relocation and discusses the role of multi-sensory and holistic techniques such as those of Michael Chekhov as well as the approaches of image streaming and context, in the light of learning style theory and visual-spatial research.

Chapter Four: Dyslexia, cognitive style and meaning-making

> I suppose that if you're in a world where, you know, you can't read, you're denied access to literature and the sound of words... the worlds that literature and words and ideas can create, but you have the temperament to want to explore it, then acting would be the best place to go. It's because it's a three-dimensional version of reading (Shona Morris, Interview 2010).[88]

Morris suggests that performance may give dyslexic learners the opportunity to get beyond the two dimensional world of 'words' and 'literature' and into an embodied three-dimensional, visceral space, that Ehardt (2009) suggests is better suited to them. Such visual-spatial perception, is something that I consider to be crucial to the dyslexic learner's particular manner of being in the world. This chapter explores the actors' accounts of their meaning-making process in the context of research into visual-spatial processing and learning style theory. It begins by creating a working definition of three-dimensional space, through Merleau-Ponty's account of bodily space. This is contextualised by the growing interest in three-dimensional space by visual artists, educationalists and theatre-makers in the early twentieth century. I suggest that, in a similar way, the actors in my research expressed a desire to explore acting in a visceral, three-dimensional performance space. The literature connecting dyslexia, three-dimensional ability and learning style is then reviewed before examples of the actors own visual-spatial process is discussed. The relationship between memory, multi-sensory learning and holistic processing is explored with examples from the actors' cognitive process. Lastly, the visual and holistic process of key training practitioners such as Konstantin Stanislavsky and Michael Chekhov are highlighted along with their implications for practice.

Three-dimensional space

According to Merleau-Ponty's account of spatial perception, our experience of space is grounded in the body. Merleau-Ponty rejects empirical accounts of space as being an

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objective entity external to the body and advocates a return to the original intentionality between space and body, a primordial, pre-reflective account of spatiality and the lived body, which reveals 'the fundamental relations between the body and space' (Merleau-Ponty 1962: 119-117). The body is not a body in objective space, rather a body that inhabits space, a 'bodily space': both the body and space are a necessary condition of constitution for each other (Shengli 2009: 136).

Central to this concept of bodily space is the idea that spatial orientation is key to meaningful perception (Philpott 2000: 109). Visual spatial processing, or material reasoning, 'help us reason about the physical or material world – that is, about the shape, size, motion, position, or orientation in space of physical objects, and the ways those objects interact' (Eide and Eide 2011: 49). It enables us to 'mentally create and manipulate an interconnected series of three-dimensional spatial perspectives' (Ibid: 171). West perceives visual spatial ability in:

> the work of the architect, mechanic, sculptor, or athlete, areas where the two-dimensional image is filled out into weighty masses or empty volumes, providing a sense of proportion as well as distance, momentum, leverage, balance (1997: x).

According to Merleau-Ponty's notion of 'grip' (1962: 261), perception of depth is made possible when the subject (body) is in the best context to perceive the object (Romdenh-Romluc 2011: 115). Merleau-Ponty discusses the notion of 'grip' in the context of an art gallery:

> For each object, as for each picture in an art gallery, there is an optimum distance from which it requires to be seen, a direction viewed from which it requires to be seen, a direction viewed from which it vouchsafes most of itself: at a shorter or greater distance we have merely a perception blurred through excess or deficiency. We therefore tend towards the maximum visibility, and seek as better focus as with a microscope (Merleau-Ponty 1962: 302).

The cognitive psychologist Gibson, also took an embodied approach to visual perception, believing that it was grounded in the body's experience of being in the world (1996). His theories were underpinned by the belief that 'Natural vision depends on the eyes in the head on a body supported by the ground, the brain being only the central organ of a complete visual system' (Gibson 1979: 1).

Visual-spatial awareness in early 20th century art, education and theatre practice

This awareness of visual-spatial bodily perception seems to have permeated the theory and practice of early 20th century artists and educators, as evidenced in the work of Pablo Picasso, Friedrich Froebel, Antonin Artaud and Oskar Shlemmer, for example.[89] Visual artists such as Picasso and the painter, sculptor and architect Vladimir Tatlin were interested in capturing the three-dimensional experience of the world. Pablo Picasso, a pioneer of Cubism, was interested in exploring the mass and volume of an object, rather than depicting objects in two-dimensions. He was concerned not only with what the eye sees presented from the viewer's point of view, but what Merleau-Ponty called 'the view from everywhere' (Willerslev 2011: 519; Holbraad & Willerslev 2007). It is curious that some thirty years later Merleau-Ponty theorises what Picasso was doing in practice.[90] In Russia, Tatlin, who was influenced by the Cubists, explored 'the view from everywhere' in a series of suspended mobile structures such as the Contre-Reliefs Liberes Dans L'espace (1915). These structures had a freedom of motion, rather than being fixed and two-dimensional (Baier, Bott and Dimatov 2012).

Similarly, in education of the early 20th century, there was a growing interest in three-dimensional, embodied ways of learning, that is an educational approach which also encouraged a 'view from everywhere', as mentioned above. The German educator Friedrich Froebel (1912) 'put the concrete before the abstract and experience before books in the education of little children' (Reese 2001: 15), believing that both children and adults 'learned best not through books but through sensory experience and

[89] The interest in three-dimensional space was informed by early 20th century gestalt thinking with its emphasis on visual principles and the nature of holistic structures (Wertheimer 1938; Koffka 1935). Graham suggests that for visual artists 'Gestalt theory provides rational explanations for why shifts in spacing, timing, and configuration can have a profound effect on the meaning of presented information… What made gestalt theory appealing to visual artists, educators, and visual communicators is that the school of psychology sought to explain 'pattern seeking' in human behaviour. These gestalt visual laws provided scientific validation of compositional structure, and were used by design educators in the mid-twentieth century to explain and improve visual work' (Graham 2008: 2). However it is important to recognise that the theory is now largely out of favour in current cognitive theory (Trimingham 2011: 38-9; Ash 1995).

[90] My supervisor, Dr. M. Trimingham, brought to my attention (in a supervision of April 5th 2013) the potential parallel between Merleau-Ponty's 'view from everywhere' and Picasso's three-dimensional aesthetic, and the idea that artists' actual practice often precedes theoreticians ideas.

contact with real objects' (Reese 2001: 16). In the Bauhaus, the Froebel-influenced art educator Johannes Itten and the Russian painter and theorist Kandinsky both became interested in the spatial effects of colour and the relationship between colour and form, and developed a series of spatial exercises during his teaching at the Bauhaus, (Droste 2003: 67) which can be seen to reflect a 'whole' experience.

In theatre also, Antonin Artaud and Oskar Schlemmer were experimenting with the visual elements of light and gesture and ideas of time and space, rather than presenting naturalistic narratives on stage. Artaud adopted a distinctly visual theatrical language that was influenced by the Balinese theatre and visual art (Artaud 2010: 26). He also developed the idea of a pure theatre language and preferred the use of signs and gestures rather than speech, an approach developed as a reaction against the literary and psychological theatre of the West (Arrandale 2003: 242). He was critical of the dominance of the written and spoken word in Western theatre, asking 'How is it Western theatre cannot conceive of theatre under any other aspect than dialogue form?' (2010:26). He was thus drawn to the Balinese theatre, as it was 'a theatre that consisted of physical signs and violent gestures and was not dependent on a script' (Arrandale 2003: 242). Balinese theatre was 'not a revelation of a verbal but a physical idea of theatre where drama is encompassed within the limits of everything that can happen on stage, independently of a written script' (Artaud 2010: 50). It epitomised for him a visual language – a three-dimensional space – which to him was richer, louder and more visceral than anything he had ever seen on stage in the West. He saw the stage as a three-dimensional spatial reality which was 'a tangible, physical place that needs to be filled' (Artaud 2010:26).

Artaud believed that theatre should be a highly visceral and visual art form akin to painting. Referring to the fifteenth century painting *The Daughters of Lot* by Van Leyden, he pointed out that the painting was 'what theatre ought to be, if only it knew how to speak its own language' (Artaud 2010: 25). He saw it as 'the result of a finely elaborated creative direction, like that governing a creative spectacle' (Barber 1994: 46). Artaud is concerned with the phenomenological moment of perception: he is aware of the visceral effect of the painting on himself as the perceiver and he is

discussing art as a phenomenological, visceral experience that affects the senses. For him, this is the antithesis of the intellectualised literary and psychological theatre of the West, dominated by intellectual ideas and verbal language.

Visual-spatial thinking is also evident in the work of Oskar Schlemmer, the German artist, theatre designer and choreographer.[91] Like Artaud, Trimingham suggests that Schlemmer viewed the stage

> from the point of view of a painter. It is evident that he is describing the creation of images on stage in the same terms as he believes apply to the creation of images in a painting; that is to say, these images are not imitative of the space of life but create a new space (2011: 91-92).

Trimingham draws on Suzanne Langer's notion of 'virtual space' in her analysis of Schlemmer's aesthetic (1953: 72-85). For Langer, the space in a painting is not the real two-dimensional space of the canvas, but rather the 'virtual' three-dimensional imagined space that the viewer perceives.[92] Schlemmer believed that the experience of watching theatre should be like looking at a painting. His stage images were not intellectual conceits, designed to imitate 'the space of life', and neither were they purely visual; rather he sought to create 'a new space' of direct phenomenological experience, connecting the audience and the stage (Trimingham 2011: 91-92). For Schlemmer, both the stage and the canvas enable the artist to create a new space, which does not seek to imitate life, but create a visceral three-dimensional space.

As Trimingham suggests 'Painting creates space and does not re-create the space we move and live in… the 'symbol' also has a tangible and material existence, paint and pigment and canvas' (2011: 91-92). These artists and theorists of the early twentieth century wanted to get beyond intellectual symbols and create a highly visual, visceral and three-dimensional space, using their embodied 'tangible and material existence'

[91] Trimingham cites the fact that Schlemmer was heavily influenced by Adolphe Appier who used light as an active element and took the stage away from naturalistic representations of reality (2011: 24)
[92] Langer was influenced by Hildebrand's book *The Problem of Form in Art in Painting and Sculpture* (1907).

(2011: 91-92). In a similar way, the actors in my research expressed a desire to explore acting in a visceral, three-dimensional 'space' of performance. As Rosa suggests:

> I'd been to art school and have a degree in art and so I went from doing the paintings to being the painting… When you're painting, you paint the person, but with acting you are the person, so you become the painting, so you're in a different dimension, and that's a release and I think dyslexics are very good at that, at creating something completely new and different to themselves (Rosa, Interview 2011).

As with Schlemmer and Artaud, Rosa connects her process from the perspective of a painter. Her description is distinctly visual, drawing on metaphors of painting to suggest that she has 'become the painting' (Rosa, Interview 2011). However, as the painter Rosa experiences a sense of lived distance between herself and the person she is painting. In contrast, as an actor she is able to 'become the painting', suggesting she has entered into an embodied and visceral three-dimensional world. For Rosa, her body is the 'site of play' and is at the core of this creative process (Wilson 1998: 96). In a similar way to Schlemmer, Rosa is not attempting to re-create or imitate nature, rather she too is creating a new space, a 'different dimension'. She creates a direct phenomenological experience of performance where 'you are the person… you become the painting' and suggests that as a dyslexic learner she is particularly good at creating these new imaginary spaces and finding 'new dimensions'.

Dyslexia, learning style and three-dimensional ability

Rosa's ability to create a three-dimensional, virtual space of performance can be linked to the growing body of empirical and anecdotal evidence that dyslexic learners have a preference for visual-spatial thinking.[93] According to the visual-spatial hypothesis, dyslexic learners are heavily reliant on visual-spatial pathways to create 'maximum

[93] The 'anthropology of the senses' is an epistemological approach that views 'sensory perception [as] a cultural as well as physical act' (Classen 1997: 401), According to this theory, perception is culturally as well as cognitively determined. Howes (2003) and other anthropologists have adopted a cross-cultural approach to sensory perception. Their work seeks to demonstrate how the visual senses have dominated consciousness in the Western world to the exclusion of the other senses such as taste and touch.

visibility' or grip over text-based objects. Whilst all human beings are capable of embodied three-dimensional mental imaging and visual thinking (Davis and Braun 1997), some argue that this ability probably exists along a continuum, with dyslexia at the extreme end, and may be such a strong influence that it precludes other ways of processing information (Ehardt 2009).

The idea of having a visual or verbal cognitive 'thinking' style is based on Allan Pavio's dual-coding theory, which is based on the premise that

> There are two classes of phenomena handled cognitively by separate subsystems [of the brain], one specialised for the representation and processing of information concerning nonverbal objects and events, the other specialised for dealing with language [the verbal subsystem] (1986: 53).

According to this theory, there are two fundamental ways of knowing: perception and symbolic thought. Language is a form of symbolic cognition, distinct from perception. The perceptual system does not depend on language to function, but operates through sensory perceptual systems, pre-dating the symbolic system in human evolution.[94] The development of cognitive style theory used by educational psychologists is premised on such theories of perception and knowing.

The most reliable model of cognitive style, such as that developed by Riding and Rayner (1998) is concerned with the ways in which the individual processes information (see Figure 17 below).[95]

[94] For an overview of Gibson's account of the perceptual system see Gibson (1966).
[95] Mortimore (2008a) argues that this model is the most all-embracing construct of the potential available models, and gives an overview of all of them.

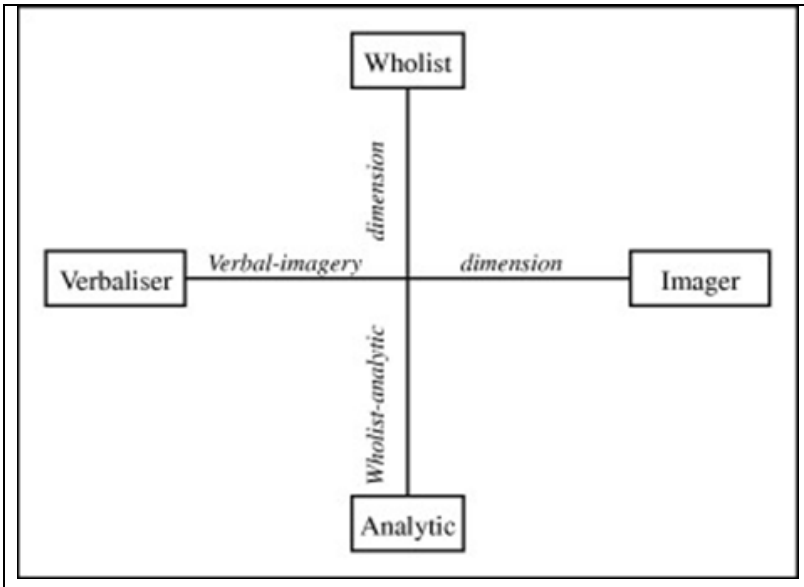

Figure 17: The holist-analytic and verbal-imagery style model (Riding and Rayner, 1998).

The model conceptualises cognition as a pair of continua: one which reflects the individual's preferred mode of expression, ranging from visual to verbal thinking, and the other referring to structural preference, ranging from holistic to analytical/sequential structures (Riding and Rayner, 1998). An individual's learning 'style' is determined by where s/he falls on the two individual continua. For example, many dyslexic learners are thought to be holist/imagers: thinking in pictures and seeing the whole (Mortimore 2008a).[96] Indeed Cooper (2009) argues that dyslexic learners are almost seven times more likely to have an extreme preference for visual thinking (thinking in pictures rather than in words) compared to non-dyslexic people (see also David & Braun 1997; West 1997) and he believes that where the preference is extreme, they cannot use alternative ways of thinking. His research found that 80% of dyslexic learners prefer to think visually, compared with 65% of the non-dyslexic group with Mortimore (2008a) suggesting that potentially it is this inflexibility in processing 'style' that creates difficulties for dyslexic learners in education.

[96] Mortimore (2007) is critical of the concept of learning 'style' as a construct, and highlights three potential negative aspects: the implications of labelling, the endorsement of pseudo-science and misinterpretations by classroom practitioners. However, she argues that learning style theory can inform the development of a more inclusive pedagogy and can be used 'as a tool for building learning power [or 'meta-cognition' as discussed in chapter two] while attempting to avoid being trapped in the strait jacket' of a rigid interpretation of learning style (2007: 11).

In a print-literate society, characteristic dyslexic difficulties in areas such as verbal processing and linear sequencing may result from this type of extreme three-dimensional processing (Ehardt 2009: 365). In this way, dyslexic difficulties result from a particular dynamic body-world intentionality. However, Ehardt speculates that three-dimensional processing may account for the well-documented dyslexic strengths in holistic processing: assembling complex structures (Geschwind, 1982; Turkington & Harris 2006; Vail 1990) and the perception of whole ideas and concepts rather than individual details (Facoetti et al. 2000; Pothos & Kirk 2004; Shaywitz 2003). He argues that these skills were integral to early societies, as well as being essential for the success of some more recent designers, engineers and architects.

Indeed, a number of dyslexic artists, designers and architects such as Richard Rogers, Norman Foster, Tommy Hilfiger and Paul Smith have attributed their skills in visual-spatial processing to dyslexia (Brunswick and Martin 2009: 181). Some, like dyslexic photographer David Bailey, believe their ability developed as a compensation strategy for early difficulties with reading: 'I feel dyslexia gave me a privilege. It pushed me into being totally visual' (Brunswick 2009: 181). Similarly, dyslexic product designer Sebastian Bergne reflects that

> When you have choices, you go for what you're good at. If one part of your development is 'blocked', you develop other parts more fully. As a child I got used to expressing things in a different way to writing. I think visually. I think in pictures. If I'm designing an object, I know the exact shape in 3D. I can walk around it in my head before drawing it (Brunswick 2009: 181).

According to Bergne, his visual thinking developed in response to his developmental difficulties. Being 'blocked' by words, he expressed himself through pictures. Brunswick et al. (2010) speculate that visual spatial superiority in dyslexia may simply reflect the individual's preference towards nonverbal processing strategies in order to avoid the problems inherent in verbal processing. However other artists and neurologists, such as the designer Terrance Woodgate have suggested that visual spatial-ability has a neurological origin:

> Visualisation is one of my strengths as a designer. I think I'm particularly good with mechanisms. I can see the whole thing finished and working. I don't need paper. I like to design while driving or showering. I'm sure this is because part of my brain is distracted, leaving the creative side to dream. It's as though we dyslexics have a 3D graphics card integrated into our heads (Woodgate in Brunswick 2009: 183).

The neurological origin of potential dyslexic strengths has been discussed in chapter one. The high proportion of dyslexia amongst art students and associated professionals may support Woodgate's notion of a '3D graphics card integrated into our heads' (Ibid: 183). A number of empirical studies indicate that dyslexic learners are disproportionately represented in professions and academic disciplines related to art and design. As many as twenty-five per cent of art students at the Royal College of Art are dyslexic (Helen Hamlyn Centre 2004) and thirty per cent at Central Saint Martins College of Art and Design (Steffert 1999). Wolf and Lunberg (2002) found that the incidences of dyslexia were three times higher among art students compared to the control group of economics and law students and the general population. They speculate that as admission to art school is extremely rigorous, this indicates inherent ability as the motivating factor rather than compensation for failure in academic fields.

The neurologist Geschwind also believes that visual-spatial ability is something that dyslexic learners are born with. He observed that 'many dyslexic children display a passion and skill for spatial activities (like drawing, doing mechanical puzzles, or building models) well before they begin to struggle with reading' (Geschwind in Eide and Eide 2011: 54). Other control studies have found a positive correlation between dyslexia and visual spatial ability. For example, Brunswick et al. (2011) explored the relationship between dyslexia and 3D visual spatial ability in university students of art and design at the Royal College of Art and Swansea Metropolitan University. Asking students to rate their abilities on skills related to art and design, dyslexic students rated such abilities significantly higher than the non-dyslexic students in terms of their visual composition in 3D and ability to rotate objects mentally to see them from other perspectives. Dyslexic students were also more likely to pursue careers as sculptors

and theatre designers than the non-dyslexic ones. Brunswick et al. argue that the findings support the suggestion of superior 3D, 'real world' spatial ability in dyslexic individuals compared to non-dyslexic art students (2011).

Similarly, a number of studies for the Boston Research Centre by Von Karolyi et al. found that dyslexic learners in their research sample had a superior global visual spatial ability, compared to non-dyslexic learners and dyslexic readers outperformed non-dyslexic ones when asked to indicate whether objects drawn in 2D could exist in 3D (2003, 2001). The dyslexic group was faster and no less accurate at recognizing the impossibility of some of these figures. The researchers point out that to complete this task the individuals needed to take a holistic (global) rather than analytical (local) view of the images and the ability to see the 'big picture' is a skill necessary for artistic professions (Brunswick 2009: 184). It has been suggested that the holistic processing skill may underpin the link between dyslexia and visuospatial ability (Brunswick et al. 2011, 2010). Learning style theorists and dyslexia practitioners have long noted that dyslexic learners have a preference for holistic 'big picture' processing, and have advocated the use of holistic approaches such as the use of outlines, mind-maps and visual representations in teaching and learning (Cooper 2009).

The actors' three-dimensional world

The use of visual and holistic thinking is evident in the rehearsal and preparation process of the actors in this research. Cognitive science has studied internal visualisation, that is 'our ability to internally represent objects, events and more abstract phenomena as mental images, and our ability to infer new information by transforming these images' (Hegarty 2004: 2).[97] The psychologist and diagnostician David Grant has defined five different categories of visualisation, three of which (creative, photographic and synaesthesia) are evident in the actors' rehearsal and preparation process (Grant 2010: 93).[98]

[97] See Hegarty (2004) for an overview of previous research into internal visualisations.
[98] The other two are paired-associative and episodic visualisation.

For example, creative imagery is evident in Sally's description of her reading process:

> Being dyslexic, I see things differently. When preparing a piece of text for an audition, there is something very visual about the audition. I see it straight away, almost filmically… what's happening in the situation, rather than reading the text, I can see what's happening with the people and the characters (Sally, Interview 2011).

Such creative imagery occurs when an individual, such as Sally, creates an 'imaginary movie', that is seeing something 'filmically', when reading or listening to music (Grant 2010: 94). Grant reports that his dyslexic students reported a more vibrant visual experience when reading and a greater number experienced imagery when reading than non-dyslexic learners (2000). Eide and Eide suggest that dyslexic strengths in visual-spatial reasoning means that spatial imagery takes the form of a heightened series of inter-connected three dimensional images along-side clear visual imagery (2011: 74). This results in Sally being able to see the plot and characters in her mind's eye 'almost filmically' (Sally, Interview 2011). Michael also described a filmic approach to reading, explaining that 'When I read it's like watching a movie in my head' (Interview 2011). A similar 'imaginary movie' is revealed in comments from the dyslexic director Ann Parnell-McGarry:

> The first thing I do when I pick up the script is to visualise from page to stage in my head… It helps me to get a general idea of design and later I can quickly plot the cast's movements with them (1996: 142).

According to the above empirical and anecdotal evidence, it could be argued that dyslexic learners have what Gardner calls a spatial intelligence (2006). For him, intelligence is not a single phenomenon but encompasses a number of types of mental ability. Spatial intelligence mediates the ability to envision the relationships among objects or parts of objects in three dimensional space. As Messaris points out

> this form of intelligence plays a role not only in art (painting, sculpture, dance) but also in geometrical thinking, in the design and construction of any solid object

> (furniture, building machinery), and in much of our everyday interaction with the physical environment (1994: 27).

The role of mental imagery in relation to text is rooted in Pavio's dual coding theory in which knowledge is coded in interconnected verbal and nonverbal representations (Pavio 1986). These connections enable us to form names when we see pictures, and construct images when we hear words. The nonverbal system represents knowledge in 'nonverbal representations that retain some resemblance to the perceptions giving rise to them' (Pressley & McCormick, 1995: 71). For Sally, Michael and Ann Parnell-McGarry, the script evokes nonverbal images such as the visual image of the stage design or the visual image of the character's walking about on the stage. These nonverbal images share some features with the actual perception or experience such as the script or book.

Another type of internal visualisation is called 'photographic' imagery. This takes place when someone recalls the precise configuration of information they have seen previously, such as the pages in a text book (Grant 2010: 94). The learner uses an external visual object, as a memory tool, such as 'an artefact printed on paper or shown on a computer monitor' (Hegarty 2004: 1), and then recalls the information in an internal visualisation.[99] For example Sharon describes how she used mind maps:

> if I remembered where a specific thing on the mind map was I'd be able to recall what it said. So if I leave the Post-it [part of the mind map] in a specific place in the room, I'll be able to recall that section. During my school years I came up with lots of different ways of getting through my exams and I have a very good visual memory so I just held my notes above my head and it all went in (Interview 2011).

Sharon suggests that she is able to hold her 'notes above my head' in the 'visual-spatial sketchpad', a term used for the internal visualisation system in literature relating to working memory (Baddeley 1986; Logie 1995) and this 'sketchpad' is important in the formation of visual imagery (Logie 1995). Sharon recalls notes by anchoring them

[99] See Hegarty (2004) for a description of the potential connectedness between internal and external visualisations.

within the bodily space of the mind map, thus enabling her to see the mind map like a photograph in her mind. At school, Molly was also able to remember 'lots of facts and quotes' in sociology due to her ability to 'keep it at the front of my brain' in the visual-spatial sketchpad (Molly, Interview 2012). It is her photographic memory which enables her to anchor information in her bodily space and as a result support her recall of information.

As an adult, Molly describes her photographic memory in her acting process:

> My memory is a little photographic in that I can see the lines that are on the page, and I know at the end of this line is the word 'the' and then I know I have to turn over the next page to see the next line. But then I'm also aware that that actually stumps me in performance because then I'm performing according to the lines and I'm not actually working (Molly, Interview 2012).

She thus uses her photographic memory as tool for remembering her lines: in her mind's eye, she sees the lines on the page which have become part of her spatial body. However, she suggests that this visualisation 'stumps me in performance' and may be getting in the way of her ability to embody the lines fully. Some education practitioners have suggested that a reliance on internal visualization may have developed as a compensatory strategy for poor working memory (Grant 2010, Mortimore 2008a). Grant discusses how the visual richness of the learner's cognition is important because 'for people with a weak auditory working memory, being able to recall what they have read being played back as a series of images or like a movie is a very important memory aid' (2010: 84).

As previously mentioned, the main term used within the working memory literature relating to the role of internal visualisation is the 'visual-spatial sketchpad'. The visual spatial sketchpad is a key component in the working memory model proposed by Baddeley & Hitch (1974) and Baddeley (1986; 2000).[100] As evidenced in Grant's

[100] Baddeley & Hitch (1974) and Baddeley (1986; 2000) conceptualised working memory as an active short-term memory store where information is held and manipulated. Baddeley & Hitch (1974) proposed three components to the 1974 working memory model: the central executive, the

diagnostic chart in chapter one (page 15), dyslexic learners typically have very weak working memory scores. In cognitive psychology, some, like McNamara and Wong (2002) have suggested that working memory is a key 'deficit' which underpins all other behavioural characteristics and cognitive theories such as the phonological deficit theory of Snowling (2000).

Another extreme type of visualisation is called synaesthesia. Described as a blending of the senses, it most commonly refers to a combination of sounds with visual imagery (Grant 2010: 85). Ramachandran and Hubbard describe synaesthesia as 'a condition in which an otherwise normal person experiences sensations in one modality when a second modality is stimulated' (2001: 4).[101] Sharon, for example, describes the fact that she

> always sees days of the week as colours, so Mondays are always blue and Tuesdays are green (and I colour code my dairy accordingly) which helps me to remember what I'm doing that day. Also when I read I get a lot of visual images, and so I get tired easily because I am seeing the visual images all happening in front of me at the same time as reading it and it gets so tiring (Sharon, Interview 2011).

The incidence of synaesthesia among dyslexic learners has been discussed by Grant (2010) and Graves (2001: 42). The result of this rich and complex sensory experience is, Grant believes, a form of sensory overload which results in tiredness when reading

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phonological loop and the visual-spatial sketchpad. The central executive is the coordinator of the memory system and allocates incoming information to the phonological loop and the visual-spatial sketchpad. It is also involved in problem solving tasks.
The phonological loop has two parts: the articulatory control process which is like an inner voice, using sub-vocal rehearsal to mentally repeat information to yourself to stop you forgetting it. The second part of the phonological loop is called the 'phonological store', which is the 'inner ear' and this can hold the memory of sounds of up to two seconds without rehearsal. The third component of working memory is the visual-spatial sketchpad which stores and manipulates visual images and spatial information, sometimes called the 'inner eye'. The fourth component (updated in Baddeley's working memory model 2000) is the episodic buffer. This acts as an interface between the sub-systems of working memory and long-term memory. It is fed by the visual-spatial sketchpad, verbal sub-systems and perception. It holds information in multi-dimensional ways, that is visual and verbal information is held and combined. It binds things together into chunks or episodes.

