

**RECONCEPTUALISING ADOLESCENT
LITERACIES AS TEXTUAL ASSEMBLAGES**

**Thesis submitted in fulfilment of the
requirements for the degree of
Doctor of Philosophy
(Education and Development)**

Adrienne Patricia Watson

University of KwaZulu-Natal

Pietermaritzburg

2012

DECLARATION

I declare that:

- (i) The research reported in this dissertation, except where otherwise indicated, is my original work.
- (ii) This dissertation has not been submitted for any degree or examination at any other university.
- (iii) This dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This dissertation does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) Their words have been re-written but the general information attributed to them has been referenced;
 - b) Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- (v) Where I have reproduced a publication of which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have fully referenced such publications.
- (vi) This dissertation does not contain text, graphics or tables copied and pasted from the internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References sections.

Student: A Watson

Signed

Date

Supervisor: Professor Wayne Hugo

Signed

Date

ABSTRACT

This investigation is a case-study of adolescent literacy practices and some of the texts arising from them. Forty-five texts were initially analysed for their generic structure and semiotic composition from within the traditions of the sociolinguistic paradigm. Findings from these two processes of analysis were then reinterpreted from a Deleuzean perspective with the aim of opening out otherwise imperceptible generative forces implicated in differences between the creation of online texts such as MXIT instant messages; Facebook texts and emails, and traditional print-and-paper school based writing. The context for the study was a Pietermaritzburg government girls' only high school. A mixed-methods approach was used throughout the research process. The sample of twelve learners was purposefully selected from across two grade 9 classes to whom subject-English was taught. The core component of the data is a single writing exercise in which the pupils were asked to write a film appraisal as 1) a MXIT or SMS message; 2) an email; 3) a Facebook message and 4) a conventional film review. There are two major findings from this study. First, in some contexts, adolescents demonstrate a high degree of differentiated control over the structural, linguistic and semiotic composition of their writing in English; second, in online literacy, there is a complex configuration of motivating contextual variables that teenagers co-opt. These generate dynamic forces that serve adolescents' own social and affective purposes and which can supersede, subvert or cooperate with the stated purpose of a genre. A Deleuzean framework helps reveal the complex processes underlying adolescent literacies and enables the beginning of an interrogation of the pedagogic implications of recent innovations in communication technology and practices.

ACKNOWLEDGEMENTS

Undertaking to write a doctoral thesis is a project that relies upon the resources, goodwill and time of many people and institutions. Thanking each would result in a long and tedious list that might unwittingly omit crucial participants. This opening paragraph therefore serves as a general acknowledgement of all those who have helped me complete this study. But there are certain people and organisations that must be mentioned separately.

The lecturers and professors at the University of KwaZulu-Natal (UKZN) have made a significant contribution to the ultimate conception of this project since I began my studies there in 1999. Mike Hart introduced me to genre theory and ways of teaching English that were responsible and powerful. He and Professor Rosemary Wildsmith-Cromarty were instrumental in persuading me to continue studying. I am grateful for Professor Volker Wedekind's support and encouragement; he expanded my horizons and gave me opportunities to explore knowledge and education from different perspectives. Undoubtedly my supervisor Professor Wayne Hugo has had the most significant impact on me. I am grateful for the many ways he has challenged and mentored me over the past five years. His incisive intellectual guidance, patience and affirmation have been strong motivating energies throughout my academic journey. The sincerest tribute I could offer him would also be the simplest: thank you Wayne.

Without the goodwill and cooperation of 'Strelitzia High School for Girls' this study would not have been possible. The support of the management and my colleagues is gratefully acknowledged. I am indebted to the girls of 'Grade 9Z and Grade 9Y' who generously permitted me to engage with them in so many ways as I collected the data. I learnt more from you than you could possibly imagine.

My family, friends and the acquaintances of my broad life-network have supported me throughout the different processes of completing this project. There are too many to even categorise. Their love and demonstrations of interest and care have helped me persevere when the going got tough. I especially value their loyalty during what became a very unsociable enterprise. In particular I would like to thank John and Gill for their moral and spiritual support; always-thoughtful JDF for her encouragement and practical help; Wendy for her fierce belief in me and for reminding me of my

priorities; Danie for caring about and energising me, and Kary, my ‘Word guru’, for making time to help me. Kim and Gill: the time you so generously gave to proofread my thesis is much appreciated. Suze: I am so thankful for your expertise and understanding.