[101] Ramachandran and Hubbard (2001) argue that synaesthesia is the result of a cross-activation between neurons and areas in the brain, which are normally linked to discrete functions.

and the need for regular breaks (2010: 89). Sharon's rich sensory world causes her to get 'tired easily' because the multi-sensory images are so vivid that she is literally 'seeing it all happen in front of me' (Sharon 2012). This dynamism of extreme visual thinking is also evident in Mark's description:

> When I read in my head, I find it amazing and exciting with all the images, it's a struggle to keep the focus but yeah I really love reading. But when I read out loud I get quite humiliated. I hate reading out loud (Mark, Interview 2011).

For Mark, reading in his head gives him a different body intentionality than when he reads out loud. Reading in his head is 'amazing, exciting', so much so that 'it's a struggle to keep the focus', as he is overwhelmed by the flood of incoming sensory information. This is in contrast to reading out loud which is humiliating (Mark 2011).

According to Machon's theory of synaesthesia and performance practice which she calls '(syn)aesthetics', the phenomenon of fused perception is key to understanding performance and seeking to reclaim 'the verbal as a visceral act' (Machon 2009:1). Similarly, the actors in my research are attempting to reclaim written words as a visceral act, through a visual-spatial process. During reading, Gerrig, a cognitive psychologist, reported that 'readers are often described as being transported by a narrative by virtue of performing that narrative' (1993: 2). For him the words 'performing' and 'transported' are metaphors used to describe the learner's reading process (Mancing 2006: 196) However, the dyslexic learner's characteristic use of rich and complex sensory imagery, may suggest that the figurative metaphor of reading as a 'performance' is literal for them.

Memory and multi-sensory learning

The actors in my research are creating a rich tapestry of non-verbal images in order to relocate themselves in a linguistic world, and achieve 'maximum visibility' or grip over the text-based world (Merleau-Ponty 1962). Many education practitioners and psychologists have discussed the role of the senses in supporting weaknesses in

working memory and the use of multi-sensory methods as remediation for a poor working memory, arguing that the more senses engaged in memory, the more supported memory is (see Carter 1996, Reid 2009a). Multi-sensory instruction is a core aspect of inclusive education pedagogy and policy (Learning and Skills Improvement Service ND) and is also used by dyslexia practitioners in support contexts. It is based on the working memory model of cognition (Baddeley 1986; Logie 1995) as discussed on page 107 of this chapter.

Multi-sensory learning is evident in the actors' approach to the learning of lines. Molly describes how:

> I have a terrible thing with lines, I try not to just kind of learn it by reading it over and over again because that doesn't really work for me. I have to listen to them. It's a bit of a labour actually, but once I've read it a few times then I'll start recording bits and pieces and then just put it on a loop and just keep it going. From reading the lines a few times I will be able to see the words on the page in my mind's eye. I don't know if my memory is a little photographic in that I can see the lines that are on the page, and I know at the end of this line is the word 'the'. I also circle a red line around a particular word that gives me a hook into the next word. So I am linking words and when I hear that word, then I know what is coming next. Lastly I record the other person's lines and leave blanks. I wasn't informed to do all this, it just felt like a logical thing to do, somehow through those stages and just generally working them into your body (Molly, Interview 2012).

Molly describes how reading the text over and over does not work for her. Instead she uses multi-sensory techniques to achieve maximum 'grip' over the lines, thus creating a new body-intentionality or way of engaging with the world of the text. Firstly she uses her auditory sense by recording the lines and listening back to them. Next, she uses her photographic memory, a form of internal visualisation to picture the words in her mind's eye. She then physically circles the words on the pages, thus using external visual artefacts and her kinaesthetic sense to give her a 'hook into the next word' (Molly 2012). These kinds of external visual representations can provide memory pegs for readers (Kozma 1991). Lastly she uses her auditory and kinaesthetic senses by

recording her cue lines and listening and speaking her lines herself. This leads to her growing sense of embodiment by 'working [the lines] into your body' (Molly, Interview 2012).

Diana also uses a multitude of senses in order to anchor information into the long-term memory. She describes how she has to

> learn through repetition. I read it and read it and read it, by going over it so many times and going back to it so many times. I also have to read it out into my iPhone, and hear how it sounds and then I listen to it back and it helps me to learn it. For me it's about practice. If I practise it continuously it will be there, but if I stop practising, no matter how many times I've learnt it, it won't go in (Diana, Interview 2012).

The role of repetition or 'over-learning' for dyslexic learners has been emphasised in the literature relating to good practice in dyslexia (Reid 2009a; Reid 2013). Because dyslexic learners are thought to have difficulty making new skills, such as learning lines, there is a need to repeat the information via a variety of senses.[102] As Diana suggests, if she stops practising, the new skill will be forgotten and this may be indicative of an unsteady body schema in the context of skill acquisition, as discussed in chapter two (page 34).

Making meaning: a holistic process

Despite the emphasis placed on multi-sensory learning, it may be that memory is supported by the broader holistic process of meaning making (Cooper ND). Using a social model of disability, Cooper argues that multi-sensory learning is merely a compensation strategy, predicated on the privileging of working memory in modern society, and argues that multi-sensory learning wrongly attempts to approximate the skills of someone with a good memory.[103] Rather, as the majority of dyslexic learners

[102] See Fawcett and Nicolson's automaticity deficit theory (1992).

[103] He argues that the working memory deficit theory is a myth, and is underpinned by the value placed on working memory by modern society. Having a weak working memory is perceived to be an indication of 'stupidity' and can define a person's self-concept (Morgan and Klein 2000).

are holistic thinkers, they rely on meaning to remember something rather than working memory. This process of meaning-making is a holistic and convoluted approach to making something meaningful, often through personal association. For dyslexic learners, this process is generally achieved holistically, rather than sequentially (Krupska and Klein 1995; Morgan & Klein 2000). Those who process information sequentially, rely heavily on working memory and little on the imagination. In contrast to this, holistic processing requires an imagination in order to make connections and see meaning in the whole pattern, and places little demand on working memory. (Cooper ND: 6).[104] It follows that dyslexic individuals favour episodic memory, remembering information about things they have experienced or imagined, over abstract or non-contextual facts, called semantic memory (Eide and Eide 2011: 172-174). The actors in my research adopt a holistic approach to their process, using episodic memory, internal and external visualisations and physicalisation to create a visceral holistic intentional relationship with the text and thereby supporting their memory.

A holistic approach is evident in Christina's 'date with the script' process:

> When I get my script for the first time, I try and wait until I have a candle or a glass of wine or some chocolates or something that really sets up a date with the script. To me, having a date with the script is a sign of respect, because otherwise I might be half in bed, in my robe, kind of being lazy, have my head on my pillow and flip through it and not really be that present, whereas when if you are on a date you are more present, you're kind of your best self or something (Interview 2012).

Christina creates a meaningful and intentional relationship with the script by creating a visceral scenario around it, and relating it to her personal association of a date, complete with the physical objects of chocolates, a glass of wine and candles. This enables her to achieve 'maximum visibility' or 'grip' over the script and create a new body intentionality with the lines on the page (Merleau-Ponty 1962). In this way, the

[104] The anecdotal strengths of three-dimensional modelling, creativity and lateral thinking are by-products of holistic information processing.

script becomes more than the words on the page, enabling her to create a new way of engaging with its world. The script has become part of her bodily space, as she wants to be 'present' and be her 'best self' when she reads it. She uses personal associations to relocate herself within the linguistic environment of the script and create a new way of being in the world. Rosa also discusses the importance of objects and kinaesthetic sense memory, as she describes how she does 'a lot of sensory work, like when I pick something up like a fan or a pair of shoes, and that would be my feeder into the character… and then I make up a whole back story' (Interview 2012).

Integral to this holistic process, the actors create an intentional relationship to the script through the use of visual marks and drawings:

> I will have a highlighter, because for some reason when I highlight and when I doodle, and write stars and stuff that seems to help me remember things. Yea, the more decorative it becomes the better; but there is a casting director who didn't like highlighted scripts and so I'd have to bring in a clean sheet in, but this somehow disassociated me with the script, it's like decorating or doing something to it. You don't mean to decorate it, it just happens, it's how you remember, it's your process, otherwise the script becomes a sterile white thing, and I am looking at it, and it's dead, it's not part of me (Christina, Interview 2012).

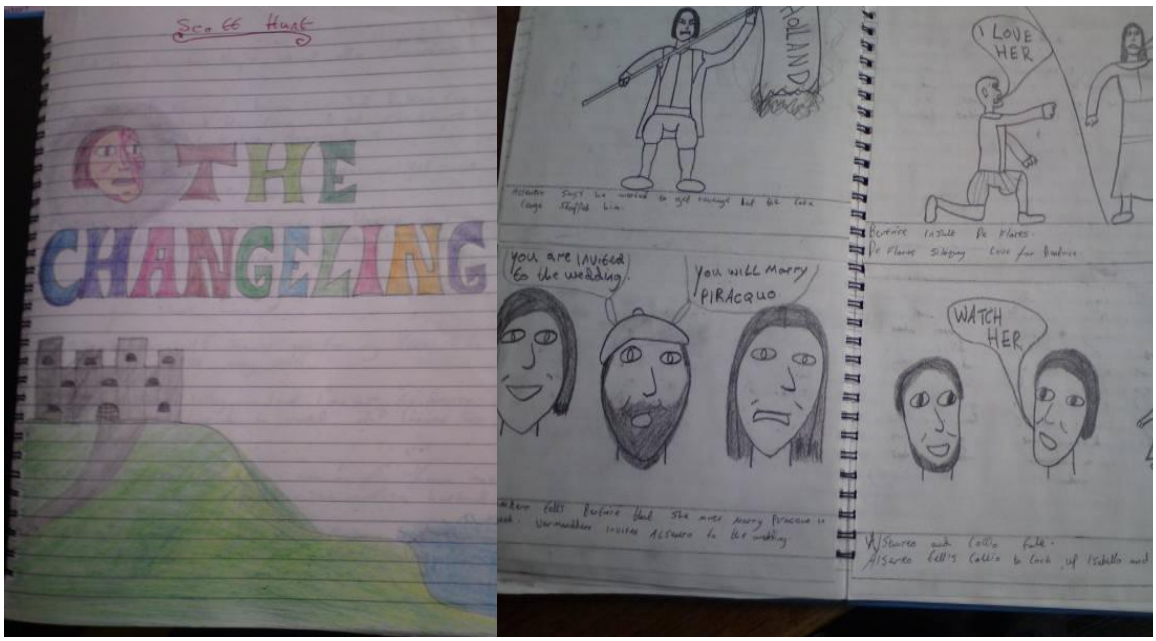
Christina uses both kinaesthetic and visual senses to anchor information into her memory. However, more fundamentally she is engaged in a process of meaning making: the script is transformed from 'a sterile white thing' to something that is 'part of' her bodily space. By drawing and writing on the script, it becomes part of her body, and helps her to reconnect with her body's experience of being in the text-based world. Without the drawings the script is 'dead', and there is a sense of a lived-distance between her body and the text as object. As Merleau-Ponty suggests, 'Distance is what distinguishes this loose and approximate grip from the complete grip which is proximity' (1962: 261). However Christina uses the 'doodles' to gain maximum grip over the object, and thus to create a new body-mind-world intentionality (Philpott 2000).

Diana is also creating and making meaning out of the words on the page through her own visual system of signs and codes. She creates an intentional relationship with the text as her script 'ends up with scribbles all over it and then I colour code things and just, it becomes a piece of, it's like a science project!' (Diana, Interview 2012). Similarly, Molly describes how

> I do scribble and make lots of picture type things, which mean things to me, for example – a light bulb in the margin means it's a new thought. If I draw an image of an open book, it suggests I have to read and check something, particularly if it's got a historical connection. I do symbols to represent inflections and things, whether it's a question and what kind of question will determine if I have my arrows up or down. I use musical notes if there is any music involved, so it's a cue. A squiggly line means I have to check the meaning of a word because I need to investigate that word or the definition. I do lots of arrows, just so I know it's a continued thought (Molly, Interview 2012).

As Molly suggests, these scribbles 'mean things' to her. As Cooper argues, personal association is key to supporting memory (2009). These scribbles help Molly to create a new body-world-intentionally with the text and relocate her body within the text-based world. In education, cognitive psychologists have stressed the importance of external visual representations for readers. Drawings can aid in the retention of information (Snowman & Cunningham 1975). They can also be used as a tool for understanding text: during the reading process, in contrast to good readers, poor readers will often use pictures to supplement information in the text (Rusted & Coltheart 1979).

Visual representations are also used by Sean in his preparation process see below Figures 18 and 19:



Figures 18 and 19: Sean's external visual representations of the play *The Changeling*

Sean's use of both words and text is similar to illustrations one might see in a picture book, that is a storybook that is 'a fiction book with a dual narrative, in which both the pictures and the text work interdependently to tell a story. It is a tale told in two media, the integration of visual and verbal art' (Bishop & Hickman 1992: 2). Sean is using the comic strip of images and key words to create an intentional relationship with the world of the play, thus giving him a new body-intentionality.

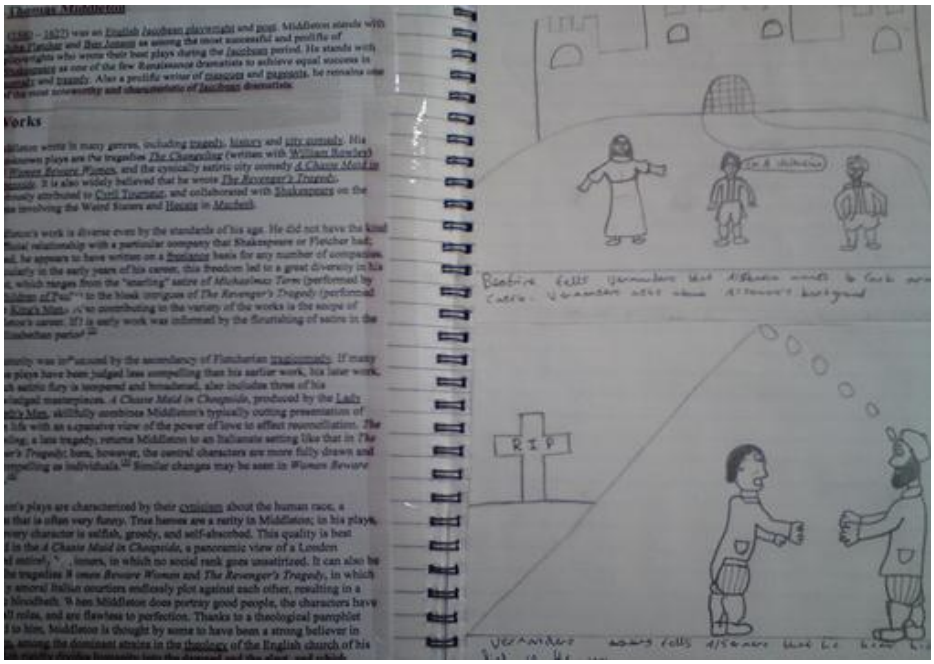
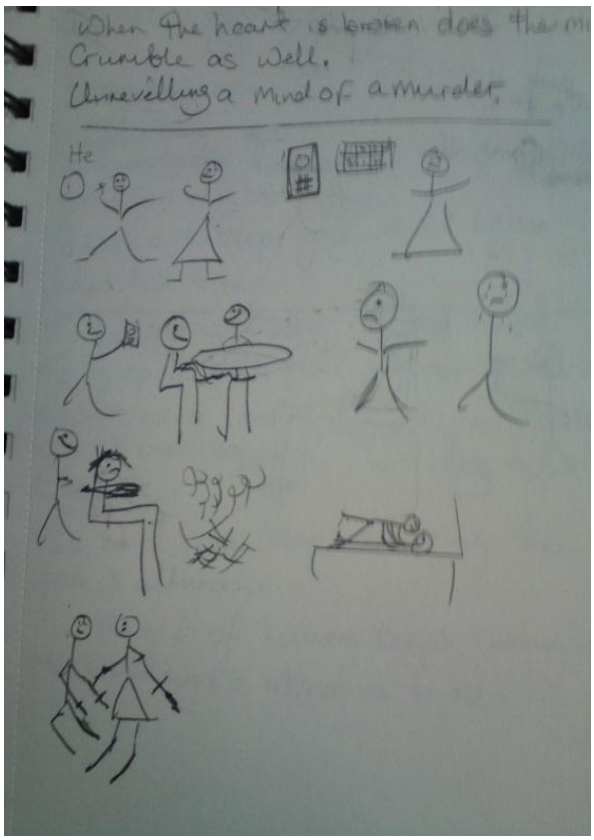


Figure 20: Sean's drawing of the actions in the play *The Changeling.*

However, Swanson (1989) suggests that poor readers like Sean often have difficulty making verbal and nonverbal connections quickly and effectively, because they are focused on the decoding of words, as was found in Sean's approach to sight-reading in chapter two. However, when given the time to prepare a script, Sean uses a holistic process which enables him to make meaning out of the words of the page, through personal association, key words and visual representations. This preparation process has allowed Sean to move beyond word decoding and to engage with the text, integrating verbal and nonverbal knowledge. By building visual representations into his preparation process, the 'pictures in text consistently produce prose learning benefits' (Levin, Anglin & Carney 1987: 53), and this helped Sean better to conceptualise the sequence of events in a linear manner. The story-book images act as memory 'pegs' on which to hang the linear narrative.

In a similar way to Sean, Steve also uses drawings to cement the narrative structure of the action:



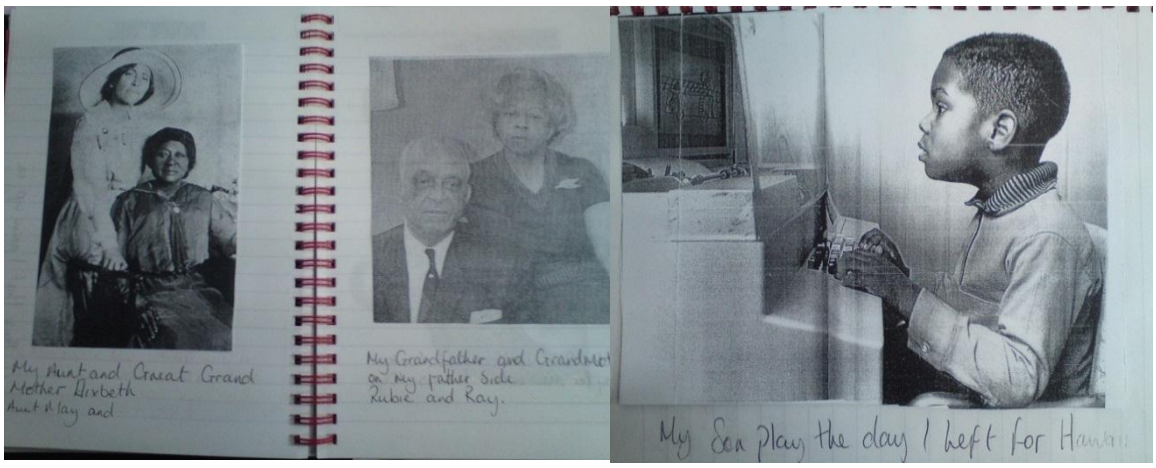
I draw out the little matchstick people in terms of the script and what they do, what the physical actions are. Part of this scene was in the kitchen and part of the script was that I had to tie up my fiancée, my wife. So I had to imagine it so I just drew it out, in the form of story boarding. It was just to get a picture of the different stages, and helped to work out the sequence of events, cause it happened in stages as well. (Steve, Interview 2012).

Figure 21: Steve's use of drawings to create linear structure.

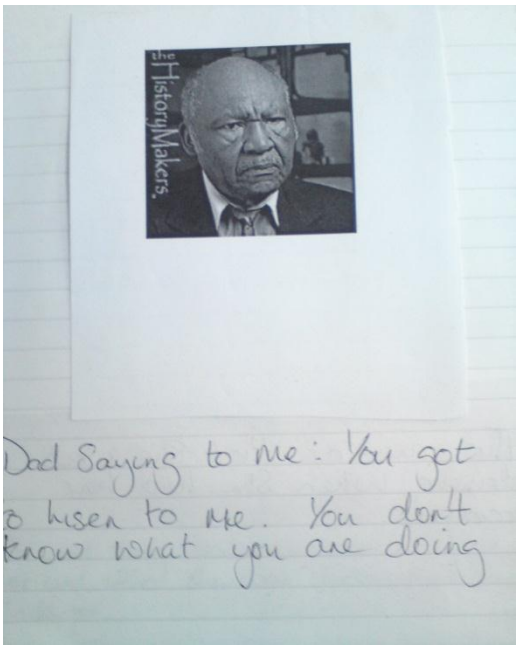
Steve is able to create a new intentional relationship with the script by drawing out the narrative, using both his kinaesthetic and visual senses. He also uses the drawings to relocate his body within the linear structure of the play. As discussed in chapter three, dyslexic learners have a different intentional relationship with time and linear sequencing, conceiving of time 'not a multiplicity of linked phenomena, but one single phenomenon of running-off' (Merleau-Ponty 1962: 419). It is the use of these drawings which enable Steve to create a new body-intentionality and connect with the linear structure of the play. The drawings are used to support the construction of internal images of a sequential notion of time and space outside of Steve's embodied experience. As Schallert suggests: 'pictures help the reader learn and comprehend a text when they depict structural relationships mentioned in the text' (1980: 513-514).

The relationship between verbal and nonverbal representations is further described by Steve :

> when I read the script, I just take out certain parts of the dialogue and if I can, a certain word kind of brings a picture to my mind and then I find pictures to help cement those images. Every time I come across that kind of word it paints an image and it gives me more emphasis to put on a word maybe, it just makes it easier for me to remember the lines (Interview 2012).



Figures 22 and 23: Steve 's scrap book for *Guess Who's Coming to Dinner*?



Figures 24 and 25 Steve 's scrap book for *Guess Who's Coming to Dinner?*

For Steve, words trigger certain images in the mind's eye. The interconnectedness of Pavio's dual coding system between verbal and nonverbal representations allows him to mentally create images when he reads words (1986). Steve then finds external visual representations of these mental images in order to further 'cement' them into his memory. These external visual artefacts act as memory pegs, and further enable him to remember and make meaning out of the verbal subsystem of written words.

Along with the use of both internal and external visualisations, the actors in my research also use external moving images in their process. Rosa discusses the use of moving images in her process, which integrates visual, auditory and kinaesthetic learning. When asked how she prepares for a role she made the point that

> I'm at it all the time in a sense that I'm on YouTube all the time. If something interests me I'll go on, for instance like the London riots, I am listening to what people say, listening to an interview with Noel Gallagher and all this kind of thing, his attitude, so I'm like a sponge. Anything happens, I will pull something up on YouTube and I store it in my mind, it's like a library of emotional work and I'll pull something out of it and say, 'what have I done? (Rosa, Interview 2011).

As Rosa suggests she is constantly preparing 'all the time', in a holistic process which utilises modern, audio-visual technology such as YouTube to better understand the psychology of people and their motivations. In psychometric testing, dyslexic learners frequently achieve very high marks in verbal comprehension which measures general knowledge. This is possibly because they are constantly picking up nonverbal clues and information from the physical environment, rather than just relying on textual sources (Grant 2010). The result of this process is a 'library of emotional work' (Rosa, Interview 2012).

Rosa uses her episodic memory (memories from actual experience or imagined) to supplement her semantic memory (factual information outside of personal experience). She asks herself

> "Have I ever experienced this?" So I will use either my own experience, or I will use anything, for instance this film I'm doing about a woman who abused children. That consistent abuse – if she didn't get what she wanted then they'd be sent down to Grandpa to be abused. And so I've watched video after video of Rosa West and watched loads of films and I researched the psychology behind the woman (Rosa, Interview 2012).

For Rosa, these moving pictures provide key images with which to connect new information from the text, providing critical background information and support for understanding the related text and character (Gambell & Jawitz 1993). They also give her a springboard into her imagination, which can be interpreted through Stanislavsky's notion of 'if', that is that '*if* acts as a lever to lift us out of the world of actuality into the realm of imagination' (Stanisalvski 1936: 46). Rosa uses moving images as a way into the material 'given circumstances' of the text which then becomes part of her semantic memory. These facts or consciously cognitive information are supplemented by her episodic memory consisting of embodied experience and imagination, as she asks herself 'have I ever experienced this?'.

Implications for practice

Given the actors' preference for visual and holistic ways of being in the world, it seems clear that training methods which favour visual-spatial, non-verbal thinking are particularly suited to these kinds of learners. The creation of a visual-spatial, 'virtual' space of performance is evident in the training methodologies which rely on visual-spatial processing such as those of Stanislavsky and Michael Chekhov. Certain techniques may, as a result of their emphasis on scene-based mental imagery, enable the dyslexic learner to create a new body-intentionality or way of engaging with the world, which has nothing to do with the written word.

For Stanislavsky, imagination was the core of the actor's work (Blair 2008: 33). He describes internal visualisations as 'inner visions… an unbroken series of images, something like a moving picture… this film will unroll and be thrown on the screen of our inner vision' (Stanislavski 1980: 63-64). He himself uses the movie-in-the-mind metaphor to discuss internal visualisation. Stanislavsky's system values the actor's ability to

> visualise the details of a character's world specifically, and to daydream or fantasise about the events of the play. Stanislavsky taught that an actor should not speak without an image in the mind's eye and suggests developing a 'filmstrip' of images to accompany the performance of every role (Stanislavski 1989: 130). Such visualisation energises the imagination (Carnicke 2010: 11-12).

Simon Callow (2013) suggests that the central importance which Stanislavsky placed on the construction of film strip images and visualisation, along with his language difficulties, discloses Stanislavsky's dyslexic tendencies:

> he had a habit of mentally substituting another play and another character, drawn from his own imagination, for the play and the character the writer had actually written. His literary sense was always poor; he was not an avid reader. Indeed, according to Nemirovich-Danchenko, he was technically dyslexic. He had great difficulty with words (learning them, even speaking them); off stage, too, he was famous for using the wrong word or for not being able to remember the one he

> needed. To what extent this influenced the development of his system, which often seems suspicious of language, is an interesting question (Callow 2013).

According to Callow's hypothesis, Stanislavsky's difficulty with written and verbal language may have influenced the development of his methodology, which in the latter part of his working life relied more on subtext, physical action, imagination and mental imagery than verbal language. It may be that there is a dyslexic aesthetic which runs through Western actor training methodology, which is inadvertently influenced by dyslexic practitioners. As Moseley suggests

> actor training traditionally and historically has been the way it is because so many actors, even before we knew what dyslexia was, were dyslexic so we know how actors learn and they don't necessary learn through intellectual means - their learning can often be more instinctual and body learning (Moseley, Interview 2009).

Callow also suggests that Michael Chekhov may have been dyslexic because he was 'always [seeking] the subtext, the emotional life behind the word, rather than engaging with the words themselves, which he was notoriously given to paraphrasing' (Callow in Chekhov 2002: xix). It could be that rather than engaging with the 'emotional life behind the word' Chekhov was rather engaging with the three-dimensional, virtual 'film-strip' of images beyond the word, as his work emphasises the imagination, visualisation and creation of such a three-dimensional 'filmstrip'. For example, the imaginary body technique encourages the actor to visualise the body of his or her character, building up multi-sensory and three-dimensional images, existing in three-dimensional space:

> You are going to imagine that in the same space that you occupy with your own real body, there exists another body – the body of your character – which you have just created in your mind (Chekhov, 2002: 78).

Actors then 'play with the imaginary body, changing and perfecting it' until they embody the imaginary body by 'cloth[ing] yourself, as it were, with this body… put[ing]

it on like a garment' (Chekhov 2002: 79). This technique may enable dyslexic learners to return to a pre-reflective spatial body, accessing their visual-spatial imagination. Ken suggests that

> Chekhov is wonderful if you're dyslexic, because as far as the imagination is concerned it allows you to think outside of the box and it is not strange to do so. I think the imagination is a very powerful tool, and as actors I don't think we are asked as much to use it (Ken, Interview 2009).

Ken has found that the Chekhov technique allowed him to return to his pre-reflective, subjective body, engaging with the world in a way that allows him to think 'outside of the box' of verbal and sequential thinking (Ken 2009). Rather than being confronted with a sense of 'dys-location' characteristic of the dyslexic person's encounter with the written word, Ken prefers to locate himself within a visual, three-dimensional and virtual space of performance, thus achieving 'maximum visibility' over the written world of the play (Merleau-Ponty 1962). The imaginary body exercise may relocate dyslexic learners within a text-based profession, by harnessing the extreme visual-spatial processing, which Erudt suggests is characteristic of dyslexic learners (2009).

When working with the imaginary body technique in relation to a character, Carl identified that

> it's very useful because I was visualising him… where he was… what the weather and climate was at the time, the clothes he was wearing… how he held his body… where he was – lying on the kitchen butcher's table tied up – he's just been caught burgling (Interview 2012).

Carl's vivid mental imagery has enabled him to transform the character's objective body into his spatial-body. Using this technique Carl was able to experience the intrinsic relation between the body and space, as not 'a body in space', but a body that 'inhabits space' (Merleau-Ponty 1962). Similarly, Rosa describes how she saw her character

> very visually, even the lacing on her dress, laced… Very, very rigid. So that constricts her movements so that she's not as animated, she can't be because of the kind of corset she's wearing. Very upright, very controlled, and determined. I saw her much more as a praying mantis (Rosa, Interview 2012).

Her description is packed with visceral and tactile images such as 'lacing' and the 'praying mantis'. These images have helped her to engage with the character's psychology and establish that she is 'very controlled, and determined'. Moreover the image is distinctly of her bodily space: her spatial movements are constrained due to her clothing and her engagement with the world is 'very tight, very controlled' (Rosa, Interview 2012). The technique has enabled the actors in my research to create a virtual performance space with which to frame verbal dialogue, removing the need to process information verbally and sequentially.

Conclusion

The actors in my research primarily use a nonverbal, holistic and sensory process to create maximum 'grip' over text-based sources, enabling them to relocate their body intentionality within the linguistic environment. Aspects of both Stanislavsky and Chekhov's methodology also employ internal visualisation and a highly sensory and contextual process using techniques such as sensory exercises and contextual research. The use of the senses and context is evident in Stanislavsky's emphasis on 'living the part' (1936: 14), which employs both background contextual information (both semantic and episodic) and multi-sensory exercises. Stanislavsky's given circumstances (Merlin 2009: 66) and mental reconnaissance both require a high level of contextual research to establish the semantic information of the play such as historical background, setting and facts. These methods are in contrast to those used in post-modern plays and in training approaches which are primarily based on the verbal subsystem of language, a form of symbolic cognition.[105] Despite the preference for holistic processing, education theory suggests that dyslexic learners should be

[105] See chapter 3 page 92 where I discuss postmodern theatre.

taught to apply schemas or ‘chunks’ to their work so that they are able to process information sequentially and analytically. This is discussed in the next chapter.

Chapter Five: The actors' experience of chaos and control in the environment: cognitive artefacts and embodied learning

> When I'm reading, things just float around in my head… the text, the words, the character and my thoughts, and I just can't quite make sense of things… these things are normally a blur, I want to find some sort of process (Ross, Interview 2012).

Ross' 'blurred' cognitive process, which 'floats around [his] head' is an intensely disorientating experience. For him, his cognitive or thinking process remains 'in his head' and this disrupts his body-world connection. In this context his thoughts have become one of 'restrictive potentialities', appearing inaccessible to him (Merleau-Ponty 1962: 165) as he 'can't quite make sense of things'. There is a disconnection between his mind where 'things just float around' and his body's experience of being in the world, resulting in a sense of volatile body-intentionality. This could be described as a breakdown in the pre-reflective structures of perception (Philpott 1998). As discussed in chapter three, cognitive psychologists have suggested that non-linear temporal processing is indicative of cognitive 'deficits' in linear sequencing and working memory (see page 68-9). In this chapter I develop these ideas further by examining the actors' embodied approach to acquiring sequencing and language skill. Their manipulation of the physical environment and the physical artefacts within it, enable them to create more stable body schemas in the context of verbal language and linear sequencing.[106] Ross himself expresses a desire to 'find some sort of process', make sense of the 'blur', and in doing so hopes to develop a new way of being in the world (Interview 2012).

This chapter will discuss the actor's desire to 'find some sort of process' with the text and gain what Merleau-Ponty terms 'maximum grip' over the world of words and sequencing (1962). It begins by outlining previous empirical research into the compensatory strategies of successful adult dyslexic learners, and links these findings

[106] As discussed in chapters one and two, page 26 and 29, the term 'cognitive artefact' is defined by Norman as 'those artificial devices that maintain, display, or operate upon information in order to serve a representational function and that affect human cognitive performance' (1991: p.17). It is also used by Hutchins (1995), Tribble (2011) and Tribble and Sutton (2013). Body schema is defined in chapter two page 34-35.

to the actors' lived-experience of chaos (as discussed in chapter three) and their own wish to and attempts to gain control over their volatile relationship with text and sequencing. These experiences are discussed in the light of Hutchin's model of distributed cognition (1995), Merleau-Ponty's account of body schemas and their founding role in skill acquisition (1962), and Philpott's assertion that dyslexic learners have a volatile body schema (2000). The chapter then discusses the ways in which some educational practitioners and theorists have applied traditional cognitivist accounts of schema theory to models of dyslexia teaching, advocating the use of learning frameworks and strategies which organise linguistic information into meaningful contexts. Schema theory is then contextualised within socio-cultural and embodied accounts of cognition, and finally there is an exploration of an embodied approach to reading which was developed with the actors in my research. The reading method is used as an example of a cognitive artefact which enabled the actors in my research to control the immediate environment around them, in order to facilitate thought.

Chaos, control and the environment

As discussed in chapters two and three, the actors in my research could be described as experiencing a different intentional relationship to verbal language, written text and structure, one which is characterised as 'the peculiar style of dyslexia' (Philpott, 2000: 32). Scott describes how, at drama school he:

> was told that it's all in there but you don't deliver it all in the right order. It gets back to front and loops around a bit, your brain just doesn't process it in the way people expect you to process it. It's just a different way (Interview 2012).

He describes his 'back to front' process as the antithesis to 'the way people expect you to process'. However, rather than viewing his cognitive style as a deficit, in the manner of psychologists, he perceives it as 'just a different way', a similar approach to that of Merleau-Ponty, who sought the lived experience behind the positivist paradigms of intellectualism and empiricism. The neuro-diverse perspective has been adopted by a

number of dyslexia theorists and practitioners who advocate a rejection of the medical model of 'deficit' in favour of the idea that 'the brains of individuals with specific learning difficulties (including dyslexia, dyspraxia and ADHD) are wired differently from those neurotypicals (NTs)' (Grant 2010: 156-157) or, as Philpott puts it, they adopt, 'a radically different manner of Being-in-the-world, and not, as might be interpreted, an incomplete manner' (1998).

Despite this rejection of the medical model and embrace of difference, the actors in my research expressed a desire to gain a sense of control over their volatile relationship with language, literacy and structure. As discussed in chapters two, three and four, the actors use a variety of cognitive strategies such as context, nonverbal language and holistic thinking, to relocate themselves in a linguistic environment, which is otherwise a profoundly 'dys-locating' experience (Philpott 2000). Yet, studies have suggested that the adult dyslexic learner's ability to successfully relocate themselves within the linguistic environment is ultimately determined by their facility to control the environment they operate within (Gerber, Ginsberg and Reiff 1992; Logan 2005, 2009, 2010).

Both Gerber, and Logan's research explore the interaction between the adult dyslexic learner and the environment. Gerber Ginsberg and Reiff's empirical research was concerned with identifying what factors make some dyslexic learners successful in adult life, and others less so. The majority of his research participants attributed their success to their ability to gain control and equilibrium in their working lives. The highly successful adult dyslexics in Gerber et al.'s research were able to achieve control by anticipating where the dyslexia 'wild card' will manifest, and prepare strategies so that they were prepared for any eventuality (1992, 2011). Control meant making a number of conscious internal decisions (such as ones relating to the person's desire or goal orientation or reframing dyslexia as a positive experience) and adapting oneself in order to move forward (the employment of external manifestations such as persistence, appropriateness of chosen career to skill set, learned creativity and support networks in the social environment). Control fuelled these people's success in the workplace, either through being in control of the physical environment (at work) or

through the deeper issue of psychological and emotional control. The most successful were able to gain control in order to move forward, rather than just to compensate for difficulties. The experience of control made them feel confident, calm and in charge of their future.

Logan's comparative research explored the incidence of dyslexia amongst corporate managers, entrepreneurs and the general population and found that there is a notably lower incidence of dyslexia in corporate management and in the general UK population than in entrepreneurs (2009). This research suggests that dyslexic entrepreneurs are particularly suited to start-up businesses or entrepreneurial roles as in that environment they are able to do things their own way. The dyslexic entrepreneurs had developed compensation strategies, such as delegation of tasks, which helped them to grow their business, and gave them an advantage over their non-dyslexic colleagues. Logan's research supports earlier findings that dyslexics are more comfortable managing a situation in which they can control the variables, and that, in the workplace, success is determined by their ability to control and compensate for any difficulties (Fitzgibbon & O'Connor 2002; Taylor & Walter 2003).

The desire to control the immediate physical environment also occurs in the lived experiences of the actors' in my research. As discussed in chapter two (pages 42-45), many of the actors in this study perceived the world of acting and the stage in such a way that it gave them a new way of being in the world; the act of rehearsal and repetition gave them a sense of certainty and control over the environment not felt in everyday life, and in some cases created multiple modes of embodiment. Yet, paradoxically, there was also a sense of being out of control when faced with tasks involving the written word, verbal processing and linear sequencing. In these cases, their body schemas became fragmented leading to a sense of lived-distance between the body and the world. Drawing on research by Gerber, Ginsberg and Reiff (1992) and Logan (2009, 2013), the actors' ability to succeed in the linguistic environment is determined by their ability to control it.

Merleau-Ponty conceptualises the intentional relationship between the body and the environment in relation to depth perception and the notion of 'maximum grip' (1962), as discussed in chapter four. The adult dyslexic learners in Gerber and Logan's research achieved 'maximum visibility' over the environment when they were in the best context for perceiving it, that is, when they were able to control their physical environment. According to Merleau-Ponty, it is the experience of distance that enables greater or lesser grip on the object and 'distance is what distinguishes this loose and approximate grip from the complete grip which is proximity' (1962: 261). The actors in my research also experience a lived-distance between themselves (the body) and the text (as object). They have a 'loose and approximate grip' over tasks requiring verbal language and sequencing, and as a result, there is a desire to achieve 'complete grip' over their process (Merleau-Ponty 1962: 261).

Tom is aware of the lived-distance between himself and the world of the text, suggesting that he feels he:

> just can't immediately get a handle over the text – I'm not sure what some of the words mean, how to pronounce them, what the play is about. It's like I have a vague notion of what is going on, but there are a lot of gaps when I read and a lot of the time I just feel so far away from the words on the page (Tom, Interview 2012).

The sense of deviation from maximum grip is evident in Tom's relationship to text when he says that he 'feels so far away from the words on the page'. However the experience of lived-distance is not solely confined to linguistic situations. Diana, for example, describes an intensely disorientating spatial experience during performance:

> At drama school we were doing a version of *To Love a Nightingale*, and there was this big dance routine which we'd rehearsed stage right, however, in the middle of the performance the lights went out unexpectedly, and when the lights came on I was completely lost as to where I was, as everyone had ended up stage left instead of stage right. Everybody else managed to work with it and I was just lost, didn't know whereabouts I was, threw me completely because it's not the way I'd learnt it (Interview 2012).

Diana thus suggests that her body intentionality is disrupted in situations where special perception is altered and in these cases, there is a sense of lived distance between her body and space. Spatial 'dys-location' is a key behavioural characteristic of dyslexic learners and is also characteristic of other neuro-diverse profiles such as dyspraxia.[107] As a learner with co-occurring dyslexia and dyspraxia, Diana's spatial awareness is thus experienced acutely because of the added dimension of her learning differences.

Merleau-Ponty suggests that this experience of distance manifests itself as an experience of tension, and this enables the perceiver to get a better grip on the object being perceived by, for example, moving closer to it (1962: 302). For the dyslexic learner, the response to this lived-distance is to control the environment, using a variety of strategies, cognitive artefacts and support networks which are 'distributed over… mind, body, activity and culturally organised settings' (Lave 1988:1), and thus creating a new body intentionality. The desire to control the physical environment is evident when Ross describes how

> I'm always trying to find the right way to do it… like I want someone to say to me 'This is what you do and this is how you do it'. I think in a way I want to find a way, a solid way again, I want to find a structured way of working on a script, like a process that I go through (Ross, Interview 2012).

Ross' response to this chaos and lack of control is to attempt to find 'a solid way… a structured way'. His process is encountered in the context of the people in the world around him, as he realises that 'man is in the world, and only in the world does he know himself' (Merleau-Ponty 1962: xi). He looks to culturally organised settings in the environment, wanting 'someone to say to me this is what you do and this is how you do it'. The oscillating relationship between body and world is evident as he looks for help with this process. As Merleau-Ponty suggests, 'it is precisely my body which perceives the body of another person' (1962: 354)

[107] The co-concurring relationship between dyslexia and dyspraxia is discussed in Moody (2007).

Jan also describes her process as a dynamic body-world relationship, in relation to objects in the environment. A key concern of distributed cognition is the role played by objects or 'cognitive artefacts' in the environment, acting as 'vehicles of meaning' in order to think (Trimingham 2013: 231). Jan reveals how she manipulates objects in the environment to create a sense of control:

> I always set up the furniture at home to look like the set, because my directions are very bad so I make sure I practice and practice... I go the right way round things... when I was understudying on a tour, that was hard because I had three people to understudy and three patterns… but because I had practised and practised at home, I was fine (Jan, Interview 2009).

As Gerber suggests, Jan anticipated where the dyslexia 'wild card' would manifest (in this case difficulties with directions and spatial orientation) and prepared and strategized for the situation. Her strategy involved firstly creating a model of the set in her front room, so that she could 'go the right way round' the set, and secondly repeatedly practising the pattern of movements. According to Gerber, being able to control the physical environment is the key to success for the adult dyslexic and this enabled Jan to learn three different 'patterns' or blockings for the same play. By simulating the stage set in her own home, she was able to create a new body intentionality, or way of being in the world. The furniture in Jan's home became part of

> The surround – the immediate physical and social resources outside the person – [which] participates in cognition, not just as a source of input and a receiver of output, but as a vehicle of thought. The residue left by thinking – what is learned – lingers not just in the mind of the learner, but in the arrangement of the surround as well (Perkins 1993: 90).

Edwin Hutchins, a cognitive anthropologist, suggests that cognition is distributed and takes place 'both inside and outside the minds of people'; that the lines between 'inside' and 'outside' are artificial and that they create 'the [false] impression that individual minds operate in isolation' to the environment (1995: 355). Hutchins

attempts to 'dissolve the boundaries of the *skin* and present navigation work as a system of interactions among media both inside and outside the individual' (1995: 5; my italics), locating cognitive activity in context, in a dynamic process with other people and cognitive artefacts in the environment. Hutchins' model of distributed cognition is closely related to the Extended Mind Hypothesis in philosophy, and the work of Andy Clark (2010).[108] Hutchins' use of the word 'skin' (in the above quotation) echoes Clark's notion that cognitive processes extend beyond the 'skin bag' into the immediate environment (Clark 2010: 76).[109] Both views concur with Merleau-Ponty's philosophy that the terms 'inside' and 'outside' exist only through each one's dialectical relation to the other, believing that 'Inside and outside are inseparable. The world is wholly inside and I am wholly outside myself' (1962: 407).

Hutchins uses the example of a naval ship to explain this process, identifying a number of cognitive artefacts on board, such as charts, GPS systems and the social structures of the ship, which function as cognitive constraints, whilst also enabling the execution of complex tasks (1995). It could be seen that Jan's use of furniture is an example of a cognitive artefact which functions as a cognitive constraint, helping her to 'go the right way round' the set (Interview 2009), and enabling her to execute the complex task of understudying three different characters. As Hutchins argues

> the environments of human thinking are not 'natural' environments. They are artificial through and through. Humans create their cognitive powers by creating the environments in which they exercise their powers (1995: 169).

Jan has created an artificial environment in her living room and has used this to improve her cognitive spatial ability, deliberately constructing an environment in order for her to create a more stable body schema in the context of spatial orientation. She

[108] The extended mind hypothesis is a closely related field to distributed cognition. See Tribble (2011) who discusses the relationship and Robbins et al. (2009) who attempts to clarify the terms.
[109] However it is important to note that Clark does not argue universally for the idea that "individual consciousness extends outside the head"; rather he believes that a "robust cognitive extension" takes place only in particular cases where "the relationship between user and artefact is about as close and intricate as that between spider and web" (1997: 218). For him, the term 'mind' can "encompass a variety of external props and aids" (1997: 215).

further describes her relationship to the physical building of the theatre, explaining that

> it's very, very important for me to get to the theatre early – I am more frightened of finding my way from the dressing room to the stage than I am performing on the stage because I remember directions backwards so I have to know the theatre inside out and back to front. Because of the chaos of my brain it is really important that I am the first person in the dressing room so I know where my things are and I have my routine (Interview 2009).

Jan's need to 'know the theatre inside out and back to front' and to 'know where my things are' reveals her need to control the physical environment around her, in response to the 'chaos' in her brain. As Merleau-Ponty suggests, 'Once a body-world relationship is recognised, there is a ramification of my body and a ramification of the world and a correspondence between its inside and my outside and my inside and its outside' (1968: 136). Insights from the Extended Mind hypothesis, proposed by Clark (1997, 2010) suggest that Jan is altering her environment to support the offloading of cognitive tasks. These changes to the environment are called 'epistemic' actions (Kirsh and Maglio 1994) and are:

> actions whose purpose is not to alter the world so as to advance physically toward some goal (e.g. laying a brick for a walk), but rather to alter the world so as to help make available information required as part of a problem solving routine. Examples of epistemic actions include looking at a chessboard from different angles, organising the spatial layout of a hand of cards… laying out our mechanical parts in the order required for correct assembly, and so on (Clark 1998: 511).

Jan organises the spatial layout of the set in her living room in order to solve the problem of spatial dislocation. The epistemic action enables her to change the environment so as to access the spatial information required of her part in the play (that is, blocking). Clark suggests that bodily activity can be part of a problem-solving routine and certainly, for Jan, she needs to be 'the first person in the dressing room so I know where my things are and I have my routine' (Interview 2009). She arrives at the

theatre early, in an effort to interact with and orientate herself with the physical building of the theatre, so that she might 'know the theatre inside out and back to front', because she is ' frightened of finding [her] way from the dressing room to the stage' (Jan, Interview 2009).

A dynamic body-world relationship is also revealed in Jan's choice of material practices. Jan suggests that the Keith Johnston improvisation method is very useful for her because 'His is a step by step story boarding and although we find sequencing hard, it's actually really good to do things step by step... we find it hard but it makes us feel safe when we know our path' (Interview 2009).[110, 111] As a dyslexic learner, Jan has a different intentional relationship to linear sequencing, which she finds difficult to master. Paradoxically, despite the difficulties with creating linear schemas, this actor suggests that it is 'really good to do things step by step... it makes us feel safe when we know our path'. According to Jan, step by step sequencing gives her a sense of control over her non-linear process. Her desire to create a linear way of being in the world is revealed in her use of the conceptual metaphor 'path', which may suggest that there is a desire to create source-path-goal image schemas. As discussed in chapter three, this ability may not have been readily created in childhood development (see chapter 3, page 72). According to a distributed model of cognition, Jan's ability to create a new linear way of being in the world has been developed because she has become embedded within the material practices of the Keith Johnson method. It could be that Jan has achieved a cognitive integration with this tool (the Johnson method) enabling her to create a more stable and linear body schema. Cognitive linguist, Rohrer suggests that it 'is not just that the body shapes the embodied mind, but that the experiences of the body in the world also shape the embodied mind' (2007: 345).

[110] This practical research originated in my MA work but is used in a different context here.

[111] The Keith Johnson method is a form of improvisation which asks actors to make and accept 'offers' from co-improvisers. Johnston describes how "I call anything that an actor does an "offer". Each offer can either be accepted or blocked… a block is anything that prevents the action from developing, or that wipes out your partner's premise. If it develops the action isn't a block" (Johnson 1979: 97). Baumer and Magerko (2009) suggest that linear narrative development is made possible through making and accepting scene-advancing offers.

Relocation and body schemas

Jan is also able to create a new-body intentionality, or way of engaging with the world of the stage, because she 'practised and practised' in order to create a series of linear spatial sequences (Interview 2009). The acquisition of skill is discussed by Merleau-Ponty in his account of body schemas, motility and habit. The body schema, a pre-conscious layer of the body, is at work in our everyday experience; it plays an active role in monitoring and coordinating movement and operates at a pre-conscious and anonymous level. Gallagher and Cole describe this as 'a system of preconscious, sub-personal processes that play a dynamic role in governing posture and movement' (1995: 370). They point out that

> In contrast to the reflective intentionality of the body image, a body schema involves a system of motor capacities, abilities, and habits that enable movement and the maintenance of posture. The body schema is not a perception, a belief or an attitude. Rather, it is a system of motor and postural functions that operate below the level of self-referential intentionality, although such functions can enter into and support intentional activity (Ibid: 371).

The body schema supports motor activity or 'motility', which is involved in perception. Jan's ability to create a new body schema is determined by the body's malleable vitality. Central to the body schema is the idea of bodily flux and transformation. Indeed, Philpott explains:

> Merleau-Ponty's belief that the lived body, in particularly the sensory organs, is a dynamic entity, one that is quite capable of transformations via its relationship with the world. Furthermore, in view of the body's capability of acquiring new skills and embodying them as habits, the idea of bodily flux and transformation becomes quite concrete; if it were not for the body's malleable vitality we would never be able to 'learn' skills such as climbing stairs, or incorporate supplementary organs into our body schema, such as a pen used to inscribe the world. A phenomenological anatomy cannot then be thought of as fixed over time, or even confined by the physical boundaries of the flesh. It must take account of the body as living process (2000: 80).

Jan is able to create a new body-intentionality because her body is a dynamic entity which interacts with the world. Her body is a 'living process' which is malleable and capable of transformation, incorporating supplementary organs into her own body schema, such as the furniture which is used to spatially orientate herself in the world. Using a useful example, Merleau-Ponty describes how the organist incorporates the musical instrument into his/her body schema through the action of playing it. The organist

> sits on the seat, works out the pedals, pulls out the stops, gets the measure of the instrument with his body, incorporates within himself the relevant direction and dimensions, settles into the organ as one settles into a house, he does not learn objective spatial positions for stop and pedal, nor does he commit them to memory (1962: 145).

Using the example also of learning a dance routine, Merleau-Ponty argues that it is the body schema that connects already acquired habits and new movements, for the body: 'must first have had, as it were, the stamp of movement set upon it. As has often been said, it is the body which 'catches' and 'comprehends' movement' (1962: 142). Skill acquisition recedes into habit when the learner no longer has to reflect on the activity: habits are learned through a tendency to practice, and these habits become habituated into the body schema. As shown above, Jan's ability to create a new body-intentionality by practising movements in her living room, habituates these into her body schema through repetition. As a dyslexic learner, she has difficulty in making new skills automatic (Fawcett and Nicolson 1994), and thus repetition or 'overlearning' (Reid 2009a) are key.

Dyslexia and Volatile Body Schemas

The dyslexic learner's different intentional relationship with language and automaticity may, according to Philpott, be due to a volatile body schema. The difficulty with acquiring phonological skills is a problem with the body schema and its founding role in skill acquisition. He explains it thus:

> the dyslexic person may have problems acquiring phonological skills due to an 'unsteady' body schema in the context of communication… It may well be that in the case of the dyslexic, their body schema may not be as cohesive as that of the non-dyslexic, and hence the fluidity and sureness of such an activity may well be impaired (Philpott 2000: 86-87).

The sense of uncertainty underlying the actor's relationship to text and space may be due to this 'unsteady' body schema, which is not as cohesive or fluid as that present in non-dyslexic learners. As the case of Jan indicates, this does not mean that dyslexic learners are unable to create new body schemas, but that the existing schema is somewhat fragmented and there is a need to use repetition and over learning in order to make the schema more cohesive. Moreover, for the dyslexic learner

> what would seem to be at stake is a problem of sedimentation, for the conversion of phoneme into its speech sound (or vice-versa) is never made fully concrete for the dyslexic. The problem faced by the dyslexic is that the hermeneutic movement between reflection and concrete activity [between the body image and body schema as defined in chapter two pages 33-34], a movement that would normally bring with it a greater understanding of a situation, is fragmented, and hence only an unsteady or superficial body schema will form. Whereas the connection between a phoneme and its speech sound will become a habit and hence anonymous for a non-dyslexic, the terrible problem faced by a dyslexic person is the continual presence of uncertainty regarding phonetic skills. The need to continuously and deliberately initiate the basic hermeneutic movement that sediments a phoneme and its sound means that the dyslexic is continually having to reflect back and check on what should be automatic (Philpott 2000: 89).

This descriptive account of the role of schemas in skills acquisition supports the cognitive theory that dyslexic learners have difficulty identifying and differentiating speech sounds (Snowling 2000) and making new skills automatic (Fawcett and Nicolson 1994). As the movement between reflection (the body image) and the activity (the body schemas) is fragmented, there is a need to constantly reflect back and check

what should be automatic. The dyslexic learner's body schema becomes fragmented when under pressure, and this impairs their ability to navigate their body in the world. Jan has a need to 'practice and practice' the spatial movements, due to a difficulty in acquiring spatial or linear skills, because of an unsteady body schema in the context of spatial movement. In order to segment the body image which is her conscious understanding of the movements, into her own body schema (her pre-conscious bodily movements), she must 'practise and practise', continually reflecting and checking on something that should be automatic.

The ritual of rehearsal has enabled Jan to stabilise her body schema. However, her successful experience of rehearsal and performance is contrasted to that of Diana who describes how, despite having practised the sequence of steps many times, when the lights went out expectedly and came on again, she was 'just lost… [it] threw me completely because it's not the way I'd learnt it' (Interview 2012). Diana points to a potential difficulty with the cognitive strategy of overlearning which may lead to an inflexibility in processing 'style', as suggested by Mortimore (2008a), meaning that when her body schema is put under pressure, it quickly destabilises, as (in the example above) she finds it difficult to respond to the changing environment.

Dyslexia and schema theory

Due to these difficulties in phonological processing, sequencing and automaticity, many educational practitioners and psychologists have stressed the role of cognitive schemas in supporting dyslexic learners to develop skills in comprehension and automaticity (Mortimore 2008a, Reid 2009a). In the field of cognitive psychology the term 'schema' has been used interchangeably with the terms 'prior knowledge' and 'frameworks' (McVee, Dunsmore and Gavelek 2005). In the field of reading research, schema theory holds that 'every act of comprehension involves one's knowledge of the world as well' (Anderson et al. in Carrell and Eisterhold 1983: 73). Readers are able to interpret text by 'combining textual information with the information a reader brings to a text' (Widdowson 1983 in Grabe 1988: 56). During this process 'the first part of a text activates a schema... which is either confirmed or disconfirmed by what follows'

(Wallace 1992: 33). Reading is therefore an interactive process which combines the text with the reader's own embodied understanding of being in the world. As discussed in chapter two pages 46-47, empirical research has found that literate dyslexic readers bring their own 'schema' or background knowledge to the reading process, utilising context and gist detection to compensate for partial decoding skills (Nation and Snowling 1998; Corkett and Parilla 2008; Eide and Eide 2011). Many studies have shown that readers compensate for weak word decoding skills by activating prior knowledge during reading and developing effective strategies in comprehension, self-monitoring and organisation (Mælan & Bråten, 1998; Strømsø & Bråten, 2002; Strømsø, Bråten, & Samuelstuen, 2003; Oakhill & Yuill, 1996; Stothart & Hulme, 1996).

According to Reid, it is important that dyslexic learners

> are supported to develop new concepts and ideas and to incorporate these into their existing understanding. This is essentially in the development of schema which is a conceptual framework that can help the learner organise information into a meaningful context. This can aid understanding and recall. This can also aid comprehension and recall as the new knowledge is being assimilated into the student's current schema or re-framed and accommodated into a new schema (Reid 2009b: 200).