But it is the people closest to me who have given me the strength and the space to complete this project. My husband and sons are the ground to which I have anchored myself while trying to overcome obstacles that at times seemed insurmountable. Thank you for leaving me to live in my head for so long. Thank you for your love and your patient, unwavering belief in the worth of my aspirations.

Finally, this project would not have been possible without the support of The Carl and Emily Fuchs Foundation; the National Research Foundation and the University of KwaZulu-Natal. I am grateful for their financial contributions which enabled me to devote my best energies to research and writing.

LIST OF ABBREVIATIONS

ALP	Adolescent Literacy Practices
AT	Assemblage Theory
BBM	BlackBerry Message
FAL	First Additional Language
ICT	Internet Communication Technology
IM	Instant Message
ITU	International Telecommunication Union
LLHQ	Literate Life History Questionnaire
MLFW	Multiliteracies Framework
MLFW-LC	Multiliteracies Framework Learner Concept
MLFW-PC	Multiliteracies Framework Pedagogic Concept
MLT	Multiple Literacies Theory
MM	Multimodality
MOI	Medium of Instruction
NLG	New London Group
NLS	New Literacy Studies
SAL	Second Additional Language
SFG	Systemic Functional Grammar
SFL	Systemic Functional Linguistics
SIA	Social Informational Assemblage
SMS	Short Message Service
WWW	World Wide Web

Table of Contents

DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF ABBREVIATIONS.....	v
List of Figures	xii
List of Tables	xiii
CHAPTER 1: INTRODUCTION.....	1
1.1 A familiar estrangement	2
1.2 Adolescents on the literacy agenda	4
1.3 Adolescent literacy on South Africa’s agenda	7
1.4 Mobiles, MXIT, and multiliteracies	8
1.4.1 MXIT on mobiles: A South African story	9
1.4.2 Genesis of a hypothesis	10
1.5 Formalising the research project	11
1.5.1 Teaching and researching at Strelitzia High	11
1.5.2 Conceptualising the research question and data collection.....	12
1.5.3 Seeing surprising structures and semiotics	13
1.5.4 Immanence and immediacy as contextual variables	14
1.6 Future directions.....	15
CHAPTER 2: LITERATURE REVIEW.....	17
2.1 Introduction	17
2.2 Dispensing with dichotomies and determinism.....	18
2.3 The semiotic mediation of culture.....	22
2.3.1 Language as cultural practice.....	23
2.3.2 Multisemiotics as social practice	25

2.4	Multiplicity: Characterising contexts, modalities and literacies	27
2.5	The New London Group and the Multiliteracies Framework	28
2.6	Complementarity of Multimodality and NLS	32
2.7	Grammars, genres and technologies of literacy	35
2.8	Convergence and participatory culture.....	40
2.9	Differentiating lenses for a unified vision	42
2.10	Multiple Literacies Theory (MLT).....	43
2.10.1	Experience and Event: Differently perceiving life, literacy and affect.....	44
2.11	Concluding comments	45
CHAPTER 3: THEORETICAL FRAMEWORK		46
3.1	Introduction	46
3.2	Reconceptualising Adolescent Literacy Practices	47
3.3	Construing experience as meaning: SFG as a social semiotic system	48
3.4	The Multiliteracies Framework	53
3.5	The internet/WWW as a space for multiliteracies.....	55
3.5.1	The internet	56
3.5.2	The World Wide Web	58
3.5.3	Digitisation: Real-actual becomes real-virtual becomes real-actual	60
3.5.4	Mobile phones: Palm-sized multisemiotic digital devices.....	63
3.6	Playgrounds of desire: Constructing a Deleuzean conceptual plane.....	65
3.6.1	The emergence of the new	65
3.6.2	Departures: Externalising the interior	67
3.6.3	Qualitative multiplicities: Infinite lines of connecting movements	67
3.6.4	Assemblages: Depositing the dialectic.....	70
3.6.5	Assembling experience, semiosis and subjectivity	72
3.6.5.1	Experience	73
3.6.5.2	Language.....	74