In classroom practice, these schemas often take the physical form of cognitive artefacts such as frameworks or strategies which integrate new knowledge into the learner's existing schema. Mortimore gives several examples of such schemas such as writing frames, prompt sheets, story chain banks and storyboarding (2008a). In a similar way to Jan's epistemic actions outlined earlier, these schemas are further examples of such actions whose purpose is to 'alter the world as to help make available information required as part of a problem solving routine' (Clark 1998: 511). For dyslexic learners, tasks which involve written and verbal language can be problematic. These schemas are part of this problem solving routine: they aim to make

the linguistic information more accessible for the dyslexic learner by helping to organise this information into meaningful contexts.

Cognitive science has traditionally used the term 'schemata' to conceptualise the organisation of disembodied mental information, defining schemas as

> data structures for representing the generic concepts stored in memory. They exist for generalised concepts underlying objects, situations, events, sequences of events, actions, and sequences of actions (Rumelhart & Ortony 1977: 101).

Schema theory, as developed in the 1970s, posited the concept that meaning is stored in mental structures, which in turn are activated and organised during the reading process, and their existence is independent of any embodied or situated activity (McVee, Dunsmore and Gavelek 2005: 542). The traditional cognitivist approach to schemas has been criticised largely by those from socio-cultural and embodied perspectives. As McVee, Dunsmore and Gavelek suggest, the cognitive accounts of schemas are predicated on the model of the mind as machine, and on a rationalist world view based on the subject-object dualism of cognitive science (2005). These accounts view cognition as an 'in-the head phenomenon' and fail to address the socio-cultural and embodied dimensions of literacy and language acquisition (McVee, Dunsmore and Gavelek 2005: 532). McVee, Dunsmore and Gavelek argue that the cognitive model, something confined to the individual's internal cognitive processes, is predicated on the dualistic separation of object and subject which is 'not given and ready-made; [but] is an idea that belongs to the human history of mind and nature' (Varela, Thompson & Rosh, 1991: 141).

Embodied learning

In contrast to the cognitivist account of schema theory, I developed a specific embodied approach to reading which is grounded in the actors' prior embodied

schemas/knowledge and is based on the SQ3R method.[112] For the actors in my research their ability to construct knowledge relationships and create meaningful intentional relationships with text is determined by the embodied and transactional nature of knowledge. The SQ3R method was used with the actors in order to facilitate their active participation with nonverbal language and to create a meaningful intentional relationship to text. Through the process, the actor is encouraged to use his or her embodied knowledge and pre-conceptual structures of perception (non-linear and nonverbal) as a bridge into the text, thus providing them with a framework to construct new knowledge relationships.

The method is premised on the view that it is the *body*, 'the form and substance of schema', which is of central importance to this research (Anderson and Pearson 1984: 259). As Merleau-Ponty suggests, it is the body which ''catches' and 'comprehends' movement' (1962: 142) and is the 'material upon which constructive mental processes work' (Resnick in Hatano 1993: 164). As Gee suggests

> Learning does not work well when learners are forced to check their bodies at the schoolroom door like guns in the old West. School learning is often about disembodied minds learning outside any context of decisions and actions. When people learn something as a cultural process their bodies are involved because cultural learning always involves having specific experiences that facilitate learning, not just memorizing words. Traditionalists treat learning to read as if 'read' was an intransitive verb. People just 'read.' But no one just reads; rather they read something (2004: 39).

Reading, like acting, is a transitive verb, it is doing something to an object: in this case the text. Meaning is not just shaped by isolated cognitive processes but through 'embodied experience and the ways in which that embodied experience is shaped by others in our social community' (McVee, Dunsmore and Gavelek 2005: 545). Gee highlights both the embodied and transactional nature of knowledge: knowledge

[112] The method was developed with the actors at the Actors Centre during the one-on-one coaching sessions. The strategy was development from the 'Survey, Question, Read, Review, Respond' reading method used by Mortimore (2008a). It originates in Francis Pleasant Robinson's work in his 1946 book *Effective Study* (Robinson 1978).

relationships are formed through embodied experiences in the world. Vygotsky (1978, 1986) emphasises the transactional nature of knowledge, highlighting the importance of social interactions, believing that thought and language has its origin in social interaction and cultural and historical systems (Vygotsky, 1978, 1986). Cognition does not exist as an isolated process within the individual but as a 'bio-social-cultural process' (Cole, 1996: 136). A socio-cultural perspective enables educationalists to examine the interaction between literate processes and the social and cultural lives of learners as they carry out meaning-making activities (McVee, Dunsmore and Gavelek 2005: 542).

Johnson (1987) maintains that knowledge relationships are shaped through the embodied nature of learning and interaction:

> Meaning includes patterns of embodied experience and preconceptual structures of our sensibility (i.e., our mode of perception, or orienting ourselves, and of interacting with other objects, events, or persons). These embodied patterns do not remain private or peculiar to the person who experiences them. Our community helps us interpret and codify many of our felt patterns. They become shared cultural modes of experience and help to determine the nature of our meaningful, coherent understanding of our 'world' (Johnson 1987 in Varela, Thompson & Rosch 1991: 150).

The embodied schemas are 'constantly operating in [the actors'] perception, bodily movement through space, and physical manipulation of objects' (Johnson 1987: 23). As discussed in chapter three, dyslexic learners are thought to have developed non-linear patterns of embodied experience in childhood; hence their difficulty in establishing source, path, goal schemas. Their perception and orientation is determined by the volatile body schema in the context of the world of words and linear sequencing. These embodied patterns are shared amongst the community of dyslexic learners who experience the world in a 'radically different but not incomplete manner' (Philpott 2000). The actors' non-linear and nonverbal embodied patterns of experience might also be called embodied schemas or prior knowledge, which are part of the body schema. It is the embodied experience or 'prior knowledge' the actor

brings to the text that is the basis for the reading method I developed for use by the actors in my research.

The use of learning materials or cognitive artefacts is discussed earlier in this chapter with reference to Hutchin (1995) and Clark (1997). McVee, Dunsmore and Gavelek also suggests that 'By attending to the materiality of artefacts we can explore the way cognitive processes are dependent on the social and physical practices that both enable and constrain the meaning potential' (McVee, Dunsmore & Gavelek 2005: 544). Tools have the potential to either facilitate or constrain the body's participation in particular activities. For example in chapter two I discussed how the use of sight reading was a constraining tool which limited the actors' successful participation in the audition process. In a similar way, Jan's use of the furniture to practice her blocking, as discussed earlier in this chapter, is a tool which facilitated her ability to learn the routine. The reading method discussed here is a tool which facilitates comprehension strategies typically used by skilled readers such as predicting, questioning, imagining, clarifying, and summarising, which should be taught to poor readers (Pressley 2000). The method is an example of an artefact which enabled the actors in my research to control the immediate physical environment (the text), in order to facilitate thought.

Figure 26 below, details the SQ3R method used with the actors in my research.

Reading Scripts / Monologues

Survey the scripts for clues: Title of play?

Date it was published?

Long/short sentences?

First & last sentences of script?

How long is the script?

Number of acts/scenes?

Number of characters?

Are there any images on the front cover?

What do the images mean to you?

What acts/scenes does your character appear in?

Write the above clues on a mind map with the title of the play in the middle.

Question:

What do I know already about:

The author?

The play?

Subject matter? (General knowledge and personal experience.)

Can I:

Predict what the play is about/the message of the play?

Predict what style of play it is? What kind of language and words?

Predict my character's journey?

Add the above information to your mind map.

Read: Read with a specific question in mind e.g.:

What is the world of the play?

What is my character's journey?

Review: Add any new info to the mind map.

Respond: What is your personal response to the play?

Figure 26 (adapted from 'Dyslexia and Learning Style', Mortimore 2008a: 138)

Survey

The technique makes use of dyslexic strengths (Mortimore 2008a: 138), as it enables actors to access text through their own embodied patterns of experience, with a focus on non-linear, holistic and nonverbal information processing and contextual facilitation. The surveying stage asks the reader to look for clues in the text by getting an overview of the script and interacting with this in a non-linear way. This approach is in contrast to reading the text in a linear manner from the beginning through to the end, which places heavy demands on working memory and is predicated on a notion of narrative and time which is linear and sequential. As discussed in chapter three, the dyslexic learners in this research do not appear to perceive time in terms of linear cause and effect Their mode of perception can be characterised as having 'neither absolute lines nor points nor colours in the things' (Merleau-Ponty 1968: 195). Rather time has 'an evolving structure which has a certain depth or spread, a depth which is the co-existence of the past, present, and future' (Philpott 2000: 221-220). As Mary suggests, the surveying stage 'made the text really accessible, because I was able to get an overview of it, before I began to read it from the beginning to the end' (Interview, 2012). The surveying stage enables the actor to create a meaningful intentional relationship with the text which has neither the 'absolute lines nor points' of linear narrative, but allows them a degree of 'spread': processing the new textual material in a non-linear way.

By scanning the text in a non-linear manner, the actors are also physically handling a book in a different way. Due to the body's 'malleable vitality' the text therefore becomes part of the actors' body schema as they 'incorporate supplementary organs into [their] body schema, such as a pen used to inscribe the world'(Philpott 2000: 80). The nature of this non-linear interaction gives the actors something physical to hang on to before they plunge into a sea of words and their body schema becomes fragmented. For example, when skim reading the play, Mary's response to the prompt question 'How many acts or scenes does your character appear in?' was that it

> gave me an idea of how much my character appeared in the play. If you're in it a lot then you think maybe your character is a driver in the play, a main force in the play.

> Whereas if they appear in one or two scenes, then that character could have a different role in the narrative and there could be a different energy you could bring, or a different way of approaching it perhaps (Interview 2012).

By skimming the play for her character's name, Mary was able to generate some initial predictions about the character's journey in the play. This process activates the dyslexic learner's skill in 'gist detection' and guesswork (Eide and Eide 2011). The process enabled Mary to construct an intentional relationship with the text, before she was confronted by the difficulties of reading and decoding verbal language.

The use of prompt questions creates an active, dynamic relationship between the subject (the actor) and the object (the text). The learner skims the outline of the text for clues or hooks into the text that can help them construct knowledge relationships, by looking at images, the 'blurb' on the back, the dramatis personae and the overall look of the words on the page. All information gleaned is then recorded visually on a mind-map, using non-textual representations of meanings such as drawings, visual representations, key words or symbols in a non-linear structure. Such a process may help to activate the actor's 'rich network of associations' surrounding words and concepts (Eide and Eide 2011: 95), which are then transferred onto the external visual representation of the mind-map. So, for example, Mary's response to the title of the play *One Graveyard* was that:

> From the title *One Graveyard* it sounds like a horror; like a spooky kind of thing, death, murder mystery. Like an Inspector Morse. Or Murder She Wrote… the title alone reminds me of the horror films that used to be on years and years ago, centuries ago. It's really making me think of those old films. It's sparking off all sorts of memories and associations. It's a hook into the play, anything that can give me a clue that could help me before I read the play (Interview 2012).

Searching for clues and making personal connections enables Mary to start generating initial ideas about the play before she reads it in a linear manner. As discussed in chapter four (page 111) the meaning-making process is a holistic and convoluted

approach to making something meaningful for dyslexic learners, often achieved through personal association. For example, Mary connected the title of the play with personal anecdotes of watching old murder mystery programmes on television. As Eide and Eide suggest, dyslexic learners favour episodic memory, remembering information about things they have experienced or imagined, over abstract or non-contextual facts, called semantic memory (Eide and Eide 2011: 172-174). The surveying phase enabled Mary to create a dynamic intentional relationship with the text that was not solely dependent on the words on the page.

Question

The method of SQ3R and particularly the questioning element also facilitates dyslexic strengths in general knowledge, which they have picked up from the environment in a range of ways not dependant on the written word (Mortimore 2008a: 138; Grant 2010). As discussed in chapter four and outlined above, dyslexic people process information holistically, making meaning out of a variety of non-textual sources. A wealth of general knowledge is evident in the typical cognitive profile of the dyslexic learner (as discussed in chapter one, page 15), a profile which often shows high perceptual reasoning and verbal comprehension (a trait which includes general knowledge), and indicates that dyslexic individuals are continually constructing new knowledge relationships from the physical nonverbal environment (Grant 2010; Mortimore 2008a: 138).

This embodied knowledge is applied to the SQ3R method in the questioning phase. Learners apply their own knowledge to the process by asking 'What do I already know about the author, play and/or subject matter? In this way, they are building up an idea of the play from their embodied experience and are developing a new schema, in order to scaffold new textual information. This process empowers learners to value their own knowledge and their contribution to the process. The relationship between the text and the reader therefore becomes a dynamic two-way relationship as the reader is activating his or her own embodied schema to supplement the new information in the text. Mary discusses the ways that she

> always had a problem when it came to Shakespeare – I would get into a panic every time his name came up in class or there was an audition coming up. It made me feel completely out of control – I couldn't get past the language, the rhythm – I just couldn't get my head round it. Then gradually, I started going to watch more and more plays at the Globe theatre, so that eventually, when I felt able to pick up a copy of the play text of *Macbeth*, for example, I had some background knowledge and experiences of watching the plays and hearing how they sound to them, to draw on (Mary, Interview 2012).

Mary's experience of watching Shakespeare and this gradually becoming part of her body's experience of being in the world is an example of embodied schemas that are 'constantly operating in our perception, bodily movement through space, and physical manipulation of objects' (Johnson 1987: 23).

The use of prior knowledge might be used to compensate for difficulties with lower level processing such as word decoding (Samuelsteun & Bråten 2005; Strømsø, Bra°ten, & Samuelstuen, 2003) and teaching readers to link their prior knowledge to the text impacts on comprehension (Williams 1998). Within my practical research, the reading method aimed to facilitate the actors' prior knowledge and use of context in a holistic process.[113] The method was used as a hook into the text, encouraging the learner to make connections with the text they are reading. For example, when approaching the text of *Pygmalion* by George Bernard Shaw, Ross activated his previous knowledge derived from visiting an exhibition about Edwardian theatre. He suggests that activating this previous knowledge helped him to 'instantly visualise the setting and historical context of *Pygmalion* – I saw really clearly the clothes my character wore. It definitely gave me a quick way into the world of the play' (Ross, interview 2012).

Read

The reading stage is particularly helpful for dyslexic learners as it encourages them to develop metacognitive skills which, research suggests, dyslexic learners have difficulty developing (as discussed in chapter two). Metacognitive skills have been defined by

[113] The method was used as part of my practical research in the one-on-one coaching sessions in March and May 2012 with the participants at the Actors Centre.

Flavell as the process of consciously knowing about how we think and learn and how we take control of these cognitive processes (1976). Questioning the text enables the reader to determine what needs to be known, explained, or justified. It is an active reading strategy common in reading a range of literature (Foltz 1996; Mannes & Kintsch 1987; O'Hara 1996; Roast, Ritchie and Thomas 2002). Ross explains that

> Normally I don't think about what I'm reading. I think that's why I find it hard to make decisions about the text and I get easily confused. I just read it and read it, but [with this play] I still don't know the age of my character, if I'm a simpleton, or if I'm looking back as a kid of ten years old or if I was fifteen years old or what. I don't feel like I'm smart enough to, like, read through a script and look at it in that much detail and ask questions of it (Interview 2012).

As Ross suggests, he does not think about what he is reading, but passively 'read[s] it and read[s] it' which results in confusion and a disrupted body-world engagement. The SQ3R method aims to help dyslexic learners to develop metacognitive awareness and create an active, two-way relationship between the learner and the text. The linear reading process begins only when the actor has surveyed the play, activated their prior knowledge and made predictions about the text. However, even at this stage, readers are not asked to do a bottom-up text analysis, reading every word in turn. Rather, they are asked to read actively by applying specific questions to each reading. For example, I used questions based on Stanislavsky's six fundamental queries: Who? When? Where? Why? For what reason? How? (Merlin 2007: 101). Examples of such questions include reading the text to find out information about the world of the play or given circumstances, such as when and where the play is set, or reading to find out what the character's journey is, that is, asking the questions: Who am I? and How do I operate in the world? Diana outlined the approach:

> If I'm just going to read for the given circumstances of the play, then in the next reading I'm going to read for my character's relationship with her husband. It focuses my brain rather than taking too much in all at the same time. So I'm only looking for specific things, at specific times. Otherwise all I see is a blur. When I look at it I just see all these words and it's only when you read with a purpose that I pick details out.

> It saves a lot of time, because what I would normally do is just read it passively, but I'd then have to go back because I can't remember what I've read and I wouldn't be clear about the given circumstances (Interview 2012).

Respond

After the review stage, the last stage of the SQ3R method is the response phase, which facilitates the actors' use and preference for episodic memory (Eide and Eide 2010).[114]The actor is asked for his or her personal response to the play, cementing the semantic details already gleaned in the process (the facts/information gleaned from the play) with episodic memory (any personal thoughts, imagination or emotions), and therefore improving memory retention and comprehension. For the actors in my research, the response phase enabled them to activate their store of personal memories and associated feelings, rather than relying on analysis. For Mary, her personal response is in contrast to a more analytical approach to text:

> It is a feeling for dyslexics... it's so difficult to intellectualise plays. If I go into an audition room and somebody asks me 'What did you think of the play?' it's so hard for me to find the words to explain; it's very intimidating because I just can't. This method [SQ3R] is really interesting because this is not intimidating and this isn't hard, this is just totally my interpretation (Interview 2012).

As discussed in chapter three (page 82-84) the actors in my research discussed their response to text or acting as a 'feeling' or 'emotion' and as the antithesis to 'intellectual' ways of working and Mary emphasises here this relationship to the text as a feeling. She suggests that she finds it hard 'to find the words to explain' her response to the play. Mary is not always able verbally to articulate her thoughts about the play which can result in feelings of frustration and humiliation for dyslexic individuals. Instead, the method enables her to respond in a way which uses feelings, personal experiences and her imagination:

[114] In the review stage, the actors were asked to go over what they had picked up from the text so far and to add in any new information.

> I find that the response phase of the method gives me permission to access my feelings for a play. For me, I always get a feeling after reading a play. When I got to the end of this exercise and I was talking about my response to the play *King Lear* I was really emotional. The method enabled me to explore my emotional response to the play, because I felt so emotional and attached to these two characters and so sorry for Lear and all these mixture of emotions. Because my Dad has dementia so that relationship is so personal and interesting to me, the demise of the father and the daughter, the way they fall apart and then come back together, it's exactly what happened with me and my Dad so I really feel drawn to that. It is always a feeling and imagining being able to play those parts. Imagine standing on the stage speaking those words being that person, how would I play that person, how do I see her in my head? (Interview 2012).

This approach enables Mary to draw on a range of personal associations and images, which result in an emotional response. This personal response enables Mary to connect with the script (in this case of *King Lear*) and allow her a way into the text that would not be so easily achieved by merely reading and analysing the dictionary definition of words in a linear manner. Mary is able to connect her personal memories with the semantic information that she has gleaned from the text. The process enables her to transform the text's semantic information into her own episodic memory, which has a number of cognitive benefits. For example, by drawing on her episodic memory, she is able to further cement the play's semantic and factual information into her long-term memory. This process also helps her to improve her comprehension; she is able to think clearly and to better understand relationships and linear plot structures in the narrative. Comprehension and memory retention are vital tools for the working actor, enabling them to better understand and remember semantic details from the text. This method, an example of a physical artefact, enabled the actors in my research to better control and connect to written language in the immediate environment, in order to facilitate thought and improve memory.

Conclusion

The actors in my research experience a different intentional relationship to the world of words and linear sequencing. As a result there is a sense of a volatile body-world engagement when faced with tasks to do with language and linear spatial processing. Despite these difficulties the actors are able to gain control over the text, and re-orientate their bodies, through a variety of cognitive strategies such as the use of cognitive artefacts and through repeated bodily practice. These strategies help the actors to develop new body schemas, by creating a more fluid movement between the conscious reflection of the body image and habitual action of the body schema. The actors were also able to create a meaningful intentional relationship to text through the use of their embodied prior knowledge, applying their own non-linear and visual way of being in the world to the reading technique of SQ3R. It is hoped that with further embodied practice and repetition, this strategy might become a material artefact of their process, enabling them to access the world of words, which is otherwise a dys-locating experience for them.

Chapter Six: Enabling and disabling environments: (dis)ability, 'reasonable' adjustments and inclusive practice

Frith's causal modelling framework highlights the central role of the environment in the learner's development (1999). To Frith, environmental influences interact with all three possible biological, cognitive and behavioural levels of descriptive analysis. The British Dyslexia Association explicitly refers to the impact of environmental factors in its definition of dyslexia, suggesting that 'its effects can be mitigated by appropriately specific intervention, including the application of information technology and supportive counselling' (BDA 2007). Frith's work is predicated on a neurocognitive paradigm which views dyslexia as a developmental disorder, determined largely by the individual's neurocognitive mechanisms, and which does not explicitly acknowledge the body's role in anchoring perception. However, her framework's inclusion of the environmental level of analysis, and its impact on the cognitive and biological levels, may make it compatible with Merleau-Ponty's belief in the inter-connectedness of the body-world relationship.

Recent theories of embodied and distributed cognition have speculated that 'brain, body, and world are united in a complex dance of circular causation and extended computational activity' (Clark 1997: back cover). Borrowing from the work of Hutchins (2010), Tribble and Sutton refer to this brain-body-world 'dance' as cognitive ecology, one which 'sees cognition as spread across more or less internal mechanisms such as attention, perception and memory; objects and environments; and other people' (2013: 10). For the actors in my research, their process has evolved out of this interconnected dance between mind-body-world. Their neurology, cognition, their bodies and the tools and people in their environment are interconnected and continue to inform their way of being in the world.

This chapter is primarily concerned with the field of learning opportunities and environmental factors: the trainers and material practices which interact with the actors in my research. The discourse amongst education practitioners centres around the need for focus on intervention being placed firmly in classroom practice (Reid

2005). Some in the field of education theory and practice have sought to highlight barriers to learning in the educational setting rather than defining dyslexia per se (Wearmouth, Soler and Reid 2002). The learner's cognitive abilities are considered in the context of the learning environment, which includes their support tutors and trainers, the pedagogical methods used and the curriculum. This chapter examines how the environmental level impacts on the individual: specifically how disability legislation and the various levels of medical, social and affirmative models of support may impact on dyslexic learners both in training and working in professional practice contexts. It details examples of good practice such as study skills support provided by the Disabled Students' Allowance (DSA), the adjustments of lecturers 'on the ground' at the Drama Centre London (DCL) and contrasts these with a number of underlying assumptions, training systems and practices which are disabling to dyslexic learners. Lastly it discusses the move towards inclusive practice and policy at the Conservatoire for Dance and Drama (CDD) and reflects upon the relationship of existing training methods and audition models.

Dyslexia and disability theory

Dyslexia was first included in disability legislation in the 1995 Disability and Discrimination Act (DDA) and subsequent revisions (DDA 2001,2005; Equality Act 2010). Prior to these legislative milestones, dyslexia was not legally recognised as a specific learning difficulty and thus the adverse effect that it can have on the learning and work opportunities of many children and adults were similarly unrecognised. By incorporating dyslexia into disability legislation, society legitimised its existence as a specific learning difficulty and required both employers and educational institutions to make 'reasonable adjustments' to reduce disadvantage. As a result, educational institutions including drama schools and the wider performance industry have become involved in the complex process of medical labelling and assessment, dyslexia provision and the application of inclusive practice models.

The actors' lived experience of dyslexia, and the various models of support and provision can be contextualised within the broader legislative framework and the

various models of dyslexia provision and support. This chapter details a number of case studies which highlight the various models of support: for example dyslexia skills tuition, funded by the Disabled Students Allowance, the reasonable adjustments made by teaching staff, and finally examples of inclusive policy. Whilst the majority of dyslexia discourse centres around medical and educational paradigm models of dyslexia (Riddick 2001; Snowling 2000), a small number of educationalists and sociologists have conceptualised dyslexia through the lens of disability theory (Riddick 2001, Macdonald 2009a). This approach facilitates research and enquiry into barriers to learning and achievement, highlighting the prevailing cultural attitudes to literacy and memory. These are necessary when considering the social 'causes' of a specific learning difficulty, and then removing the barriers to learning related to that difficulty, whilst also raising complex questions concerning the location of responsibility. Disability theory also acknowledges the interaction between the social and medical models of disability. An actor's experiences of barriers to learning in the environment are created partly out of the biological ontology of dyslexia as well as from the literary based society surrounding him or her. However, despite these latter social aspects of dyslexia, training and adjustment in the workplace is only available once a medical-style 'diagnosis' is achieved (Macdonald 2009b: 27). Such medical diagnosis has been helped considerably by advancements in neuro-imaging technology, which have proved vital in determining the neurological origin of dyslexia. According to Snowling, this consists of 'inherited differences in speech processing mechanisms located in the left hemisphere' (2000: 157) and the medical recognition of these differences has helped to ensure the provision of adjustments in society.

Medical models of support

Since the first recorded case of dyslexia in 1876, professionals from the fields of medicine, psychology and education have sought to identify it as a medical difference (see page 60-62 for historical account). The dyslexic learner's body has been pathologised and placed in a position of 'corpse-like passivity', whilst professionals actively prescribe diagnosis and interventions (Leder 1990: 125). These Cartesian psycho-medical definitions have created a paradigm model of dyslexia as a

'dysfunction', 'condition' or 'deficit' which is predicated on a 'within' model of dyslexia and responsibility. A medical model of support is evident in the support provided by the DSA which provides study skills support and technology to the learner. Under this model, dyslexia is seen as an 'individualised problem' (Armstrong and Barton 1999: 212), which places the location of responsibility on students (in this case the actors) themselves to develop 'compensatory' strategies in their own time, and with a dyslexia tutor separate from the mainstream teaching environment.

The emphasis on medical labelling and diagnosis is evident in the wording of the DDA (1995, 2005) which stipulates that disability is 'a physical or mental impairment which has a substantial and long-term adverse effect on [a person's] ability to carry out normal day-to-day activities' (DDA 1995, 2005). By including dyslexia in the 'impairment' category, the medical model of disability is implied: dyslexia is conceived of as a neurological dysfunction, localised within the individual's neuro/cognitive mechanisms, and it is this dysfunction which restricts full participation in education and society at large (Morton 2004; Fawcett & Nicolson 1994). This 'within' model also locates the question of responsibility within the individuals themselves, rather than examining the role that the immediate environment plays in the construction of the individual's experience. The 'within' model of dyslexia is also compounded as it is a 'hidden disability', in the sense that there is no obvious physical impairment (Riddick 2003). Goffman points to a 'double perspective' of stigma: there is firstly 'the plight of the discredited' for whom 'differentness is known about already or is evident on the spot', and secondly 'the discreditable' for whom 'it is neither known about by those present nor immediately perceivable' (1990: 14). The 'hidden disability' of dyslexia certainly falls within this latter category.

The cognitive anthropologist, Hutchins is a critic of such Cartesian models of cognition, arguing that they 'create the impression that individual minds operate in isolation and encourage us to mistake the properties of complex socio-cultural systems for the properties of individual minds' (1995: 355). An over emphasis on the medical label of dyslexia has covered up the complex socio-cultural systems which contribute to the dyslexic experience and these include the ways in which attitudes to literacy have fed

into pedagogy. These individualistic and 'within' models are unable to account for social and cultural ideologies underpinning discrimination. A core criticism levied at the medical model, is that intervention and support models simply help the student to fit into the print literate society, rather than questioning the underlying social and cultural assumptions or changing the methods of practitioners and institutions. Griffin and Pollak, for example, point out that whilst the Disabled Students Allowance enables students to purchase extra support, such as screen readers, recording devices and study skills tuition, it is

> at odds with the social model of disability, in that the procedure for obtaining it involves a medical-style identification, and subsequent compensation for their identified 'deficits'. The DSA does nothing to make the environment more accessible but instead provides the person with the means to make him/herself 'fit in' (2009: 24).

As Cooper suggests, the development of dyslexia skills support and equipment attempts to 'approximate the skills of those perceived as 'normal'' (2011: 9). It is predicated on the view that dyslexic learners need to compensate to achieve culturally determined standards of reading, language and working memory skill. Goffman defines the notion of 'normality' as being related to all 'those who do not depart negatively from the particular expectations at issue' (Goffman, 1990: 15). He goes on to suggest that

> The notion of 'normal human being' may have its source in the medical approach to humanity or in the tendency of large-scale bureaucratic organizations, such as the nation state, to treat all members in some respects as equal (1990: 17).

In drama schools, as in other educational institutions, dyslexic students are entitled to individual 'study skills' support which helps them to 'fit in', and 'normalise' their cognitive functioning, by equipping them with strategies to aid memory, metacognition and organisation. Whilst the DSA support is confined to student actors in Higher Education Institutions, actors with a dyslexic identification are entitled to use

the ‘Access to work’ scheme which provides practical support in the form of equipment and/or a support worker.

Despite these criticisms of the DSA model of support, a number of enabling and empowering methods are evident in the pedagogy of dyslexia tutors working both within drama schools and in the industry. One such tutor, Tanya Zybutz at Central School of Speech and Drama, views her practice as developing to meet the more practical and creative needs of the students on the acting courses:

> My students have taught me... I was never trained how to work in this particular field of HE, it's just happened because I'm in this environment... it's not taught on any dyslexia training course. It's partly Central trained me... but I’ve always had an interest in working on the body (Zybutz, Interview 2011).

Zybutz points to the fact that although dyslexia support tutors are trained to support generic academic study skills, such as essay writing and note taking, her own practice has developed as a result of a dynamic relationship between the acting teachers and methods of the drama school and the individual student. As Grasseni suggests, a distributed model of cognition studies how ‘groups of skilled practitioners may be considered as complex systems with socially distributed properties’ (2004: 47).

Zybutz’s interest in working with the actor’s lived-body is in contrast to the objectification of the body by cognitive psychology. Criticising the social model of disability, Hughes and Paterson (1997) believe that it has abandoned the body to the domain of the medical model, and argue for the ‘expansion of the social model’ proposing ‘an embodied, rather than a disembodied, notion of disability’ (Hughes and Paterson 1997: 326). The focus on embodiment is evident in Zybutz’s approach to reading and line learning, as her students are encouraged to embody the text through physical movement. She gives as an example a student who

> had problems learning lines, couldn't even begin to look at the thing she was meant to be learning... I got her to walk on the tables and while she was walking on the

> tables she had to recite the Shakespeare piece. She was so scared about falling off the tables that it allowed her to focus on the text and it was quite a useful strategy in terms of distracting the mind (Zybutz, Interview 2011).

Zybutz's approach is grounded in the body's movement in the world for, as Merleau-Ponty suggests it is 'the body which 'catches' and 'comprehends' movement' (1962: 142). A person's body image can be interpreted as "a system of perceptions, attitudes, and beliefs pertaining to one's own body" (Gallagher 2005: 24). The student in the example above had conceptualised her body image as a poor line-learner and it was this belief that contributed to her difficulty in learning lines. However, once she starting reading whilst walking on the tables she stopped reflecting on her body image as her body schema (the 'system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring' (Gallagher 2005: 24)) was engaged. She moved from reflecting on and thematising her abilities (through her body image) to concrete activity of the body actually doing something (the body schema). Her body image as a poor reader and line learner was therefore "distracted" and her body schema (motility) become more stable.

Alongside such an embodied approach, Zybutz also uses learning style theory in her practice. As discussed in chapter four, a number of cognitive psychologists and educational practitioners have identified the fact that dyslexic learners have a preference for 'big picture' or holistic thinking (Brunswick et al. 2011). Both Mortimore (2008a) and Cooper (ND) attribute this cognitive preference to difficulty with and privileging of working memory in contemporary society. Holistic thinking places little demand on working memory and requires an imagination in order to make connections and see meaning in the whole pattern, in contrast to an approach to thinking which processes information sequentially, relying heavily on working memory and little on the imagination (Cooper ND: 6). Dyslexic learners are therefore using outlines and context in order to create meaning. Zybutz uses this holistic thinking style as a bridge into the text. She asks her students to

> create the emotional state of where they are when they're starting the piece they have to learn. So we will describe your environment, the colours, the feelings; are they sitting, are they standing? And then I'd take a birds eye view to the end and look back and say 'OK, what journey are you making, where do you end up, are you emotionally in the same place as where you start off?' (Zybutz, Interview 2011).

The actors are encouraged to immerse themselves in the contextual and sensory detail of the scene they are learning, and draw upon the rich network of episodic memory and nonverbal images that dyslexic learners frequently use (Eide and Eide 2011, Cooper 2009, ND). Rather than becoming overly focused on decoding words or on the semantic level of language, the dyslexic actors can concentrate firstly on establishing an overview of the monologue and their character's journey.

However, a holistic processing style may lead to an inflexibility in style which can be problematic when learners are faced with tasks involving analysis and a need to break down the whole into composite parts (Mortimore 2008a). Good practice guides relating to dyslexia suggest that these kinds of dyslexic learners should be taught how to transfer holistic information (in a mind map for example) into analytic structures (such as charts or story boards) (Mortimore 2008a, Reid 2009a, Reid 2009b). In order to do this schemas or frames are used to 'chunk down' information into smaller parts which helps comprehension and memory (Mortimore 2008a: 128). Zybutz provides a frame for the actors by specifically asking them just to explore the beginning and then the end of the text. This frame is then used to scaffold new information, and segments such material from the 'big picture' to the component parts, in a sequential manner. Next, echoing Stanislavsky's units/bits, the actors segment the text in order to clarify changes of thought and emotion. In Zybutz's classes they 'break it up into... what I call emotional highs or lows – to see if we can actually 'chunk' the piece. Then it becomes segmented, so it is chunked down' (Zybutz, Interview 2011). 'Chunking' is a cognitive strategy common in the literature relating to learning and expert behaviour (De Groot 1978; Chase and Simon 1973; Gobet & Simon 1996.) The theory holds that 'a chunk is a meaningful unit of information built from smaller pieces of information, and chunking is the process of creating a new chunk' (Gobet and Lane 2012). Subsequent revisions

to the chunking theory are known as the 'template theory' which is a form of schema (Gobet & Simon, 1996).

The chunking strategy can also be applied to the reading process. Zybutz suggests that the volume of reading required, both for scripts and background reading can be overwhelming for some of her dyslexic students and consequently some can experience sensory overload during reading, with the words appearing to move around. This visual disturbance is a form of visual stress, otherwise called Meares-Iren syndrome, known also as scotopic sensitivity syndrome, which is a frequent occurrence with dyslexia (Singleton 2009). For the individual, the result can be headaches from reading and exacerbated by bright lights, and during reading words appear to move or spring out, which is a key characteristic of visual stress and this type of sensory overload.

Zybutz uses a chunking strategy to mitigate the effects of this visual overload and Figure 27 is an example of the technique.

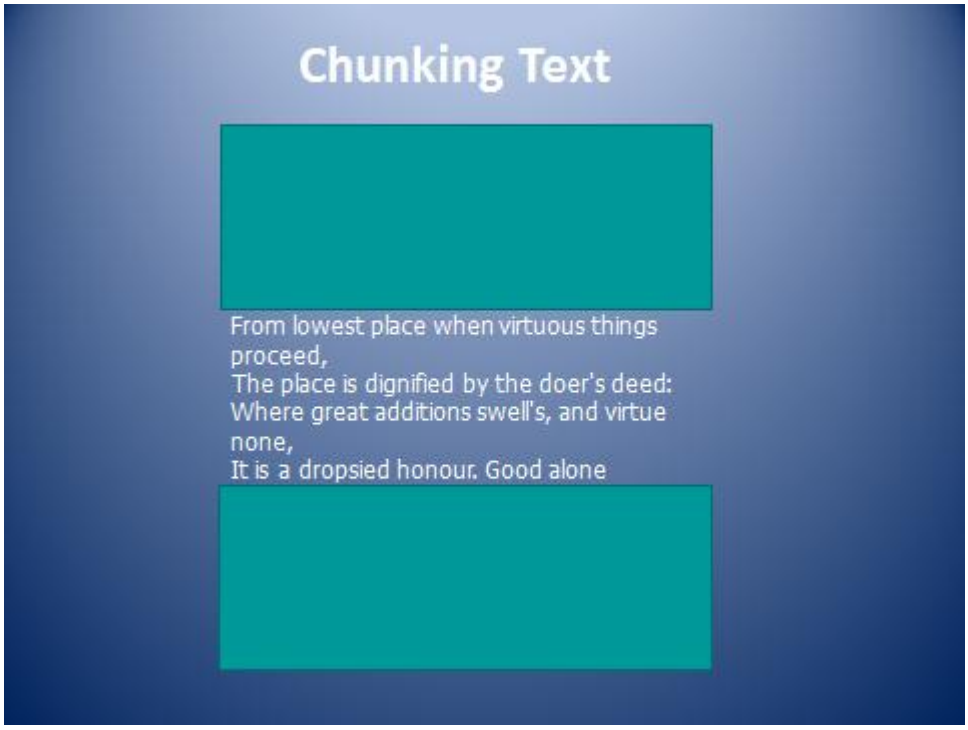


Figure 27: Zybutz's chunking reading technique

By covering up parts of the text with post-it notes or paper, the visual glare is reduced and readers can focus their attention on a few lines at a time. Nancy describes how normally without the chunking method she 'freak[s] out' due to the look of the lines on the page, however, when she uses the chunking method it 'really helps... when I'm reading in auditions, I block [the text] all out in [chunks of] three lines… I can see the three lines that I'm saying, the two between, and I'll do three by three by three' (Nancy Interview 2012).

Another dyslexia support tutor, Claire Salter, an independent dyslexia consultant, has created a line-learning method based on multi-sensory learning theory. Salter's method incorporates a number of senses such as kinaesthetic movement, sound, sight and speech into the process. She explains it thus:

> I am trying to get [the lines] to go in as a sound file so they are actually recording the stuff as speech rather than text... then I want to attach movement, so I want to use visual, auditory and kinaesthetic [approaches]; I want to use multisensory elements in order to explore it because there are weaknesses in at least one of the senses, the visual, auditory or kinaesthetic. But there must be strengths in other areas... So, by using the other senses I am shoring up the weakness; but also I want to use the strengths so I am bound to be helping… weakness and using… strength by using as many senses as possible (Salter, Interview 2011).

Salter's method is tailored to the individual's pattern of strengths and weaknesses, as identified by Grant (2010) and discussed in chapter one. The focus on a multi-sensory method is indicative of the prevalence of this method in special educational needs practice.

Multi-sensory learning is based on the early work of Dr. Samuel Orton back in the 1920s and 1930s and is evident in contemporary phonics training such as the multisensory system for reading (Johnson, Phillips and Peer 1999) and the Orton Gillingham method (1966). In mainstream dyslexia support practice, multisensory learning is thought to be one of the most effective reading instruction methods, as it

uses such methods to anchor information into the long term memory (Reid 2009a). However, as discussed in chapter four (page 111) a criticism of the method is that it attempts to approximate the sensory world and skills of a 'normal' person, viewing it as a necessary compensatory strategy in order to fit into the status quo (Cooper ND). Despite this criticism, Rosa describes the positive impact of the method. She describes how her

> biggest fear is if I get a script, (deep inhalation) that the immediate reaction, you know, is 'Oh my god, how am I going to get through all this?' I just panic, it's an immediate panic, and I'll just try and do a page a day, even that's too fast for me, just like, you know, writing out a million times on a piece of paper (Rosa, Interview 2011).

However Salter's line-learning strategy enabled her to learn

> two pages of *A Doll's House* in twenty minutes; normally it would take me two weeks. I'm really slow because I muddle things up. But with this method it was so quick. I had the lines recorded with somebody else saying them, then I wrote the key words of each line on post-it notes and stuck them round the room, whilst I listened to the recording. Then I would listen to the line and move to the corresponding post-it note, listening back to the recording, then say the line myself. Then I would go to the post-it note, say the line myself and then listen back to the recording to check it. I was really shocked with how it worked, because when you struggle, (and I really struggle with line learning and I will often paste Act one into Act Two) you know I will really reverse things (Rosa, Interview 2012).

Despite the common approach of multi-sensory learning, it may be that memory is supported rather by the broader holistic process of meaning making (Cooper ND), and the role of the body schema in the acquisition of skill (Merleau-Ponty 1962; Gallagher 2005). This holistic process of making meaning then becomes embodied through the body schema.

In a similar way to Zybutz, Salter's pedagogy is underpinned by learning-style and reading theory (as discussed in chapter two page 46 and chapter four page 100). The

learner is encouraged to develop an intentional relationship with the text that is facilitated by a contextual and holistic approach to it, which is the antithesis of a bottom-up approach which focuses firstly on decoding words (as discussed in chapter two). Salter suggests that

> before I start to look at the lines I think you have to know what the play is about, and that to start from the lines is going to always pose you a massive problem. So, if you didn't have dyslexia maybe you would come reading straight off the paper without any context. That's ok because you have got that fluency, you have got that accuracy, you have got no visual processing difficulties. If you have a difficulty with processing, fluidity and accuracy you need somewhere else to be starting from, and I think that is the whole, it is the sense of the play (Salter, Interview 2011).

Salter highlights the use of context as a cognitive strategy employed by literate dyslexic readers to aid in comprehension and memory (Corkett and Parrila 2008; Nation and Snowling 1998). As discussed in chapter two, the actors in my research frequently experienced a disrupted body-world intentionality when they were presented with a page of context-less words in sight-reading situations. Salter suggests that this lack of context can lead dyslexic readers to become fixated on a bottom-up approach to decoding written text which means that they are

> stuck on trying to learn, learn, learn the lines before... they had really learnt the play and what was the play about and what was being conveyed and I think that is a difficult way around to go... If somebody gave you a book and you couldn't see the cover and you have no idea of what… it is about, that would be really challenging. Why not get a sense of the whole of it, and what we already know and bring it into it? (Salter, Interview 2011).

As discussed in chapter two, for the actors in my research a lack of context in reading situations resulted in disrupted body-world intentionality, in which the actors experience a sense of spatial 'dys-location', as their already volatile body schema was put under pressure (Philpott 2000). However, by using 'big picture' thinking, the actors

are able to re-orientate their bodies in the linguistic environment, and create a more stable body schema in the context of reading.

Both case studies show how dyslexia tutors have responded to the demands placed on their student actors by the mainstream curriculum and wider industry. Such strategies which develop skills in line-learning and reading are a potentially powerful tool in facilitating the actors' progress. Despite this, as Griffin and Pollack suggest, this model purely helps the learner to fit in without addressing the broader pedagogical and policy-making responsibility of trainers and institutions (2009).

Towards a social model of dyslexia provision: reasonable adjustments in class

The social model of disability was created in response to the Cartesian medicalization of the lived experience. This model places the responsibility for adjustment and accommodation in society, arguing that it is society which creates barriers to learning and achievement and therefore these barriers should be removed in order for individuals to achieve their potential. The social model views 'disability' as socially constructed: dyslexia is not a 'disability' but an 'experience that arises out of the natural human diversity' (Cooper 2009). Rather it is society which mistakes "early learning of literacy, good personal organisation and working memory" as a sign of intelligence (Cooper 2009). Dyslexia therefore is conceptualised as a learning 'difference' rather than 'difficulty'. It is the socially constructed cultural values and practices of society itself which labels dyslexic people are 'problematic' and so it is the institutions which make up society which need to take responsibility and make changes to policy and practice.

The influence of the social model of disability is evident in legislation with the inclusion of 'reasonable adjustments' in the Disability and Discrimination Act (1995, 2005) the Special Educational Needs Act (2001) and the Equality Act (2010). Such legislation requires institutions to provide 'reasonable adjustments' so that individuals can access education, services and employment. The exact nature of these 'reasonable adjustments' is vague and defined by the DDA as simply a 'change', either to the

physical aspects of the educational institute or workplace, or a change in the way something is done. It sets out four tests of 'reasonableness' whilst not actually defining it: how effective the adjustment would be in overcoming the disadvantage; how practicable it is to make the adjustment; the financial and other costs incurred by the employer and the extent of any disruption to activities and the extent of the employer's financial and other resources (Public and Commercial Services Union 2012).

For drama schools and the wider performance industry, the requirement for the provision of accommodations might appear clear cut, but the practical application of such adjustments is less clear. In the context of actor training and professional environments, the question is what adjustments can be made, what can be considered 'reasonable' and how these adjustments can be measured for 'effectiveness'. The Conservatoire for Dance and Drama describes reasonable adjustments by stating that

> it is often possible for adjustments to be made as and when they arise to meet problems that have not been anticipated. For example… teachers often invent ways to assist students who find it difficult to learn dance notation, lines or dialect. Some examples of adjustments that are frequently made for dyslexic/dyspraxic students include: help with 'over learning' (i.e. by constant repetition) for students who take longer to learn routines, sequences and lines (Support for Disabled Students: ND).

The emphasis on the 'as and when' nature of the trainer's adjustments is in direct response to the needs of the individual student. According to this 'as and when' model, cognition is distributed over the mind, body, activity and other people in the culturally organised setting (Lave 1988). Both trainer and the student are interacting and thinking together to create these adjustments. This happens because

> the boundaries of cognitive systems lie outside the envelope of individual organisms, encompassing features of the physical and social environment… the mind leaks out into the world, and cognitive activity is distributed across individuals and situations (Robbins and Murat 2009: 7-8).

Adjustments, such as repetition are examples of epistemic actions, the purpose of which is to alter the environment to support the off-loading of cognitive tasks, and make information more accessible within a problem solving situation (Kirsh & Magio 1994). As Clark suggests:

> the flow of thoughts and the adaptive success of reason are now seen to depend on repeated and crucial interactions with external resources. The role of such interactions… is to transform inputs, to simplify search, to aid recognition, to prompt associative recall, to offload memory, and so on. In a sense, then, human reasoners are truly distributed cognitive energies; we call on external resources to perform specific computational tasks, much as a networked computer may call on other networked computers to perform specific jobs (1997: 68-69).

Other kinds of epistemic 'adjustments' within mainstream pedagogy are evident in the approaches of Shona Morris at the Drama Centre, London. Her pedagogy has developed to respond to her students' needs, incorporating individualised and tailored adjustments in her own practice. For example, as a movement teacher, Morris uses psychophysical practice to encourage dyslexic students to get over the initial barrier of text. As discussed in chapter two, psychophysical training is a process of embodiment which refines the 'bodymind' to 'subtler levels of awareness' (Zarilli 2008: 25). The Cartesian division of the mind/body is rejected in favour of the 'construction of the organic body-mind' where the body is 'trained to respond to every minimal impulse of the mind' (Ruffini 1991:50-53). Morris discusses one student who was:

> really struggling with being able to read - we worked on a strategy which was slowing the rehearsal down to [the student's] pace… I also discovered that the way to get her to connect to it [Shakespeare], was by putting [the text] through her body, and that [process] was quite amazing, it was an amazing journey for her. I work everything through the body: we talk about the text, we talk about what the scenes are [about] but I don't sit down and tear the scene apart. As a piece of text I get it up on its feet... [the student] was doing the most extraordinary things… and she said to me that it was because the words were actually in her body, they weren't sort of away from her, they were in there (Morris, Interview 2010).

In this example, Morris enabled the student to set the pace of the rehearsal, enabling her to process information in her own way and control the dynamic interaction with the incoming sensory world. During this process, the text was worked 'through her body' and '[got] up on its feet', becoming part of the student's body schema. By physicalising the text, the student was able to reconnect with her subjective body and be "in her body" and so she was able to connect to the text. This mode of experience enabled her to relocate herself within a linguistic environment and make meaning out of it. She transformed her lived-distance of text which was 'sort of away from her' to subjective experiences of the text being 'in her body' resulting in her 'doing the most extraordinary things'. Such an approach is in contrast to the disembodied rehearsal and training techniques of, for example, Max Stafford-Clark and of Mamet's practical aesthetics, which focus on round the table language analysis (see chapter three).

In movement training, Morris also aware of how sequencing and mapping movement can impact on some of her dyslexic students:

> if you do something and they have to follow it... mapping… I realised it was through very simple repetition… And then taking that into some very simple sequencing, you know like sliding across the floor and then adding an arm swing, which in fact is very complicated, but if you build it up with a series of sequential steps, then, because the movement is natural movement and about the way the body works naturally, they actually end up being able to move (Morris, Interview 2010).

Morris' use of simple sequencing is another example of cognitive chunking as discussed earlier in Zybutz's use of post-it notes when reading. Morris is also aware of the positive role of repetition in the skill acquisition process, which links to the compensatory strategy of over-learning, common in the dyslexia good-practice literature (Reid 2009a). Chunking movements and repetition may play an important role in making the dyslexic learner's body schema more stable in the context of spatiality. As discussed in chapter five, for dyslexic learners, the movement between reflection (the body image) and the activity (the body schemas) is fragmented, and

there is a need constantly to reflect back and check what should be automatic. In order to segment the body image which is her conscious understanding of the movements, into her own body schema (her pre-conscious bodily movements), the student needs also needs information to be chunked down into component parts.

Invisible adjustments: disabling performance?

However, despite this case study of good practice, my research has found a number of disabling practices evident in both pedagogy and at institutional policy level. These practices reveal the barriers to learning that the actors in my research experience both in training and the wider industry, and the tensions between the legislation and the practices and underlying assumptions of the industry. In spite of shifts in legislation which make it necessary for institutions to anticipate potential barriers before they take place, rather than just responding when the need occurs, there remains a lack of provision both within the mainstream teaching environment and at DSA level. The following interviews with Amy (a student actor), Claire Salter, Tanya Zybutz, Lois Keith (Equality and Diversity Manager, CDD) and Helen Heaslip (movement teacher at CSSD) reveal a variety of latent assumptions about dyslexia, the nature of provision and training which disable dyslexic learners and potentially other learners as well.

Prior research has found that there is a lack of communication between those using the various models of disability provision within HEIs: there can be a 'glass wall' which separates the dyslexia service from the teaching staff (Mortimore 2000b). For example, Amy's experience of training reveals this 'glass wall', as her school

> spent all this time getting me assessed and then did nothing after that. No support. You know I had DSA support, they came and taught me computer packages and things but whenever we were given sight reading pieces I wasn't given an extra bit of time in the sight reading piece. My dyslexia was never taken into account - I've got visual stress, they never gave me anything on yellow paper, there was no feedback about my dyslexia - they all read the report but nobody went "I see this is what's

> going to help you here, let's see what we can do here"- some of them didn't even remember that I was dyslexic (Amy, Interview 2012).

Amy's experience of dyslexia support was confined to the equipment and training provided by the Disabled Students Allowance, and was not assimilated into her mainstream training course. The separation of DSA provision and the mainstream teaching environment undermines the DSA if it is not integrated into day to day practice. Teaching staff were either not able to make adjustments due to a lack of training themselves, or were simply unwilling to alter their teaching practice for one student, even though the adjustment could have been as simple as changing the colour of the paper.

Teaching practice in itself can be a main barrier to disabled students' learning (Matthews 2009: 229). Salter gives an example of a student whose experiences contains a number of disabling teaching practices and a lack of adjustments. Indeed the student had to stop attending drama school 'due to the teaching method that was going on within the centre' (Salter, Interview 2011). For example, she was 'given rhythm and tapping exercises that [she] found very difficult to follow. Being in physical movement [class] and being demonstrated sort of face on, and then having to reproduce them…[she felt] really pressured' (Ibid). Additionally, teachers telling her, 'you have to be able to do it, I don't understand why you can't do it' was not helpful and neither was she 'given the scripts in advance' or 'given any context' for them (Ibid). She 'was being asked to sight read immediately' and although 'she had asked for things on coloured paper and things to be in advance' this was done to begin with 'and then after a bit they said 'look you are just going to have to get on with it' (Ibid).

The above case study reveals some teachers' lack of understanding of the ways in which students with specific learning differences learn best. In contrast to Shona Morris's approach, these teachers were unwilling to explore different ways of demonstrating movement or to incorporate the student's learning style into their own pedagogy. On the administrative side, they were unable to provide coloured paper or circulate texts in advance. The student was solely charged with having to 'get on with

it' which takes away any institutional responsibility to provide even simple changes to the environment, such as coloured paper.

This institution's attitude also reveals a number of myths and assumptions surrounding dyslexia, disability and training. The belief that 'you are just going to have to get on with it' reveals, what Lewis (2009) terms a 'sink or swim' agenda, which is based on a belief that disabled people are not physically or mentally capable of succeeding in or even fulfilling a training programme. Macdonald (2009a) draws similarities between physical disability and dyslexia in order to develop a social model of dyslexia. Lewis' findings are therefore relevant to the dyslexic actor as they highlight a number of teaching practices that are potentially incompatible with the dyslexic learner. For example she identifies 'potentially damaging metaphors that underlie many movement systems which are predicated on an ideal body' making the point that 'such methodologies can invalidate the impaired body' or body-mind (2009a: 184).

Similarly, as discussed in chapter three, a number of practices are predicated on linear sequences and language experience. For example, Zybutz suggests that some training systems which use metaphorical and technical language can become blocks for dyslexic learners and she does not use such 'terminology, so they don't get freaked out' (Zybutz, Interview 2011). She gives an example of a student whose teachers asked him, 'what archetype are you?' and he's like 'I don't understand what archetype is' so she does not use any such terminology, even though she knows 'it's psychological gesture, but I'm not asking for that terminology' (Ibid).

This student's lack of understanding of technical language can be interpreted according to Johnson's embodied metaphor theory, in which language is created through the body's experience of being in the world:

> Human beings are creatures of the flesh. What we can experience and how we make sense of what we experience depend on the kinds of bodies we have and on the ways we interact with the various environments we inhabit (Johnson 1999: 81).

Zybutz is concerned that trainers and directors should be aware of 'how language is perceived in the teaching situation [otherwise] they are shutting out these learners. They don't understand and they are not being given anchors to help them understand' (Interview 2011). Such an aversion to alteration of their training practice on behalf of some acting tutors may be due to the belief that dyslexia support and provision is incompatible with the expectations of the industry. Lois Keith (CDD) points to:

> a kind of tension between how teachers want to support students in their training and the belief that the professional world is very tough and you have to prepare them for this. Traditionally, there's been a view that students have to become independent learners, that you can't help them too much. I wouldn't say at all it was the view of schools - there have been a lot of changes in the way our schools view student support but there can be a tension between these two schools of thought when directors and choreographers come in from the outside (Keith, Interview 2012).

In the case of drama schools, some industry professionals may believe that dyslexia provision and inclusive practice will not prepare actors for the demands of last-minute auditions, sight-reading and short rehearsal periods.

The affirmative model of disability, a development of the social model, rejects the social model's focus on personal tragedy and dependency and advocates the positive aspects of 'disability' and the need for individuals to take control over their own support and training (Swain and French 2000: 578-9). The affirmative model emphasises 'disability as a positive personal and collective identity, and disabled people leading fulfilled and satisfied lives' (Ibid: 571). Many dyslexia theorists have discussed the positive aspects of dyslexia (see West 1997; Ehardt 2009; Gerber, Ginsberg and Reiff 1992) highlighting entrepreneurial, visual-spatial and creative abilities, which many in the performing arts are keen to emphasise. As Keith suggests, there was a prevailing view that dyslexic students were 'gifted' in the performing arts and would therefore not experience the difficulties they did in academic subjects, yet

> as soon as we started to talk to students then it was clear that actually they were struggling just as much with the performance aspects of their training not just the writing - it's learning scripts - it's sequencing and remembering movement - the general organisational issues and so on (Keith, Interview 2011).

A further complication may arise because of the nature of dyslexia as a hidden disability and the fact that disability legislation does not acknowledge the difficulty of accommodating such hidden disabilities. Matthews (2009) found that the majority of lecturers did not know that their students' had a hidden disability unless the student had disclosed this information themselves. Helen Heaslip (CSSD) points to the fact that the act of disclosure in itself can be problematic for the individual: 'because they think it's a weakness, don't they? It's seen still [as such] which is why they don't often tell us in the auditions' (Interview 2011).

The difficulty that many people have in disclosing their dyslexia may inadvertently help create a 'culture of disbelief' for high-functioning dyslexic people working in the professions and in higher education. Such a culture also highlights the lack of knowledge about the nature of dyslexia as a developmental specific learning difficulty that changes over the course of an individual's life, depending on their situation (Fassett & Morella 2010). Because dyslexia is a hidden disability, dyslexic learners are faced with the prevailing societal attitude that 'non-visible disability is pretence' (Fassett & Morella 2010: 143) and this is evident in the numerous denial campaigns by both politicians and journalists (Hitchins 2009, BBC 2009). Students themselves experienced scepticism from their own lecturers, who can view it as an excuse for free laptops and extra time (Griffin and Pollak 2009: 34).

Inclusive teaching and learning: the way forward?

Despite these areas of tension, some have argued that 'attention to the social model pushes us in the direction of modifying teaching environments to be as inclusive as possible' (Matthews 2009: 234) which might remove some disabled students' special needs altogether (Tinklin et al. 2004). This view is echoed by Lois Keith (CDD), who

discusses the 'change from the whole idea of reasonable adjustments to the idea of inclusive practice' (Interview 2012). Within higher education Matthews cites the use of Power Points and web based learning as examples of inclusive teaching practice, which may eliminate barriers to learning for dyslexic students.