3.6.5.3 Breaching boundaries: Subjectivity as object.....	76
3.6.6 Desire: A generative intervention	78
3.7 Conclusion.....	79
CHAPTER 4: RESEARCH METHODS.....	81
4.1 Introduction	81
4.2 Classifying the study	81
4.3 Distinctions: Educational research or research in educational settings.....	84
4.4 Research context.....	84
4.5 Sampling, selection and ethical considerations	86
4.6 Research methods.....	87
4.6.1 Data collection	87
4.6.1.1 The LLHQs: Qualitatively rich and a basis for selection	89
4.6.1.2 Semi-structured interviews	90
4.6.1.3 Genre writing exercise	90
4.6.2 Analyses	92
4.6.2.1 LLHQs	92
4.6.2.2 Multi-genre writing exercise.....	92
4.6.2.3 A multiplicity of qualities	93
4.7 Concluding comments	93
CHAPTER 5: PATTERNS OF TEXT STRUCTURE.....	94
5.1 Introduction	94
5.2 Organising rationale	95
5.3 Deriving text structure.....	102
5.3.1 Distinguishing genres.....	103
5.3.2 Discerning textual stages as patterns.....	104
5.3.2.1 Analysis and categorisation	104
5.3.2.2 Applying the categories	105

5.4	Applied perspectives on patterns of text structure	106
5.4.1	Introductory overview: An exemplar analysis	106
5.4.2	Structural stages as dynamic zones	108
5.4.2.1	Holler! The Greeting.....	108
5.4.2.2	Its gr8! go c it! Appraisals and Recommendations.....	112
5.4.2.3	Check it out! The Response Invitation	114
5.4.2.4	g2g! The Farewell.....	115
5.4.3	Film reviews: Zones of stability.....	117
5.5	Concluding comments	118
CHAPTER 6: SEMIOTIC VARIATION: A META-LITERATE RESOURCE		120
6.1	Introduction	120
6.2	Processes of analyses.....	121
6.2.1	Identification and counting	121
6.2.2	Classification.....	123
6.2.2.1	Orthographic features	124
6.2.2.2	Lexical variation	126
6.2.2.3	Layout and design features	126
6.2.2.4	Hyperlinks.....	126
6.2.2.5	Corrections.....	127
6.2.2.6	Errors	127
6.2.3	Classification: An example	130
6.2.4	Deriving patterns of semiotic variation.....	131
6.2.4.1	An exemplar analysis.....	131
6.3	Refining the distinction	131
6.3.1	Technologies of immediacy: A variable of register.....	132
6.3.1.1	OMG! I jst saw this gr8 mvie: Intimately sharing experience.....	133
6.3.1.2	Don't let them miss out: Writing on paper for Anonymous.....	136

6.3.2	The SIA: A contextual variable in register shift	138
6.3.2.1	Such a nastified muvi becomes profoundly disturbing.....	139
6.4	Concluding comments	143
CHAPTER 7: TEXTUAL ASSEMBLAGES.....		144
7.1	Introduction	144
7.2	Involutions of life: Experience; semiosis and subjectivity.....	146
7.2.1	Experience: Mind-body encountering the world.....	146
7.2.1.1	Deleuze and technology.....	152
7.2.1.2	Windows of perception: Opening or closing the world.....	153
7.2.1.3	Free-floating techno-human.....	154
7.2.2	Semiosis as a process	157
7.2.2.1	Signs and Sense	158
7.2.3	Subject as object in the included middle.....	174
7.3	Structured roaming and gradients of immediacy.....	179
7.3.1	MXIT: A paradoxical outside-in hybrid	181
7.3.2	Facebook: Networked noticeboard and private messenger.....	186
7.3.3	Email: The eternal personal inbox	189
7.3.4	Electronic texts: Bounded freedom.....	190
7.4	Film reviews: Structured stasis and the freedom of constraints.....	190
7.5	Concluding comments	191
CHAPTER 8: CONCLUSION		193
8.1	Implications	195
8.1.1	Articulating multi-dimensional degrees of freedom	195
8.1.2	Managing the personal-private and the public-displayed	197
8.1.3	The analytic processes.....	199
8.2	Limitations.....	199
8.2.1	Contexts.....	199

8.2.2	Participants and processes	201
8.2.3	Technologies and time	202
8.2.4	Limitations of data and analysis	203
8.3	Directions for future research	204
8.3.1	Theoretical issues	204
8.3.2	Practical directions	206
8.3.2.1	Reconceptualising the functions of literacy	206
8.3.2.2	The multiple as a feature of diversity	208
	REFERENCES	210
	APPENDICES (Separate Volume)	223

List of Figures

Figure 3.1	Singularities within the internet assemblage.....	56
Figure 3.2	Summary diagrammatic representation of the conceptual plane	65
Figure 3.3	Interacting dimensions of assemblages	71
Figure 6.1	Emergent register patterning as a function of T1-3 usage	133
Figure 6.2	Histogram of T1-3 usage across text types	136
Figure 6.3	Percentage comparison of T1-3 elements across two genres.....	138