A variety of inclusive practices are described in the CDD's Disability Equality Scheme which sets out to adopt a proactive approach to the promotion of equality and the removal of barriers. The scheme is based on the social model of diversity, using the insights and experiences of individual learners to form policy. The Conservatoire's 2007 Disability Equality Scheme set out a 3 year action plan which involved collecting data on disabled staff and students, securing the active involvement of disabled staff and students to identify areas of change, providing access to venues and implementing priority issues and assessments. One outcome of this Disability Equality Scheme is a published booklet for students entitled 'Support for Disabled Students' which goes into some detail about the potential nature of adjustments for dyslexic students as detailed above. Although the adjustments cited have not been anticipated in advance (as suggested in the DDA), it could be argued that the act of collating data and publishing examples of potential adjustments promotes an atmosphere of disclosure and by implication suggests that these adjustments have been integrated into mainstream teaching practice at the schools and form an anticipation of needs.

The focus on removing barriers in the audition process and the application of this to all students at some of the Conservatoire's individual schools is also discussed by Keith:

> When I first came [to work at the CDD] applicants for drama training were often given a sight reading exercise using photocopied sheets, not always clearly photocopied. The next change was to provide the scripts with bigger fonts on the pink paper – the assumption was that dyslexic students would choose these – and in ordinary font on white paper. And then they thought this is ridiculous… why wouldn't everyone benefit from having scripts available with clear font in a reasonable size. Now all the scripts are available in a more accessible form. And then we began to think about why we do sight reading at audition. It makes some students very

> nervous – is it an essential part of the audition process? So the whole process was reviewed (Keith, Interview 2012).

The removal of sight-reading as an audition tool is an example of the anticipatory nature of inclusive teaching and learning, which may also benefit other kinds of learners.[115] It also acknowledges the socially constructed nature of 'disability' as discussed by Riddick (2000). It may be that by removing sight-reading, this type of inclusive practice may eradicate the behavioural characteristics of 'dyslexia' altogether. However, as evidenced throughout this thesis, it would be reductive to reduce the actors' lived experience of dyslexia (both the strengths and the challenges) down to a single difficulty with sight-reading. As Keith suggests, social disability theory and the inclusion agenda have enabled some institutions to question practices which were previously taken for granted. Such an approach might prove beneficial in the wider industry and encourage directors and casting directors to question the efficacy of sight reading as a casting tool; whether sight-reading is a true indication of the actors' full potential, and whether technically accurate sight-reading in the audition room necessarily translates to imaginative and embodied work in rehearsal and performance. Other audition tools such as improvisation and audio-visual materials may enable the actor to create a more embodied reflection of their abilities.

Using the social model of disability places the lived experience of the disabled learner at the heart of curriculum design, teaching, casting and directing. The efficacy of training and rehearsal systems should be further evaluated in light of the pattern of dyslexic strengths and weaknesses, as enabling practices for dyslexic learners are potentially beneficial for all (Cooper 2009: 76). Holistic, 'top-down' approaches to text should be used in the early stages of training and rehearsal to establish context, relationships and the 'big picture'; such approaches should form the basis of any subsequent 'bottom-up' text analysis work, with a more detailed approach to text (and

[115] Another example of inclusive practice at CDD affiliate dance schools is provided by Keith: "initially dyslexic students were given extra time to learn routines for assessment. Realising that having the space and time to rehearse and practice dance sequences benefited all students, the assessment procedure was changed so there was time for all students to rehearse and practice before being assessed" (Interview 2012).

a focus on the semantic level). This example indicates the importance of the relationship between the holistic, which should be addressed first, and the analytic, which follows from it. Any contextual approach should incorporate multi-sensory and/or psychophysical elements. Text should be 'chunked down' into manageable bites to aid in comprehension and memory. Any verbal movement instruction or direction should be 'chunked down' into sequential parts. All reading tasks should be active: questions should be asked of the text so the reader engages in a two-way relationship. Teachers and directors should consider how they communicate: the words used, the quantity of notes given at any one time, and their body language. Ultimately, all curriculum design, teaching and directing practice should, at its core, aim to foster positive identities and independent learners, who can go on to devise their own innovative and enabling ways of working.

Thesis Conclusion

The aim of this research has been to explore atypical cognition in performance practice with specific reference to dyslexia, and in doing so I have offered a new way of conceptualising both dyslexia and performance practice. In this thesis I have drawn on philosophical, cognitive and theoretical paradigms such as phenomenology, embodied cognition and social disability theory in order to describe the lived experience of the dyslexic actors in this study in the context both of training and in the profession. These descriptions have been concerned with the dyslexic actors' intentional relationship to their body and identity, and to the material and social practices in the immediate environment. A key concern of the research has been the emergence and confirmation of a dyslexic identity and how that plays out in the backdrop of performance practice. For the actors who took part in this research, 'dyslexia' has become a part of their identity, one which both fluctuates and is often not discussed openly. Some of the actors in my research have suggested that confirmation of this identity (through the assessment process) has helped them to create a positive self-image. However, it may prove problematic if learners are given a label without the tools to understand what that label is and how to work with it. It does not follow that if barriers to learning are removed in the environment (such as the omission or modification of sight-reading) then the individual's identity as a dyslexic learner is also removed: dyslexia is not purely a 'condition' with associated problems and difficulties, but rather a way of processing information which brings both positive attributes and challenges. In this way, the research challenges the neuro-cognitive deficit theories, conceptualising dyslexia as a dynamic process which is distributed across a range of levels: the individual's neuro-cognitive mechanisms, the immediate physical environment (work/educational institution) and society at large. I have used a mixed-methods research design which reflects both the complexity of the phenomenon under investigation and accounts for the varied research questions. The outcome of this descriptive account has been to identify a number of potential enabling strategies and inclusive-practice recommendations, both for the actors themselves and those practitioners who work with them.

The research has identified common themes and trends: fundamentally, the actors in my research could be said to have a particular intentional relationship to the world of written and spoken language and linear sequencing. In some cases this resulted in an acute sense of body-world alienation or 'dys-location' in the context of communication (both written and verbal) and the linear sequencing of information. This lived-distance with the verbal sub-system of language may also be the source of dyslexic strengths, giving them freedom over the normative rules of English language, enabling them to develop their own unique linguistic and conceptual connections and thus creating imaginative worlds beneath and beyond the literal dictionary definition of words. The intentional relationship between the body and text may also be central to the formation of the participants' identity and self-concept, both as dyslexic learners and actors. For some, their early negative experiences of texts and education have led to a negative body image (conceptualising their body as 'stupid', 'thick' or 'clumsy', for example), which is the cause of continuing feelings of frustration and a lack of confidence. However, training and performance in itself has given them a different experience of being in the world, freeing them from some of the difficulties experienced in everyday life (such as word finding and decoding), creating multi-modes of embodiment, and giving them both the opportunity and permission to explore the world of text through psycho-physical and embodied means. These affirmative experiences have created new and positive dyslexic identities and body images, and may go some way to explain why dyslexic learners become interested in drama and/or choose acting as a career path.

The actors themselves have also developed a number of (embodied) cognitive strategies to support their process. Their volatile body-text relationship has meant that they have developed a number of strategies which function to enable them to relocate themselves in the linguistic and linear environment. Examples of strategies include background research, psychophysical practice, holistic meaning making, personal association, repetition, chunking and the use of cognitive artefacts. However, the impact of the environment is also central to the formation of the actors' body schema (how they operate): the actors' intentional relationship to text cannot be separated out from the immediate physical environment and the practises and values that

operate within it. As such, the research has identified a number of barriers to learning which the actors have experienced both in training and in the contexts of professional auditions and rehearsals. For some, the demands of the text-based environment, the privileging of literacy in rehearsal practice, and the use of sight-reading as an audition tool, combined with the actors' lack of metacognition have meant that they have adopted strategies which are primarily disabling, approaching text from the bottom-up, for example, focusing on semantics and grammar. Curiously, this is in contrast to empirical research which has found that literate dyslexic readers generally use context and guesswork in order to make meaning when reading text.

This research has identified how some training and rehearsal practices may be more inclusive for dyslexic learners (at least, for those in my research) than others. Training methods and practices which are predicated on working memory, linear sequencing and language skills such as text analysis, the through-line of action and sight-reading, are a primarily disabling experience for the actors I interviewed. In contrast, there are a number of training approaches, cognitive artefacts and support models in the immediate environment which have an intentional relationship with the actors, and enable them to relocate themselves in a linguistic environment. Examples of potential enabling training methods which utilise non-verbal and holistic information processing include Active Analysis and the methods of Michael Chekhov. The research has also identified the ways in which inclusive practice, additional support (through the DSA) and cognitive artefacts (such as the SQ3R method) might have a role to play in the formation of new and more stable body schemas.

Due to the nature of the qualitative research design and phenomenological theoretical orientation of the research, I am not comparing the participants' experiences with a non-dyslexic control group in the manner of empirical research designs. It follows that the findings are evidently not empirical in nature and I am not claiming to have found objective truths. Rather, I have chosen to focus on the lived experience of the participants in this research and their individual perceptions and as such, have identified a number of key trends and common experiences specific to the research sample. However, these trends are relatable to the participants who took part in this

specific research, and therefore cannot be taken as representative of the wider community of dyslexic actors. Future research might use both dyslexic and non-dyslexic actor-participants in order to get a sense of the difference in lived experience. Whilst I acknowledge the potential limitations of the small research sample and the lack of a control group, the thesis is intended to contribute to future larger scale research, and to add both to a theoretical and practical understanding of dyslexia and acting practice and also, more broadly, to atypical cognition and performance practice.

Implications and future research

The thesis has a range of potential theoretical, practical and policy implications in the area of dyslexia and acting practice, and also point to areas of future research. Firstly, the research indicates that the experience of performing and acting may contribute towards the creation of a positive dyslexic identity and that it may also have cognitive benefits for dyslexic individuals. The implication therefore is that drama, both as a curriculum subject and as an extra-curricular activity may also have positive benefits for dyslexic learners who are not professional actors. It is recommended that dyslexic learners are encouraged, from an early age, to explore the world of books and reading through performance. Future research might adopt a control study to investigate the impact of performance on both cognitive reading ability and identity, amongst children and/or adults.

Secondly the research suggests that dyslexic learners may have a different intentional relationship to text and acting approaches than non-dyslexic learners, and this has implications for teaching and directing practice. There is a disconnection between the dyslexic manner of being in the world and some of the neuro-typical approaches and practices these actors have encountered in the profession, which are based on linear-sequencing, working memory and literacy skill. Therefore acting practitioners, including actor trainers, directors, agents and casting directors, should be offered specific training by industry bodies (such as Equity or Drama UK) in the nature of the dyslexic lived-experience, inclusive policy and practice. The specific nature of recommendations should be based on the (embodied) cognitive strategies the actors

in this research have developed to support their process. Such strategies, referred to earlier in this conclusion, might enable them to relocate themselves in the linguistic and linear environment. Future research might use empirical research methods, such as neuro-imaging technology, to determine the neurological impact of these strategies on the functionality of the dyslexic brain.

Drawing on these findings, best-practice training for acting practitioners (such as teachers and directors) could encourage the use of context in supporting working memory and reading, and the use of chunking as a cognitive strategy to improve memory and develop linear narratives. It might also create an awareness of the ways in which spatial awareness can affect tasks involving movement and blocking, an understanding of the impact of working memory on assimilating verbal directions and an examination of alternative forms of audition methods. Additionally, trainers and directors, could develop an awareness of how their choice of working methods and their manner of communication might impact on the actors they are working with. Training might also be integrated into teaching and directing training courses. The research also suggests that attempts to apply inclusive practice are uncoordinated amongst teachers, practitioners and support workers, therefore future research might examine how the various teaching methods, practitioners and tools (such as the actors themselves, teachers, support workers and working methods) might be coordinated in a more integrated way, breaking the glass wall that separates them.

For the dyslexic actors in my research, their ability to construct atypical knowledge relationships with language and concepts may be linked to their neuro-diverse or 'different' relationship with the world, and this has broader implications in the field of theatre and performance theory. Theorists and practitioners could be incorporating models of neuro-diversity (such as dyslexia) into their understanding of performance practice. Due to the high incidence of dyslexia in the performing arts, it may be that there is a neuro-diverse aesthetic that underscores many performance practices, but which has yet to be highlighted and examined. It could follow therefore that true creativity, in relation to innovation, may be derived from a neuro-divergent way of being in the world which subverts the neuro-typical norm. This hypothesis has already

been postulated by Simon Callow, in his assessment of both Stanislavksi and Chekhov's processes as displaying dyslexic characteristics. This possible positive by-product of dyslexia may enable dyslexic learners in the future to conceptualise their dyslexia in the light of strengths and benefits, rather than as a deficit or disability. The proposed causal relationship between dyslexia and the working methods of Stanislavsky and/or Chekhov might form the basis of future research, using textual analysis of source books as a primary research method. Whether such a relationship exists, is beyond the remit of this research, however it may help to create positive identities for neuro-diverse actors in the future. Furthermore, an interdisciplinary research project could explore the relationship between atypical cognition more broadly, taking into account dyspraxia and those on the autistic spectrum for example, and relating them to creativity and performance practice.

The thesis argues that certain types of acting methods and performance making techniques are more suitable to the dyslexic way of being in the world, and this may impact on their ability to survive and thrive in the acting profession. Dyslexic learners may find that they are better able to utilise proposed non-linear and non-verbal ways of being in the world in contemporary performance practice contexts which encourage the creation of new ideas and concepts, using non-linear and non text-based methods. This hypothesis is reflected in the high numbers of dyslexic learners on the RCSSD BA Devised & Collaborative course in comparison to the low numbers on its more traditional text-based BA Acting for Stage & Screen course. This hypothesis supports studies that suggest that dyslexic learners are attracted to self-employed and entrepreneurial roles. Dyslexic actors can be seen to be attracted to making their own work, as they can do it in their own unique style of being in the world, rather than adapting to more traditional theatre companies, which may have more rigid methods of working and use text and linear narrative as primary methods. Again, these findings emphasise the positive benefits of dyslexia. On a practical level, if dyslexic learners are particularly gifted at making their own work which requires skills in innovation, collaboration and thinking 'outside the box', then they may be more able to survive and thrive in the profession than other actors who passively wait for the call from their agent. This could indeed have wider implications for the long-term future, working

methods and organisation of the stage and acting industry in that those responsible for the organisation and management within it could both learn and draw from the creative approaches adopted by actors such as those in my study.

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Focus group actor-participants

Carl (2011). Focus group participant, Actors Centre, 15th July 2011.

Connor (2011). Focus group participant, Actors Centre, 15th July 2011.

Dela (2011). Focus group participant, Actors Centre, 15th July 2011.

Harry (2011). Focus group participant, Actors Centre, 15th July 2011.

Marcus (2011). Focus group participant, Actors Centre, 15th July 2011.

Mark (2011). Focus group participant, Actors Centre, 15th July 2011.

Paul (2011). Focus group participant, Actors Centre, 15th July 2011.

Rosa (2011). Focus group participant, Actors Centre, 15th July 2011.

Ross (2011). Focus group participant at Actors Centre, 15th July 2011.

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[116] Interviewed as part of my MA fieldwork.
[117] Interviewed as part of my MA fieldwork.
[118] Interviewed as part of my MA fieldwork.

Sally (2011). Focus group participant, Actors Centre, 15th July 2011.

Steve (2011). Focus group participant, Actors Centre, 15th July 2011.

Tim (2011). Focus group participant, Actors Centre, 15th July 2011.

Additional actor-interviews 2009-2011

Doreen (2011). Interviewed 8th June 2011.

Jessica (2011). Interviewed 8th June 2011.

Nancy (2011). Interviewed 4th July 2011.

Kat (2011). Interviewed 9th July 2011.

Ken (2009). Focus group participant, Central School of Speech & Drama, 23rd June 2009.[119]

Jan (2009). Focus group participant, Central School of Speech & Drama, 23rd June 2009.

Kay (2009). Focus group participant, Central School of Speech & Drama, 23rd June 2009.

One-on-one workshop participants

Ross (2011). One-on-one workshop participant, Actors Centre, 10th December 2011, 12th February 2011.

Rosa (2011). One-on-one workshop participant, Actors Centre, 10th December 2011, 12th February 2011.

Steve (2011/12). One-on-one workshop participant, Actors Centre, 10th December 2011, 12th Feb 2012, 6th May 2012.

Tanya (2012). One-on-one workshop participant, Actors Centre, 10th December 2011, 12th February 2012.

Sharon (2012). One-on-one workshop participant, Actors Centre, 10th Dec 2012.

Carl (2011/12). One-on-one workshop participant, Actors Centre, 10th Dec 2011 6th May 2012.

Simon (2012). One-on-one workshop participant, Actors Centre, 12th Feb 2012.

Christina (2012). One-on-one workshop participant, Actors Centre, 12th Feb 2012.

Sean (2012). One-on-one workshop participant, Actors Centre, 12th Feb 2012.

Molly (2012). One-on-one workshop participant, Actors Centre, 12th Feb 2012.

Sammy (2012). One-on-one workshop participant, Actors Centre, 25th March 2012.

Amy (2012). One-on-one workshop participant, Actors Centre, 25th March and 6th May 2012.

Mary (2012). One-on-one workshop participant, Actors Centre, 25th March 2012 .

Diana (2012). One-on-one workshop participant, Actors Centre, s6th May 2012

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A**ppendices**

Appendix 1a

Table showing the percentage of dyslexic learners across the three years between 2007-2010, enrolled on a three year BA Acting degree, validated by the former National Council for Drama Training (now Drama UK). Students had provided evidence in the form of a formal assessment from a qualified assessor.

School	% of dyslexic students 2009/2010	% of dyslexic students 2008/2009	% of dyslexic students 2007/2008
1	17	17	32
2	27	27	n/a
3	14	15	14
4	10	9	9
5	8	5	10
6	11	10	n/a
7	7	4	9
8	11	n/a	n/a

Appendix 1b

Table showing the numbers of dyslexic learners across the three years in the academic year 2009/2010, enrolled on a three year BA Acting degree, validated by the former National Council for Drama Training (now Drama UK), and the average/mean percentage across all institutions. Students had provided evidence in the form of a formal assessment from a qualified assessor.

2009/2010		
School	Total numbers of students across 3 year groups 2009/2010	Numbers with dyslexia
1	58	10
2	120	28
3	96	13
4	78	8
5	87	7
6	83	9
7	73	5
8	100	10
TOTAL	**695**	**90**
Percentage	90/695 x 100	**13%**

Appendix 2a: list of research participants

Interviews with acting teachers:

- Helen Heaslip, Lecturer, BA Acting (Collaborative and Devised Theatre), Royal Central School of Speech and Drama (RCSSD), Interviewed 29 November 2010
- Shona Morris, Course Director, BA Acting, Drama Centre London, Interviewed 23 November 2010
- Amanda Brennan, Course director, MA Acting for Screen, RCSSD, Interviewed 7 July 2009 [120]
- Nick Moseley, Senior Lecturer and Pathway Leader, BA Acting, RCSSD, Interviewed 7 July 2009 [121]

Interviews with directors / coaches

- Lyn Darnley, Head of Text, Voice and Artist Development, Royal Shakespeare Company, Interviewed 6 December 2010
- Tom Latter, freelance director, Interviewed 16 March 2011
- Dan Ayling, freelance director, Interviewed 15 January 2012
- Michael John, Head of Creative Programing, Actors Centre, 16 January 2012

Interviews with dyslexia academics / support tutors and policy makers

- Nicola Brunswick, Senior Lecturer, School of Health and Education, University of Middlesex, Interviewed 11 September 2011
- Lois Keith, Equality and Diversity Manager, Conference of Dance and Drama, Interviewed 21 February 2012
- Sandra Hargreaves, (Former) Senior Lecturer, Education Studies, London Metropolitan University, Interviewed 22 November 2010
- Claire Salter, Dyslexia tutor and trainer, Dyslexia Unlocked, Interviewed 22 May 2011
- Tanya Zybutz, Dyslexia Co-ordinator, RCSSD, Interviewed 20 March 2011 and 30 March 2011
- Jamie Crabb, Disability Services Coordinator, RCSSD, Interviewed 4 June 2009 [122]

Focus group actor-participants 15 July 2011

- Steve
- Carl

[120] Interviewed as part of my MA fieldwork.
[121] Interviewed as part of my MA fieldwork.
[122] Interviewed as part of my MA fieldwork.

- Tim
- Ross
- Sally
- Marcus
- Paul
- Rosa
- Dela
- Harry
- Mark
- Connor

Additional actor-interviews 2009-2011

- Doreen, interviewed 8 June 2011
- Jessica, interviewed 8 June 2011
- Nancy, interviewed 4 July 2011
- Kat, interviewed 9 July 2011
- Ken, Focus group participant, 23 June 2009[123]
- Jan, Focus group participant, 23 June 2009
- Kay, Focus group participant, 23 June 2009

[123] Focus group conducted as part of the fieldwork for my MA, 23rd June 2009

Appendix 2b: One-on-one workshops at the Actors Centre December 2011-May 2012 Participant details

Given name	Training	Practitioner focus?	Accreditation?	Other specific learning difficulty ?
Ross	1 year Post Graduate Diploma in Acting	General	Yes	
Rosa	A number of short courses	General	No	
Steve	2 year part time acting course	Meisner technique	No	
Tanya	2 years Acting Diploma	General	Yes	
Sharon	2 years Acting Diploma	Strassberg	No	
Carl	3 Years BA Acting	General	Yes	
Simon	3 years BA Performing Arts	General	No	
Christina	None	No	No	
Sean	3 Years BA Acting	General / Strassberg	Yes	ADHD
Molly	Stage School	General	No	
Sammy	3 years BA Performance	General	No	
Amy	2 Year Acting Diploma	General	Yes	Dypraxia
Mary	None	No	No	
Diana	2 year part time acting course	No	No	Dyspraxia

Appendix 3: Participant cognitive profiles from assessment reports from December 2011 session

Actors Centre Coaching Sessions, assessment report analysis, 10th December 2001

WAIS IIIGeneral Level of Intellectual Functioning Summary meaures, WAIS III - Wechsler, D. (1997) Wechsler Adult Intelligence Sale (III Edition UK)

69 & below are extremely low	70-79 borderline	80-89 low average	90-109 average	110-119 high average	120 - 129 superior	130 & above very superior			
Time	Name	Participant	Monolgue	Assessment Report	Verbal Comp	Perceptual Orgnaisation	Working Memory	Processing Speed	Report Summary
10am	Tanya	A	Portia from Julius Ceasar	Yes WAIS III	109 : Average (top end of range)	91: Average (just in average range)	94: Average (middle of average range)	106: Average (top end of average range)	Good verbal comp and processing speed. Weakness in perceptual organisation.
11am	Steve	B	Julius Cesear	Yes Wais III	88 : Low average	88: Low average	94: (middle of average range)	86: Low average	Difficulties in phonologcial processing and processing speed. Mild working memory difficulties. Visual spatial challenge. Vocab not extensive. Needs both visual & auditory anchors when reading. Sight reading.
12pm	Rosa	C	Miss Sara Sason by Gotthold Ephraim Lessing 1755	No. Was assessed by Dr. M Critchley in 1971 but no assessment report available then. Evidence provided by doctor's note.	n/a	n/a	n/a	n/a	Initial anecdotal evidence from RS suggests: Short term memory problems, inability to map read, comprehension problems(has to read a page 3 times before she understands it) Can't do times tables or add up.

Actors Centre Coaching Sessions, assessment report analysis, 10th December 2001

WAIS IIIGeneral Level of Intellectual Functioning Summary meaures, WAIS III - Wechsler, D. (1997) Wechsler Adult Intelligence Sale (III Edition UK)

69 & below are extremely low	70-79 borderline	80-89 low average	90-109 average	110-119 high average	120 - 129 superior	130 & above very superior			
Time	Name	Participant	Monolgue	Assessment Report	Verbal Comp	Perceptual Orgnaisation	Working Memory	Processing Speed	Report Summary
2pm	Ross	D	5:30 by Alister Mcdowell	Yes Wais III	105 Average (top end)	106: Average (high end)	88: Low average (top end)	96: Average (mid range)	Typical dyslexic pattern: High verbal & perceptual in comparison to low working memory & processing speed. Problems: speed of readining, remembering hwat just read, taking verbal direction, concenration, Needs to use both phonologcial (sounding out words) and visaul reading techniuqes when reading. Encourage use of active reading techniques. Needs to reaed out loud.
3pm	Sharon	E	August; Osage County	Yes WRIT	Superior	Superior	Avaerage	Average	Superior verbal comp and visual spatial ability. Weakness in auditiory processing and working memory. Possible challanges sight reading, concentration, takign verbal direction.
4pm	Carl	F	Sight reading: The Ruling Class by Peter barnes	Yes (waiting for full report)					Successful compensated dyslexic. Difficulties with visual motor processing, poor working memory (slow speed of auditory information) taking direction? Diff. with tracking print as visual distrubance black on white. Primary diff. visual prcessing & visual disturbance. Report suggests: read for gist; break it down; read aloud; coloured overlays / glasses; post it notes.

Appendix 4: Interview questions

Actor trainer / Director / Dyslexia tutor interview template October 2010
Remind her/him of research questions –

1. The relationship between dyslexia and the acting process
2. What is it about acting that draws dyslexic people to acting?
3. What support do dyslexic actors need in training/professional practice? (Do they need more / less / different amount than non dyslexics?)
4. Can actor training methods be offered as a support technique to non acting dyslexic learners?

Questions:

1. How long have you been working with actors?
2. Can you approximate how many of those that you've worked with have been dyslexic / dyspraxic?
3. What is it about acting that draws dyslexic people to it?
4. Amongst the dyslexic actors you have worked with (both in training and professional practice) have you noticed any strengths or challenges in relation to the following?:

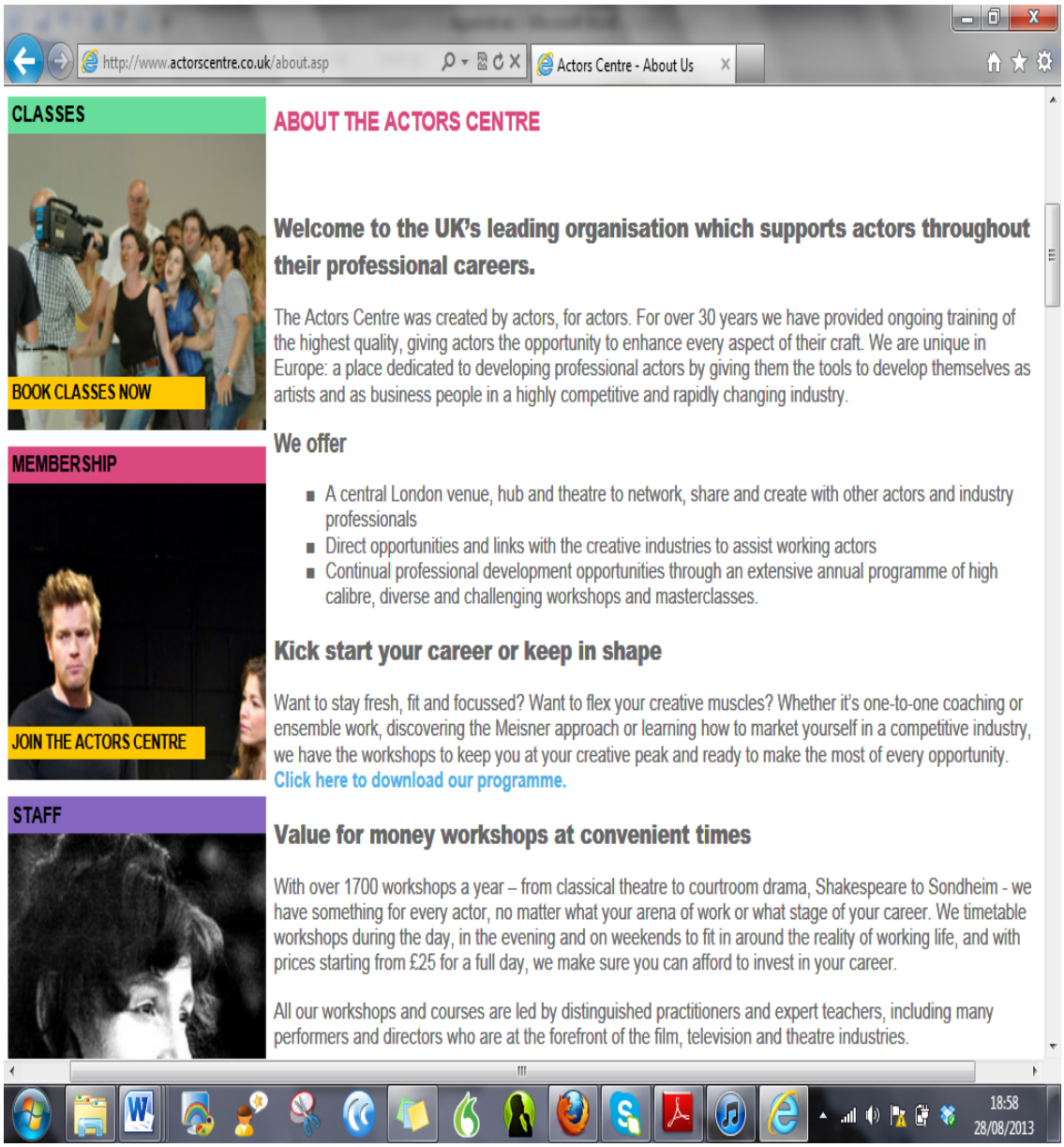
- Being in the moment
- Connection to impulse
- Concentration
- Creating an imaginative world
- Balance and coordination
- Verbal expression / Reflective practice (expressing thoughts in Class / pronouncing words)
- Sequencing
- Making something automatic
- Receiving verbal information (in rehearsal / class)
- Reading
- Remembering lines
- Anything else

5. If any challenges mentioned in question 4 have been apparent - how have they been overcome? What strategies have you adopted in your teaching?

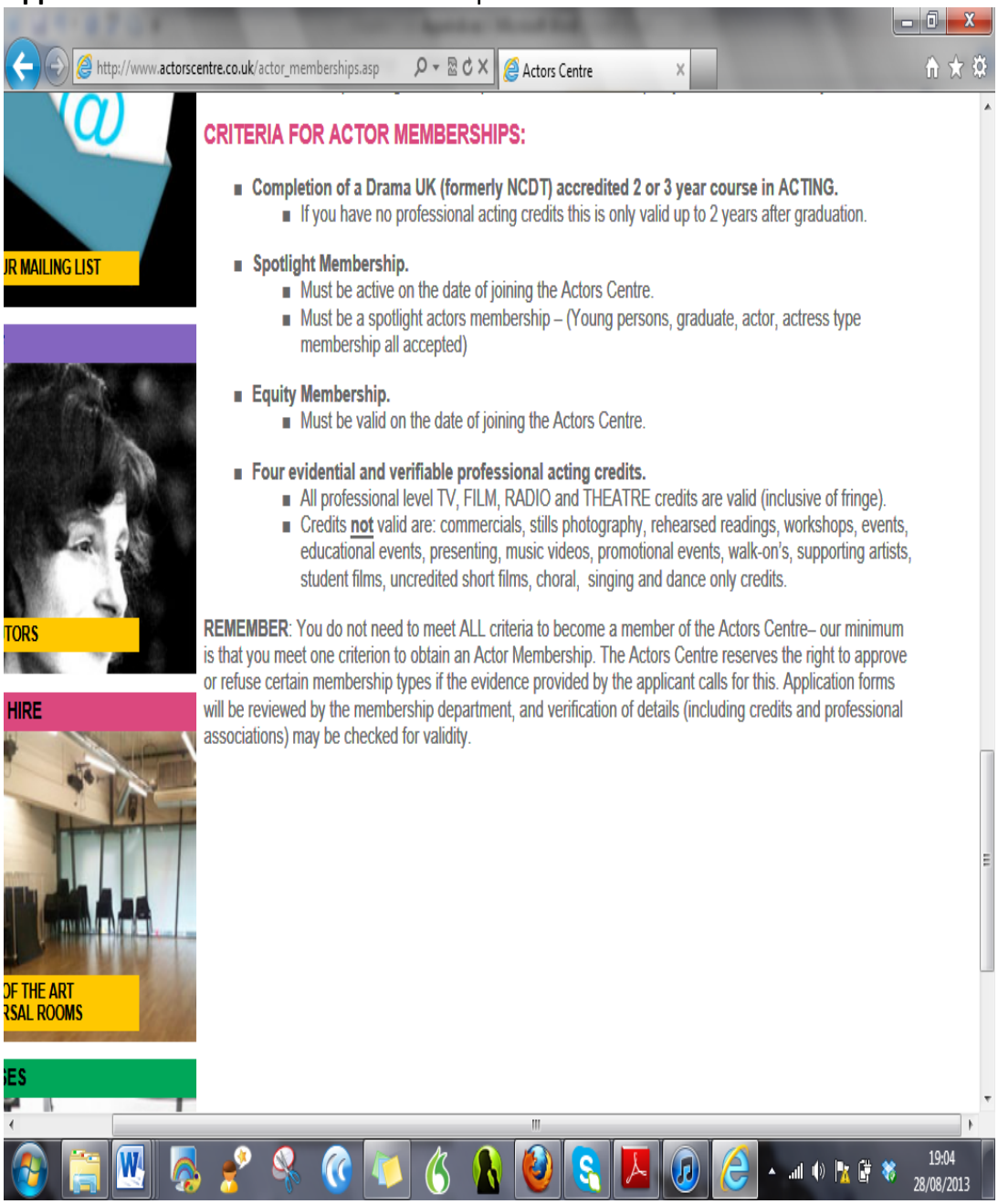
6. In your experience, are there any specific actor training methods that dyslexic actors have responded to particularly positively / negatively?

Thank you very much
Deborah Leveroy

Appendix 5a: About the Actors Centre



Appendix 5b: Actors Centre membership criteria



Appendix 6: Advert in the Actors Centre course brochure calling for participants, July 2011, December 2011, February 2012, March 2012, May 2013

July 2011
Deborah Leveroy
Acting and Dyslexia
July 15
10.30-17.30
Course: A3
This exploratory workshop for dyslexic and dyspraxic actors is an opportunity to explore your dyslexia in a practical studio setting. Using sensory exercises, storytelling, discussion and text work, participants will gain an awareness of how their dyslexia feeds the creative process and discover strategies for overcoming challenges. The workshop will be facilitated by actress Deborah Leveroy. A Voice and Text Coach from the Royal Shakespeare Company will conduct a text workshop as part of the day. This workshop forms part of a PhD research project which is exploring the following: What draws dyslexic people to acting? What are the practical and sensory implications of dyslexia for the actor's process? How can dyslexic actors be supported in both training and professional practice? With participant consent, the workshop will be filmed for the purposes of PhD documentation and will not be accessible to the public. Participants can request that their image be blurred out in the final cut. All participants should be assessed as dyslexic and provide evidence on application in the form of a letter or report from an assessor. The workshop also welcomes actors with dyspraxia.
• Deborah trained at Drama Studio London and is currently doing a PhD in acting and dyslexia at the University of Kent where she also teaches acting.
PARTICIPANTS: £FREE

December 2012
Deborah Leveroy
Acting with Dyslexia, One-to-One Sessions
December 10
10.00-17.00
Course: A23
If you are a dyslexic learner then come along to these hour long, one-on-one sessions. Bring an audition piece or scene that you want to work on. We will discuss any challenges, explore line-learning techniques and address how you can utilise your dyslexia to your advantage by exploring different acting techniques from Stanislavsky to Michael Chekhov. This workshop forms part of a PhD practice research project which aims to address the practical implications of dyslexia for the actor's process, and how dyslexic actors can be supported in both training and professional practice. With participant consent, the workshop will be filmed for the purposes of PhD documentation and will not be accessible to the public. All participants must be assessed as dyslexic. To take part please email a copy of your assessment report to D.Leveroy@kent.ac.uk
PARTICIPANTS: £FREE

February 2012
Deborah Leveroy
Acting with Dyslexia, One-to-One Sessions
February 12
10.00-17.00
Course: A21
If you are a dyslexic learner then come along to these hour long, one-on-one sessions. We will discuss any challenges, explore line-learning techniques and address how you can utilise your dyslexia to your advantage by exploring different acting techniques from Stanislavsky to Michael Chekhov. Bring an audition piece or scene that you want to work on. This workshop forms part of a PhD practice research project which aims to address the practical implications of dyslexia for the actor's process, and how dyslexic actors can be supported in both training and professional practice. With participant consent, the workshop will be filmed for the purposes of PhD documentation and will not be accessible to the public. All participants must be assessed as dyslexic. To take part please email a copy of your assessment report to D.Leveroy@kent.ac.uk.
PARTICIPANTS: £FREE

March 2012
Deborah Leveroy
Acting with Dyslexia, One-to-One Sessions
March 25
10.00-17.00
Course: A26
If you are a dyslexic learner then come along to these hour long, one-on-one sessions. Bring an audition piece or scene that you want to work on. We will discuss any challenges, explore line-learning techniques and address how you can utilise your dyslexia to your advantage by exploring different acting techniques from Stanislavsky to Michael Chekhov. This workshop forms part of a PhD practice research project which aims to address the practical implications of dyslexia for the actor's process, and how dyslexic actors can be supported in both training and professional practice. With participant consent, the workshop will be filmed for the purposes of PhD documentation and will not be accessible to the public. All participants must be assessed as dyslexic. To take part please email a copy of your assessment report to D.Leveroy@kent.ac.uk
PARTICIPANTS: £FREE

May 2012
Deborah Leveroy
Acting with Dyslexia, One-to-One Sessions
May 6
10.00-17.00
Course: A12
If you are a dyslexic learner then come along to these hour long, one-to-one sessions. Bring an audition piece or scene that you want to work on. We will discuss any challenges, explore line-learning techniques and address how you can utilise your dyslexia to your advantage by exploring different acting techniques from Stanislavsky to Michael Chekhov. This workshop forms part of a PhD practice research project which aims to address the practical implications of dyslexia for the actor's process, and how dyslexic actors can be supported in both training and professional practice. With participant consent, the workshop will be filmed for the purposes of PhD documentation and will not be accessible to the public. All participants must be assessed as dyslexic. To take part please email a copy of your assessment report to D.Leveroy@kent.ac.uk.
PARTICIPANTS: £FREE

Appendix 7: Focus group scheme of work and interview questions

Dyslexia and Acting Workshop 15th July 2011 10:30-17:30

Session 1 10:30-12:00 Deborah

Welcome, Agenda & House Keeping (15mins)

Agenda

15 July 2011, 10:30am-17:30 at Actors Centre

- Welcome everyone to the group and thank you for coming. Introduce myself, may know some of them from previous working environments.
- Go through informed consent form with participants and agenda.
- Please say what you really think and feel, this is very important, there are no right or wrong answers.
- Ask people to switch off mobile phones, fire safety and toilets, importance of signing in re fire regulations.
- Any questions, does that all sound OK?

Participant InformedConsent[1] Form DL.docx

WARM _UP

Focus Group Part 1 'Acting' and 'Dyslexia'

- **How do participants understand and conceptualize the dyslexic acting expedience?**

Visual Representation (Drawing) (20 mins)

VISUAL METHOD:

- Participants will be provided with number of magazines, newspapers, leaflets and art materials etc along with a large sheet of paper, glue and scissors.
- They will be asked to make a visual representation of dyslexia and acting.

Word Association (10 mins)

- In a group circle. Start with the word 'acting'. X 3 times. 'dyslexia' x 3, 'dyslexic acting'
- Simile - My dyslexia is like....

Personifying Dyslexia (15 mins)

- Walk around the space as you - neutrally,
- If your dyslexia was an individual person how would it walk? What rhythm? Where is it's center? How does it react to the space around them? Etc.. (maybe imaginary

body)
- Greet other people: If your dyslexia could talk what would it say? How does it talk?

Psychodrama (20mins)

Ask participants to perform scenes in which 'brands' are performers i.e. The brands go to a party.

- Your Dyslexia sits in the waiting room of a doctor's surgery.
- Your Dyslexia goes to party.
- Your Dyslexia goes into a library.

Split the group in two - half the group watches whilst the other 'performs'.

Session 2 12:15-13:30 Deborah

- **Focus Group Part 2**
- Why did you become an actor?
- One Word, One Sentence, Two Sentences, 3, 4, 5 etc) (10 mins)
- What do you feel are your strengths as an actor?
- Big Group visual representation (15 mins)
- What are the challenges you have encountered as an actor with dyslexia?
- Individual Visual representation and Discussion (25 mins)
- What acting methods do you use?

(Questionnaire and 'voting' style discussion)

(25 mins)

Look down the list of acting methods.
- Do you use any of them?
- Please rate how it worked? From amazing to useless.
- If possible say if you liked using the method: □ Yes □ No
- Please fill in any other methods you use not mentioned.

Method	Do you use it? • Yes • No • Never heard	Does it work? • Amazing ! • Really well • Quite well • Hardly at all • Useless	Did you like it? • Yes □ • No □

Objectives (e.g. I want to kiss him)			
Actions (e.g. 'I flatter')			
Physical Actions (e.g. I reach out my arms)			
Units (e.g. breaking down the text into different parts)			
Counter-Objectives (e.g. He doesn't want to kiss me)			
Michael Chekov's Psychological Gesture			
Improvisation			
Meisner's repetition exercise			
Emotion Memory (e.g. remembering a memory from your real life)			

Sense Memory (e.g. remembering a smell / touch / taste / sight from your real life)			
Other:			

Session 3 (2:15-3:45) Michael Corbidge (RSC Text Department)

'Non' dyslexic text workshop

Session 4 (4pm-5pm) Tanya Zybutz (Dyslexia Coordinator, CSSD)

Strategy Focus Group (Discussion based) DL or TZ to lead

Strategies with Tanya

- Line learning strategies (multi sensory method: drawing lines, also maybe play clip from 'Don't call me Stupid')
- Reading strategies (chunking text, audio books etc.)

Session (5pm - 5:30 pm) Deborah

Download, Evaluation & Next steps

Appendix 8: A sample page from Ross' anonymised dyslexia report

SUMMARY

Abilities

was assessed using the Wechsler Adult Intelligence Scale (WAIS-III). He is of sound ability.

Pattern of Strengths and Weaknesses

displays a number of cognitive features typical of specific learning difficulty.

Attainments

's score on a standardised test of word reading (WRAT3) is below the level expected on the basis of ability and educational background. His score does not reflect the slow speed with which he reads many words. Speed of sight word reading is well below average, whilst speed of phonic reading is in the average band. Given an extended text to read silently, he was unable to recall much of the information even after a second reading with the test questions in mind. In a free writing exercise he found it hard to put his thoughts down on paper.

Conclusions and Recommendations

A conclusion of specific learning difficulty (dyslexia) is supported by the test results.

would benefit from help from a learning support tutor, or a teacher specializing in adult dyslexia, so that he can develop strategies to compensate for his problems. It is suggested that he discusses written course work with a dyslexia support tutor and subject tutors with a view to planning an efficient strategy.

is recommended to apply for the Disabled Students' Allowance.

Some specific suggestions have been made.

Michael Vinegrad
Chartered Psychologist
B.Sc.,Ph.D.,C.Psychol.,AFBPsS
6 November 2006

13 Honor Oak Rise
London SE23 3QY
Phone: 020-8699-9545

Appendix 9: A sample page from Sammy's anonymised dyslexia report

1. Summary

Kate has an irregular profile of cognitive abilities, indicative of specific learning difficulties.

Kate's Verbal Comprehension Index lies within the high average range (above 79% of her age group). Her Perceptual Reasoning Index lies within the upper-average range (above 73% of her age group).

Overall summary of strengths

Kate's good strengths fie in areas of her verbal and non-verbal abilities:

• verbal reasoning (above 84% of her age group);
• vocabulary (above 75% of her age group);
• long-term memory for factual information (above 75% of her age group); • visual perception and organisation (above 75% of her age group); and
• non-verbal analytical reasoning (also, above 75% of her age group).

Dyslexia

Kate has significant weaknesses in areas of her working memory and information processing. Phonological processing is also problematical. These are typical dyslexic difficulties.

Attainments in literacy

Kate demonstrates difficulty with sight-word reading efficiency. She sight-reads text at the professional level, albeit with hesitancy. She also has difficulty remembering what she has read. When reading silently, Kate reads more slowly than expected and has difficulty with reading comprehension.

Kate has an average spelling ability, but demonstrates some inconsistencies. Her score is weaker than expected. Kate has difficulty spelling, both everyday and similar-sounding words. Kate writes more slowly than expected and displays difficulty with grammar and the structure of her work.

Kate wondered if she might be dyspraxic however, on the tests administered, no strong evidence was found to support a diagnosis of dyspraxia. Overall her weaknesses, together with her history of difficulties, confirm my view that Kate is dyslexic.

Appendix 10: Set of prompts used in one on one sessions

December 2011 Questions:

Can you talk a little bit about your training and methods you use?

What do you find are your most pressing challenges?

When do you feel most confident?

What have been your most enjoyable rehearsal experiences?

February - March 2012 Questions:

You have an audition on Wednesday. How do you feel?

(establishing audition 'issues'.)

You've got the job. What is the first thing you do when you pick up the script for the first time?

(establishing relationship between self and text)

What do you look forward to and what don't you look forward to about beginning the process? (likes and dislikes)

How do you prepare for a role? (get a sense of general process.)

May 2012 prompts:

What are your thoughts about your assessment report?

Appendix 11: Sample plan for one on one session with Rosa December 2011

Plan:

1. Welcome, discuss informed consent form and obtain through signature

2. Use of verbal prompts to facilitate discussion:

Can you talk a little bit about your training and methods you use?
What do you find are your most pressing challenges
When do you feel most confident?
What have been your most enjoyable rehearsal experiences?

3. Introduce text work:

*Rosa to discuss her choice of monologue from the play 'Miss Sara Samson' by Gotthold Ephraim Lessing (this has been emailed to me in advance)

*Me to introduce to Rosa methods we will be applying to text

4. Take Rosa through the **Imaginary Body Exercise**

- close eyes, aware of the breath in the body
- picture character in mind, where? Standing or sitting? Outside/inside? Standing on what? Be clear about that space, objects, colour.
- picture character standing out in front, looking you directly in eyes
- notice character's feet: how they're placed on the floor. How weight distributed?
- character's hips: even hips? Leaning? Balance?
- observe character's shoulders: drooping or rising? Tense/relaxed?
- observe character's arms: relaxed and loose or tense? Where held?
- character's neck: sticking out in front/ backwards/ central to the body?
- observe the character's whole posture
- look up and see character's face. What part of the face do you see first? the most striking thing about the character? What are the hands doing?
- see character turning their back to you, starting to slowly walk away
- observe how they move: the rhythm? Centre of the movement? Animal? Character turns around and looks back at you.
- Step forward, open eyes, take another step forward into the character & start speech

Discuss: reflections on exercise? Able to generate internal images? What, if anything did the exercise add to your final performance of the text?

5. Take Rosa through the **Psychological Gesture Exercise**

- brief discussion of what character's objective might be
- eyes closed, aware of breath, keeping in mind the objective of the character
- visualise objective, how might look (images, forms or pictures)
- picture becomes settled, repeat the image in the mind
- begin to physicalize this image, play around, any other gestures that might embody the character? play with images until one feels right
- repeat gesture, aware of beginning, middle and end of gesture, form and structure
- open eyes, still physicalizing and repeating gesture
- act out the text, keep overtly physicalizing gesture
- repeat, but with gesture in the back of your mind try to act the speech

Discuss: reflections on exercise? How do you usually explore and decide on an objective? What was it like exploring the objective through visual & physical means rather than just through discussion?

6. Take Rosa through the Active Analysis technique:

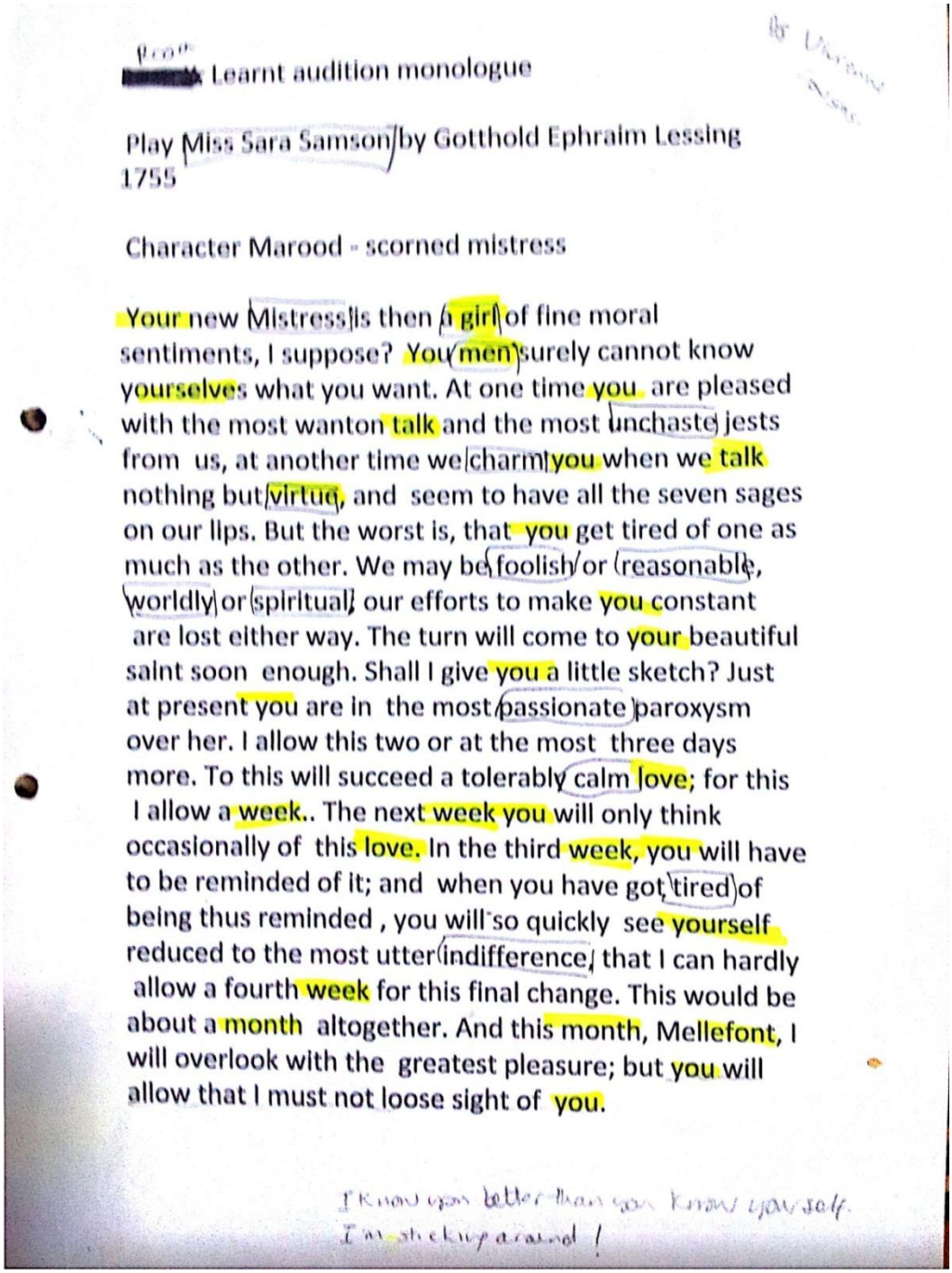
- Rosa read speech
- discuss main event /action & counter-actions
- improvise speech with no words or sounds
- discuss the improvisation, how it compared to words & incidents in the text
- read text again
- improvise speech with sounds
- discuss impro & compare with text
- read text again
- improvise speech with key words
- discuss impro & compare with text
- read text again
- improvise speech with full sentences
- discuss impro & compare with text

Discuss: reflections on exercise? How do you usually explore approach text? What was it like exploring the language through improvisation/silence/key words etc.?

Endings: Any questions?
Final reflections?
Contact details
Provide info on access to further support

.

Appendix 12: Rosa's text worked on in her one-on-one session



Learnt audition monologue

Play Miss Sara Samson by Gotthold Ephraim Lessing 1755

Character Marood - scorned mistress

Your new Mistress is then a girl of fine moral sentiments, I suppose? You men surely cannot know yourselves what you want. At one time you are pleased with the most wanton talk and the most unchaste jests from us, at another time we charm you when we talk nothing but virtue, and seem to have all the seven sages on our lips. But the worst is, that you get tired of one as much as the other. We may be foolish or reasonable, worldly or spiritual; our efforts to make you constant are lost either way. The turn will come to your beautiful saint soon enough. Shall I give you a little sketch? Just at present you are in the most passionate paroxysm over her. I allow this two or at the most three days more. To this will succeed a tolerably calm love; for this I allow a week.. The next week you will only think occasionally of this love. In the third week, you will have to be reminded of it; and when you have got tired of being thus reminded , you will so quickly see yourself reduced to the most utter indifference, that I can hardly allow a fourth week for this final change. This would be about a month altogether. And this month, Mellefont, I will overlook with the greatest pleasure; but you will allow that I must not loose sight of you.

I know you better than you know yourself.
I'm sticking around!

Appendix 13: Overview of Steve's one-on-one session December 2011 and plan for session February 2012
Steve – December 2011 over view:

Overview:

Question: Training methods. Meisner (good for observation, honing intuition, behaviour and being neutral. Issue when it came to the text (3 months in) Thinking all the time he's going to trip over the lines. 'I clammed up', 'getting over fear of tripping up'. 'As soon as I got to text I was like, I clammed up', 'getting over fear of tripping up', 'no room for error'. IDENTITY, PERCEPTION, RELATIONSHIP TO TEXT.

Question: How do you prep for a role? Goes through lines for : 1. number of lines 2. words don't know. Unfamiliar words, stumble over.
Discussed prep for new script: highlight lines, read out, try find meaning, actions (problematic), history of character (before the scene), objectives, pictures (places, food people) music. Doesn't like others to see his script. Embarrassed.

Discussed experienced of rehearsed reading – missed out word, mispronounced words. Just end up saying the words – reading exactly – monotonous. No emotion / connection / relationship.

Discussed sight reading – gone to NF class – encouraged him to go back. Reading newspaper aloud. Sight reading at auditions – not understanding word, thinks need to be 'word perfect'. What is the audition panel looking for? Very concerned. Talked through briefly sight reading tech: reaction shot, listen – react – look down – pick up, thumb.

MISREADING

Exercises we discussed / tried out:

Tried out BIRDS EYE VIEW EXERCISE – first/last line: ASK DID IT WORK?

Briefly talked about how to break down monologue into actions / units (I persuade / tease / excite: Did this work?

Briefly discussed use of gestures on repeated words and opposites: HAS HE TRIED IT? DID IT WORK? FOLLOW UP.

Briefly he discussed mind mapping – TO FOLLOW UP.

Feb 2012

Session 2 Questions:

Feedback from last session:

- Did you use the exercises we covered in the last session?
- If so how did you get on?
- If not, why didn't work?
- Ask him to talk about mind mapping

New Questions: (Steve has already answered a lot of these in the last session so adapt them to suit the new monologue.)

- What is the first thing you did when you picked up this monologue for the first time?
  (establishing relationship between self and text)
- What do you look forward to and what don't you look forward to about beginning the process?
  (likes and dislikes)
- How do you prepare for this role?
  (get a sense of general process.)

  Possible exercises with speech:
  Q. What have you done already on this speech?
  Q. 6 questions
  Q. The script.
  Q. Active analysis

Appendix 14: Worksheets developed in one on one sessions

SQ3R Reading Scripts / Monologues

Using SQ3R **S**urvey **Q**uestion **3 R's** = **R**ead, **R**eview, **R**espond

Survey the scripts for clues: Title of play?
Date it was published?
Long / short sentences?
First & last sentences of script?
How long is the script?
How many acts / scenes?
How many characters?
What acts / scenes does your character appear?

Write the above clues on a mind map with the title of the play in the middle.

Question:

What do I know already about – author?
Play?
Subject matter? (general knowledge and personal experience.)
Can I predict what the play is about / message of play?
Can I predict what style of play it is? What kind of language and words?
Can I predict my characters journey?

Add the above to your mind map.

Read:

Read with a specific question in mind i.e.:

What is the world of the play? What is my character's journey?

Review:

Add any new info to the mind map.

Respond:
What is your personal response to the play?