List of Tables

Table 5.1	List of research subjects	96
Table 5.2	Table of criteria for differentiating stages in electronic texts	104
Table 5.3	Table of criteria for differentiating stages in film reviews.....	105
Table 6.1	Exemplar count of semiotic elements	123
Table 6.2	Table of orthographic features as semantic units	126
Table 6.3	Exemplar semiotic classification.....	130
Table 6.4	Exemplar semiotic count and analysis	131
Table 6.5	Comparison of multisemiotic and lexico-grammatical elements.....	142

CHAPTER 1: INTRODUCTION

A study of adolescent literacy practices is predicated on the socially constructed emergence of the teenager as an identity distinct from the child or the adult, as a person engaged in processes of becoming-adult (Livingstone, 2009). In recent years, the roles that literacies play in the adolescent journey to adulthood have become controversially implicated with the intensified traction of the internet and its penetration into the subjective, social and pedagogical dimensions of adolescence, especially via mobile phones. These globally networked devices and their affordances have been the subject of predictable technologically deterministic debates, both disparaging and utopian. Their impact on adolescents in general has been subjected to particular scrutiny with regard to the development of proficiency in reading and writing. In searching for reasons why standards of traditional literacy seem to be falling in many English speaking countries, it has seemed natural to blame the multimodal, hyperlinked milieu of online interaction for this apparent decline.

In South Africa, similar concerns have surfaced. These are complicated by the pervasive drive to master literacy in English in a profoundly multilingual society. The contours of the linguistic landscape in South Africa largely continue to reflect the historically segregated social organisation imposed under apartheid. The result of this is a contested, complex and unequal educational landscape unified, however, by the perception of English proficiency as the gateway to social and economic progress. A further unifying force is the ubiquitous uptake of mobile phone technology, even amongst teenagers in the poorest communities. An attempt to account for the impact of the convergence of these two powerful social forces in the literate practices of a group of South African grade 9 students provides the broad motivating context for reconceptualising adolescent literacy practices and the texts emerging from these.

Such a reconceptualisation begins, however, with the conventional perspective of adolescents as developing readers and writers who are challenged with negotiating the complex relationships between genre, text structure and lexico-grammatical choices to achieve a diversity of subjective, social, affective, and academic purposes. The role

of the teacher in enabling mastery of written genres in particular is acknowledged as one amongst an increasingly diffused network of factors that influence literate development. Extending the reconceptualisation of adolescent literacies requires that the impact of mobile phone technology is factored into this diffused network of factors.

It is important to underpin such a reconceptualisation with the clarification that it is the individual writer and reader who harnesses the unique and structured capacities of mobile applications for her own purposes that interlink the different dimensions of her life. The term ‘affordances’, mentioned above, is widely used in the literature to refer to an extensive range of internet-linked device software programs, most of which require literate engagement to achieve a variety of purposes. As Hutchby (2000, in Livingstone, 2009) asserts:

Technologies can be understood as artefacts which may be both shaped by and shaping of the practices humans use in interaction with, around and through them (p. 26).

This study therefore presents both the broad enquiry and its specific focus – adolescent literacy practices – as evolving from the lived experiences of a group of twelve teenage girls and their subject English teacher in Strelitzia High School, KwaZulu-Natal. It aims to explore teenagers’ attitudes to literacy in a context characterised by flux. Further, it examines a range of structural and semiotic choices manipulated by the girls to achieve a variety of goals. A further aim is to subject the data to analytic processes that strive to open out imperceptible forces possibly implicated in adolescent literacies. Attitudes and practices are positioned within a pedagogic milieu where proficiency in English is a complex and contested outcome.

1.1 A familiar estrangement

In pedagogic contexts, English is potentially transformative owing to its continued global dominance. Amongst multicultural groups of learners it would not be needed as a resource were it not still perceived as the language of progress and economic power. Yet, its history as a language of conquest and colonisation cannot go

unmarked in the subject-English classroom. This problematises its teaching in situations where diverse cultures, ethnicities, religions and languages are represented in one group of students. In South Africa's state-controlled urban schools this is exactly the context an English teacher faces (Chick, 2009; Deumert, 2005; Mesthrie, 2008; 2002). For example, teaching African post-colonial literature such as *Nervous Conditions* or *Shades* requires that the history and the future of English as both ideological and performative are foregrounded: in South Africa, language was directly used as a repressive weapon (Alexander, 2012). The deep irony of teaching protest literature in the language of conquest to the descendants of both the conquered and the conquering is at once fraught and exhilarating.