(adapted from *Dyslexia and Learning Style*, Tilly Mortimore 2008: 138)

Line Learning using mapping and imaging

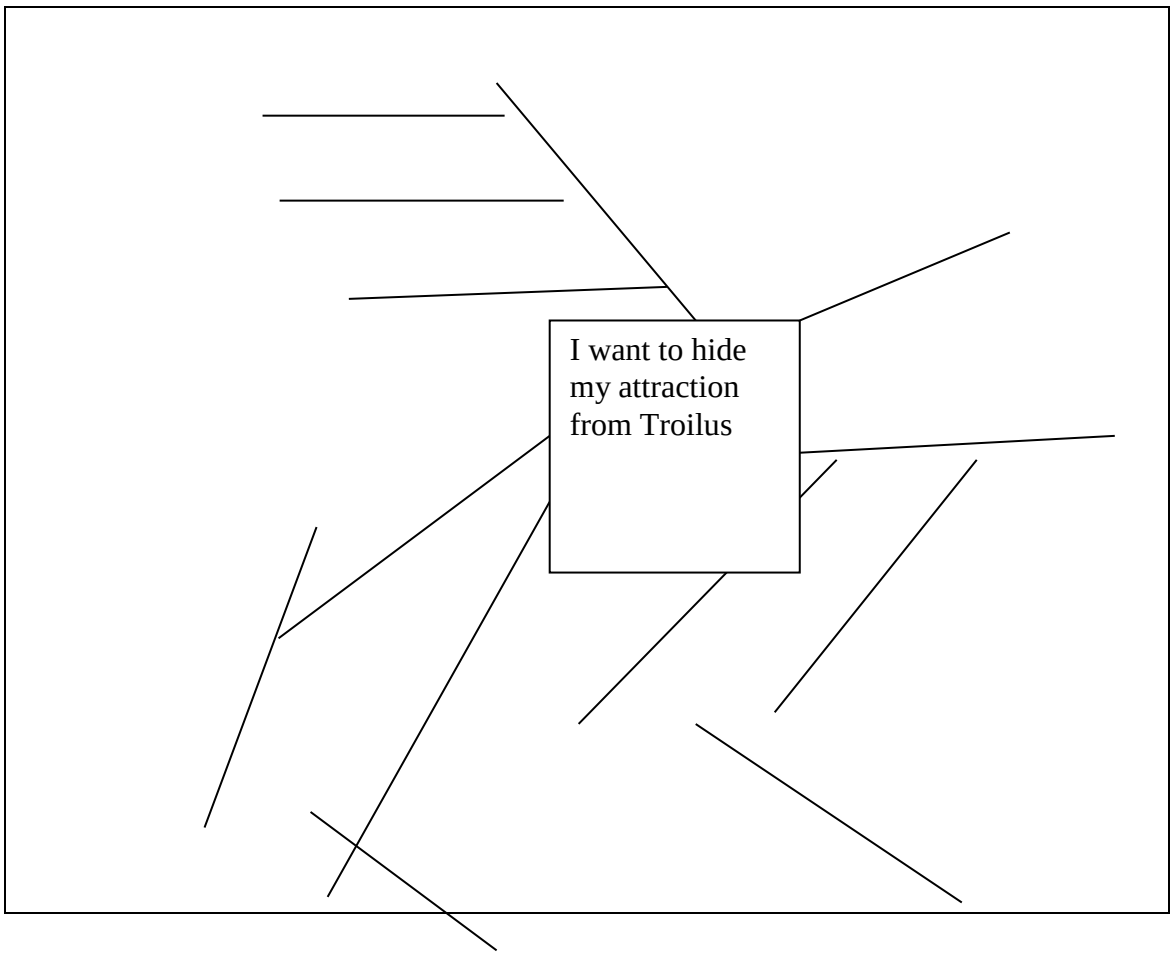
1. You are going to create a mind map of your speech from memory.

2. Get someone to read out the monologue or record it and play it back.

3. For this example I will use Cressida's speech from *Troilus and Cressida* Act 3 Scene 2:

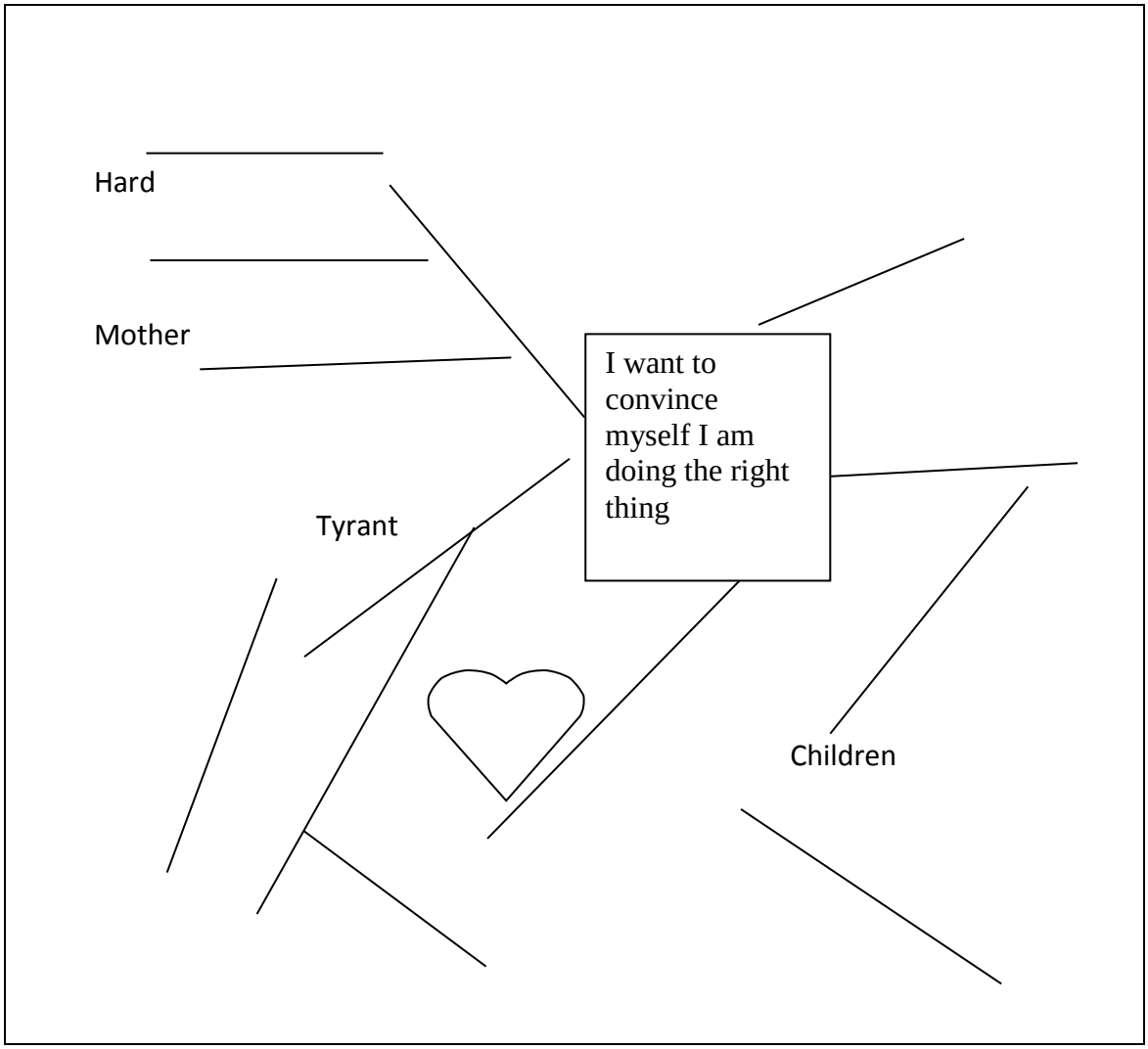
Hard to seem won: but I was won, my lord,
With the first glance that ever--pardon me--
If I confess much, you will play the tyrant.
I love you now; but not, till now, so much
But I might master it: in faith, I lie;
My thoughts were like unbridled children, grown
Too headstrong for their mother. See, we fools!
Why have I blabb'd? who shall be true to us,
When we are so unsecret to ourselves?
But, though I loved you well, I woo'd you not;
And yet, good faith, I wish'd myself a man,
Or that we women had men's privilege
Of speaking first. Sweet, bid me hold my tongue,
For in this rapture I shall surely speak
The thing I shall repent. See, see, your silence,
Cunning in dumbness, from my weakness draws
My very soul of counsel! stop my mouth.

4. Take your blank concept map and write down main idea in speech / what does your character want? / what is he trying to do?



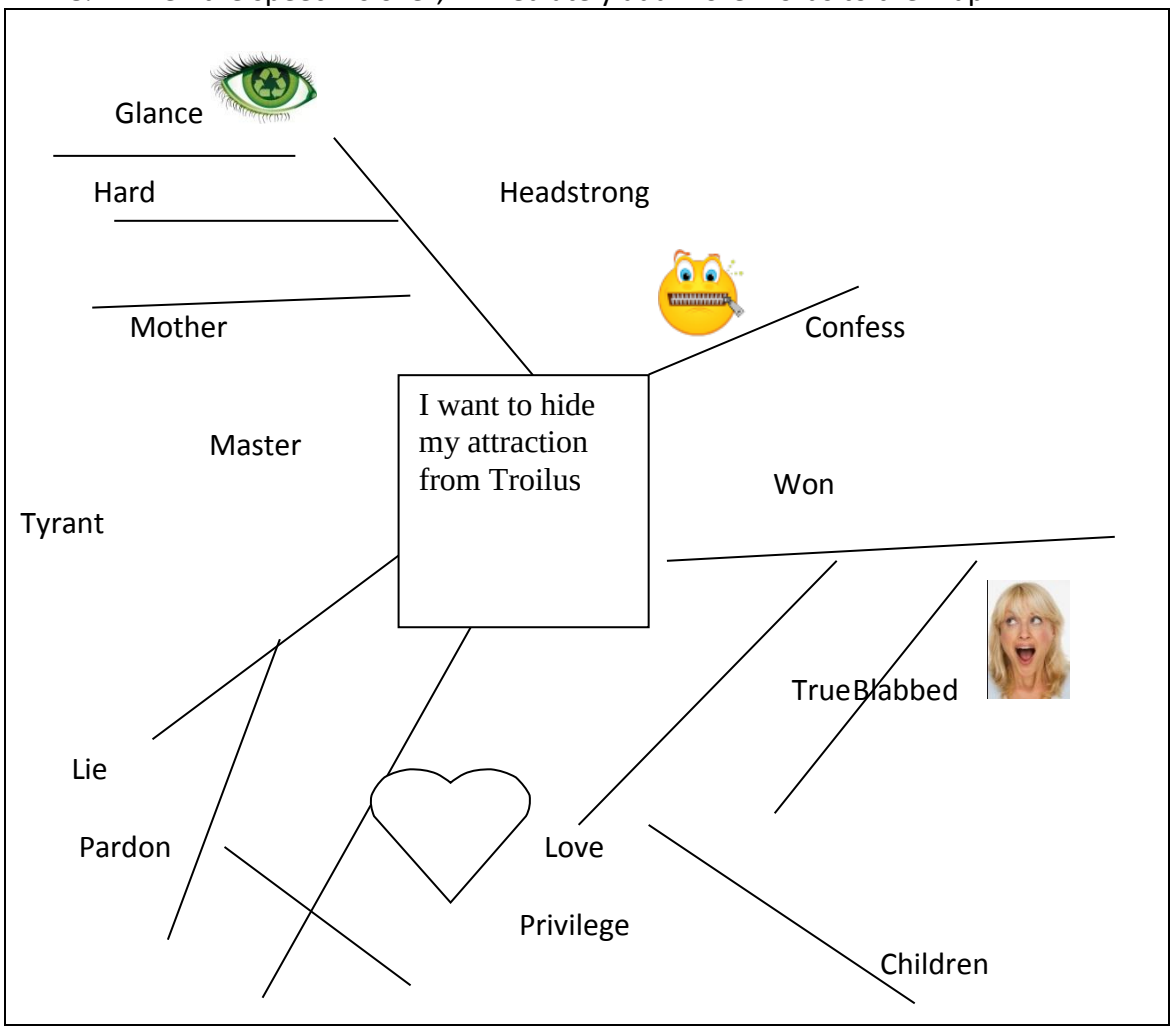
5. Re-listen to the speech

6. Fill in the lines with as many key words and ideas as you can remember. Use pictures too if you want.



7. Put your pen down and listen again to the speech.

8. When the speech is over, immediately add more words to the map.



7. Read out key words on map in no particular order. Discuss how you got these ideas / what it means.

8. Look at map. Can you identify parts of the speech in the mind map? i.e. the word 'hard' represents the first line 'hard to seem won'.

9. Can you organise key words / images to link with the order of the speech? i.e:

   1. hard 2. won 3. glance  4. Confess  etc..

   Hard to seem **won**: but I was won, my lord,
   With the first **glance** that ever – pardon me—
   If I **confess** much, you will play the tyrant.

10. Now take a blank concept map and map out as much of the speech from memory using key words.

Adapted from *Dyslexia and Learning Style* by Tilly Mortimore (2008: 144)

Using Time-lines for play structure

Useful for plotting sequences, chronological narrative and histories.

Act / Scene	Day	Time	Place	People	Events	Props
Act 1	Sunday, Mid Morning	12pm	Lounge in Claire's house, Brixton, London.	Marie and Claire	Preparing lunch. Phone rings with news of crash.	Marie - cigarettes in pocket.

Could include character scenic objective?
Use icons / drawings.

Appendix 15: Thematic analysis

Evaluation of one-on-one sessions at the Actors Centre in London (December 2011-May 2012)

The interview/ coaching sessions were fully transcribed and thematic analysis of the data was performed using a traditional paper-based approach (Braun & Clarke, 2006). I identified 25 overarching themes relating to the research questions.[124]

Number of actors who discussed theme (out of 14)	Theme (by frequency)
11	Difficulty remembering lines.
	Preference for physical methods.
	Reliance on context (holistic)
9	Preference for visual methods.
8	Difficulty understanding text / words (comprehension)
	Difficulty with sight-reading (an audition technique which gives minimal preparation time and little contextual information).
	Preference for improvisation.
	Desire for or use of structure (analytical).
	Felt the need to be 'word perfect'
	Difficulty remembering text whilst reading
	Difficulty remembering verbal information
	Issues with confidence & identity
	Slow processing
	Misreading / missing out words
	Couldn't use Stanislavsky's Actions
	Use of emotion rather than words
6	Lack of concentration.
5	Difficulty with word finding.
	Poor pronunciation.
	Felt they were creative.
	Made them over-prepare.
	Observation.
4	Difficulty with accents
3	Sensory overload
1	Poor coordination

[124] Between December 2011 and May 2012 I conducted 19 hours of one-on-one coaching sessions with professional actors with a dyslexia identification, who were members of the Actors Centre in London. In total I worked with 14 actors, 1 for 3 hours, 3 for 2 hours, and 10 for 1 hour. The 1 hour sessions were one-third semi-structured interview and two-thirds practice based. Prior to the session I had access to their assessment report.

For the practice sessions, I asked each of them to bring a piece of text to work on. We then worked on the piece using a variety of techniques drawing from acting methods and study skills. During and after the exercises the actors were encouraged to use a think-aloud protocol which gave me an insight into their thoughts on the effectiveness of the techniques (Noice & Noice 1994).

Appendix 16: Kent Application for Ethical Approval from Faculty of Humanities Research Ethics Advisory Group

UNIVERSITY OF KENT AT CANTERBURY
FACULTY OF HUMANITIES

Submitted to Carol George Date Submitted: .....
on behalf of Dr Karl Leydecker,
Chair, Humanities Research Ethics Review Completed: .....
Advisory Group

Researcher(s) Notified: .....

Application for Ethical Approval from
Faculty of Humanities Research Ethics Advisory Group

Please submit 3 copies.

Name of Researcher: .....Deborah Leveroy.....
email: .....dl255@kent.ac.uk / dcleveroy@hotmail.com.....

Status (Academic Staff, Research Fellow, Research Assistant, Visiting Training Fellow, graduate student, undergraduate student or other)

Graduate student
.....

Project Title: An investigation into the experience of dyslexic actors

1. Who are the participants:
Dyslexic actors; Actor trainers working in drama schools; directors working in drama schools and in the profession; drama schools (providing stats and access to students/staff.)
How will I be recruiting the participants, e.g. how and by whom will they first be approached?
Students in drama schools will be approached via the contact in the school (the dyslexic support worker or acting tutor.)
Professional actors will be recruited via a call for participants advert through the Actors Centre, ArtsJobs, Casting call pro and Being Dyslexic Forum.
Acting teachers at Drama Schools will be approached by contacting the dyslexic support service in the first instance at the individual school.

2. Describe briefly the proposed research project, and the way in which it involves human participants.

A. In the first instance **statistics** detailing the number of dyslexic students over the 3 year acting course will be obtained from drama schools (with National Council of Drama School status) from the dyslexia coordinator/registrar or the school (or from the NCDT itself with permission from the individual school.) These stats will be used to answer the first research question 'how may dyslexic student actors are there? What is the proportion? Is there a trend? Secondly

stats will be gathered from professional theatre companies and unions

(e.g. Equity / Spotlight) to determine the numbers of dyslexic actors currently in the profession. Again this will be used to ascertain the percentage of dyslexic actors.

B. The qualitative aspect of research will be in the form of structured and unstructured **interviews** with the following:

1. Dyslexic student actors on a NCDT 3 year training course (describing why they chose to become actors; their experience in training.)
2. Dyslexic professional actors (describing why they chose to become actors; their experience in training and in professional practice.)
3. Actor trainers and directors working in a NCDT accredited drama school (describing their experience of working with dyslexic actors; what are the strength/challenges identified; what strategies have been put in place by the drama school.)
4. Professional directors working in the profession (describing their experience of working with dyslexic actors; what the strengths/challenges are; what strategies have been developed in the rehearsal room?
5. Dyslexia professionals; (what is dyslexia?; what support is currently out there? What is the link between dyslexia and creativity? How are dyslexia support tutors trained?)
6. Dyslexia support tutors working in drama schools (what strengths/ challenges do your students present with? What strategies have been put in place to support students? How appropriate is the Disabled students allowance to the acting course?)

C. A group workshop will be conducted for dyslexic actors at the Actors Centre. This exploratory workshop will provide participants with the space to explore and share their experience of dyslexia in a practical group setting. The workshop will use visual methods, storytelling, discussion and text work in order to facilitate discussion and generate new working methods.

D. A series of 1:1 sessions for dyslexic actors at the Actors Centre. The session will consist of unstructured interview and text work. The aim is to discuss the participants experience of dyslexia and acting, using text work to facilitate discussion and generate new working methods.

3. Consent

Describe the means of obtaining prior consent.
Consent will be obtained both verbally and in writing.

Will consent be obtained from others on behalf of the participants (eg in the case or children from parents or guardians) Y/N No

4. Deception

Is there any deception involved? Y/N
No
If yes, describe the deception and the reasons for its use:

5. Participants' Access to Research

Will the participants have access to the research materials? If so, how? Y/N
Yes – If requested for interviews all transcripts will be sent to the participant who can approve it. If requested for workshop – all participants will have access to a copy of the recording.
For stats – if requested all stats, when compiled and analysed will be sent to the participating schools.
I will add a section to the consent form requesting them to supply their address if they would like a copy of the findings sent to them

6. Confidentiality

Will confidentiality be guaranteed if requested? If so, how? Y/N
Yes – all names of schools and individuals involved will be omitted from the thesis. All participants will be given pseudonyms in the transcription stage. Only participants who are happy to give consent to be filmed will be in the workshop.
I will ensure anonymity and confidentiality of participants' identities as a matter of course. Care will be taken not to combine two or more pieces of information in the findings (e.g. location / film, theatre or TV production / drama school, etc.) so that identities cannot be extrapolated.

7. Protection of Participants

Are there risks of harm to participants? Y/N Yes

If yes, describe the nature of the risk and steps taken to minimise it.

Dyslexia is a sensitive subject in itself, and some people would not want their dyslexic status to be known. There may be embarrassment or possible damage to their career or reputation that must be mitigated against. In the first instance participants will be provided with participant information sheets before they agree to take part in the research. If they agree to take part, confidentiality will

be assured in order to not expose their identity. The participant information sheet will offer sources of further information or help that can be accessed if necessary by participants.

Will a risk assessment be done as a standard feature of Health and Safety procedures? Y/N Yes – for the workshop.

Is the information gathered from the participants of a sensitive or personal nature Y/N yes

If yes, describe the procedures to be used for:

a) assuring confidentiality, if requested (see also 6).
Confidentiality will be assured via a verbal and written declaration by the researcher; the names of all participants will be taken out.

b) protecting participants from undue intrusiveness.
All participants have the right to refuse to answer a question, participate in the workshop, or disclose statistics.
The consent form should make it clear that if potential participants decide they do not want to take part, or decide to withdraw from the project, their education will not be affected (for those recruited from drama schools)

I have read the Faculty principles regarding research with human participants and agree to abide by them. I further agree to submit any significant changes in procedures.

Signed:

Researchers(s)

.....
Date .....

.....
Date .....

.....
Date .....

Supervisor (if applicable)

.....
Date .....

Please attach copies of any document given to participants.

Action taken:

☐ Approved

☐ Approved with modifications or conditions noted below

☐ Action deferred. Please supply additional information or clarification noted below.

Date: .....

RJN/leb
x: Research Ethics/application form
24/09/02

Appendix 17: Letter of approval from ethics committee

University of Kent School of Arts

Jacqueline Aldridge, School Administrator
School of Arts
Jarman Building
Tel. 01227 827554 (direct line)
Fax 01227 827484
Email ja58@kent.ac.uk

23 March 2011
Ref: ja/ethics/dl

To whom it may concern

18.iii.1

Ms Deborah Leveroy has applied to the Research Ethics Committee of the Faculty of Humanities of the University of Kent at Canterbury for ethical approval of her project 'Investigating the experience of dyslexic actors', which will involve both students in drama schools and professional actors. I am happy to confirm that Ms Leveroy's project and its methods have been scrutinised both by Prof Lanet Montefiore and by Dr. Pratik Chakrabarty, as our Committee's remit requires, and that both have the Committee's full approval.

Any further information can be obtained from the undersigned.

Yours faithfully

Jacqueline Aldridge
School Administrator

University of Kent
School of Arts
Canterbury
Kent CT2 7NX
United Kingdom

Informed Consent July 2011

Title of Research: The Practical Implications of dyslexia for the actor: training and practice.

Researcher: Deborah Leveroy, PhD student at the University of Kent, Visiting Lecturer at University of Kent, CSSD & DSL alumnus.

Purpose of research: This is a part of my PhD research examining the relationship between dyslexia and acting. Research questions are as follows:

- What draws dyslexic people to acting?
- What strengths do dyslexic actors have?
- What challenges do dyslexic actors experience?
- What acting methods are more or less accessible to the dyslexic learner?
- What strategies are being used to support dyslexic actors?

Funders: The University of Kent

What you are being asked to take part in:

- You are being asked to take part in a workshop asking you to reflect on your relationship with your dyslexia in the context of your job as an actor.
- The workshop will use group discussion, mind mapping, arts & craft, role-play, text, improvisation and questionnaires.

Workshop Schedule:

10:30-12:30

- Welcome
- Warm up Workshop - The relationship between Dyslexia and Acting

Break

12:00-1:30

- Workshop 2 – Why did you become an actor? What do you feel are your strengths as an actor? What are the challenges? What acting methods do you use?

Lunch

2:15-3:45 Text Workshop with Michael Corbidge

Break
4:00-5:00

- Group Discussion on strategies
- Strategy workshop with Tanya Zybutz

5:00-5:30 Evaluation of the day

At the end of the day will be handed a questionnaire to evaluate the workshop. This is anonymous. Please use it to express your honest opinion of your experience today.

Risks: There are no anticipated risks involved with this research.

Benefits: Possible benefits may include being able to express experiences, opinions and emotions about dyslexia and identity as an actor, in a safe environment.

Costs and payments: There will be no costs associated with the study for you. There will also be no payments made to you for taking part in the study.

Confidentiality:
The workshop will be filmed and photographed and will not be viewed by anyone outside the study unless we have you sign a separate permission form allowing us to use them. The tapes will be destroyed three years after the end of the study, as required by the funding organization.
All questionnaires and written / drawing material / transcripts of conversation will be anonymous and confidential. This means that your identity will be protected and the information will not be shared with unauthorised persons.
Any references to your identity in the information will be removed before publication of the research. All personal/sensitive data will be destroyed as soon as it is no longer needed, or if necessary stored for a maximum of three years, after which it will be securely destroyed.

How your information will be stored:

The information gathered from the workshops, questionnaires and interviews will be stored in a locked filing cabinet in Deborah Leveroy's office. Digital copies will be stored on a password protected hard-drive. The key for identifying participants in pseudonymised documents will be stored separately from the rest of the data. After an embargo of three years, and ensuring information has been anonymised and sensitive data removed, the research will be made available for research and learning and teaching development.

Uses, publication and presentation of the research: The outcomes of this research will be published as part of a PhD thesis. Parts of this research will be presented at a conference and published in academic journals. Further, after three years the fully anonymised research will be made available for research and learning and teaching development, and research outcomes will inform debate on whether changes could or should be made to the training curriculum and the industry in the way it supports the dyslexic actor.

Right to withdraw: You have the right to withdraw from this research at any time and for any reason. Any data gathered up until that point will continue to be used for this research, under the conditions of anonymity described above.

Questions/Contact: If you have any questions about the research, please contact Deborah Leveroy dl255@kent.ac.uk
Should any complaints arise, please contact the Director of Research Services, Room Reg 151, Registry, University of Kent, Canterbury, CT2 7NZ.

Further Support: British Dyslexia Association has a help line for further information on dyslexia, assessment and support. 0845 251 9002 http://www.bdadyslexia.org.uk/

I have read and understood this Informed Consent form provided to me. I agree to participate and I am aware that I may withdraw this consent at any later date if I wish. I am over 18 years of age.

I agree that all of this information can be processed in order to facilitate the research being undertaken. I agree that this will be for educational purposes and in perpetuity.

Signed:_____ Date:_____

Appendix 19 Informed consent form for 1:1 sessions December 2011, February 2012, March 2012, May 2012

Informed Consent 1:1 sessions

Title of Research: The Practical Implications of dyslexia for the actor: training and practice.

Researcher: Deborah Leveroy, PhD researcher at the University of Kent, Visiting Lecturer at University of Kent, CSSD & DSL alumnus.

Purpose of research: This is a part of my PhD research examining the relationship between dyslexia and acting. Part of the outcome will be a set of best practice guidelines for drama school teachers, endorsed by the National Council for Drama Training. Research questions are as follows:

- What draws dyslexic people to acting?
- What strengths do dyslexic actors have?
- What challenges do dyslexic actors experience?
- What acting methods are more or less accessible to the dyslexic learner?
- What strategies are being used to support dyslexic actors?

Funders: The University of Kent

What you are being asked to take part in:

- You are being asked to take part in a 1:1 coaching session asking you to reflect on your relationship with your dyslexia in the context of your job as an actor.
- The workshop will use any of the following: discussion, acting exercises, text, improvisation and memory techniques.

Confidentiality:
The workshop will be filmed and photographed for the purpose of PhD research for educational purposes. All transcripts of conversation will be anonymous and confidential. This means that your identity will be protected and the information will not

be shared with unauthorized persons. Any references to your identity in the information will be removed before publication of the research.

Right to withdraw: You have the right to withdraw from this research at any time and for any reason. Any data gathered up until that point will continue to be used for this research, under the conditions of anonymity described above.

Questions/Contact: If you have any questions about the research, please contact Deborah Leveroy dl255@kent.ac.uk
Should any complaints arise, please contact the Director of Research Services, Room Reg 151, Registry, University of Kent, Canterbury, CT2 7NZ.

Further Support: British Dyslexia Association has a help line for further information on dyslexia, assessment and support.
0845 251 9002
http://www.bdadyslexia.org.uk/

I have read and understood this Informed Consent form provided to me. I agree to participate and I am aware that I may withdraw this consent at any later date if I wish. I am over 18 years of age.

I agree to assign copyright to Deborah Leveroy and to waive my moral rights in any oral statements, written statements or audio recordings given as a part of the research; and also to assign copyright and waive moral rights in any photographs or other visual recording to Deborah Leveroy. I agree that all of this information can be processed in order to facilitate the research being undertaken. I agree that this will be for educational purposes and in perpetuity.

Signed:_____
Date:_____

I have read and understood this Informed Consent form provided to me. I agree to participate and I am aware that I may withdraw this consent at any later date if I wish. I am over 18 years of age.

I agree that all of this information can be processed in order to facilitate the research being undertaken. I agree that this will be for educational purposes and in perpetuity.

Signed:_____ Date:_____