Complicating the issue further in post-apartheid South African classrooms is the widely and fiercely cherished belief amongst speakers of languages other than English that it is the magic door through which their children will enter into educational success and economic prosperity. As a language spoken by few and desired by many, English has extremely high 'profits of distinction' (Bourdieu in Alexander, 2012). So the situation exists where those who can afford it, from within the majority of people who were politically oppressed, economically impoverished and marginalised from mainstream education, are now choosing to send their children to schools where the culture is often still characterised by peculiarly South African, 'white', English speaking norms. This leads to what Alexander (2012) framed as The Static Maintenance Syndrome, describing the drive to acquire the former language of oppression as disempowering to the extent that it resembles a 'social pathology'. Certainly it is a force that shapes the educational landscape of South Africa.

Young people in our schools could be at risk of continued marginalisation by having to learn in English rather than their maternal language. Further, if teaching fails to sufficiently develop learners' competence in English, especially writing, marginalisation from the global English-speaking world could result. But there is a price to be paid for becoming proficient. Many young people endure a third marginalising process: a loss of connection to their ethnic and linguistic roots, sometimes ostracisation and criticism from people in their communities who cannot afford to climb the educational ladder. In learning English, much is at stake and much is sacrificed. This places a significant responsibility on teachers in South Africa's schools.

The responsible teaching of English is not merely about teaching and learning literature and grammar. Incorporating an energetic focus on mastering powerful written genres such as argumentative essays, newspaper reports and editorials as well as many other practical forms of transactional writing is vital in enabling people to use their written skills to accomplish educational and social purposes. For as long as South Africa's children are not learning in their maternal languages and English remains globally dominant, its teachers must grapple with the complexities of adolescent literacy development in general, and in English particularly.

It is from this perspective that I brought to my practice unsettled notions around the implications of teaching English to a profoundly heterogeneous group of adolescent girls. As the years progressed in my tenure at Strelitzia High school, I inwardly questioned the girls' and their parents' driven determination to master English underpinned by their perception that it was vital for success. I ruminated on my colleagues' complaints that standards of literacy amongst teenagers were dropping. I reviewed my own practice trying to find ways of enabling learners to master English while foregrounding that it was just one of a range of linguistic choices they should nurture. My practice could only become more effective if I knew more about how, why, where, when and through what media the teenagers I was teaching were using their literate resources. And with the rapid adoption of mobile phone technology and its embodied incorporation into classrooms, it became clear to me that I needed to rethink the construct of adolescent literacy practices.

1.2 Adolescents on the literacy agenda

There are three main epistemological paths that have converged to generate a discrete category of enquiry focused on the levels of literacy amongst teenagers. First is the issue of marginalisation of some groups in society; second is the impact of ICTs on foundational literacy and third is the interrogation of assumptions regarding how teenagers are using the networked applications of the internet/WWW. These are briefly outlined below.

Internationally, concern over levels of adolescent literacy gained momentum in the 1990s peaking halfway through the first decade of the new millennium (Cassidy, Dee Garrett, & Barrera IV, 2006; Ippolito, Steele, & Samson, 2008). Its emergence as a

research issue is situated in decades of multidisciplinary enquiry around ideological conflicts in pedagogic contexts, predominantly in developed countries such as the U.S.A, England, Australia, Canada and New Zealand. The disparities in levels of academic achievement amongst culturally diverse student populations centred on the issue of marginalisation: in teaching contexts where English was the language of power for a dominant majority, minority learners whose maternal languages were different struggled to attain high levels of academic success and suffered continued marginalisation in society as a consequence, trapped in their habitus and positioned as having little or no agency. This theoretical space of an *at risk marginalised group* shifted its focus to teenagers as educational institutions in the developed world began to sound alarms about low levels of literate achievement amongst secondary school students. What Jacobs refers to as ‘the language of crisis’ (2008, p. 11) began to permeate the discourse.

The waves of penetration into civic, educational and social spaces of a plethora of networked computer applications, first on computers then on mobile phones, energised further the concern over adolescent literacy. The recognition that a profound global social shift had occurred with the advent of ICTs – foreshadowed by thinkers such as McLuhan, Rheingold, Castells and Halliday amongst others – broadened the literacy debate with calls for conceptualising the internet’s epistemological and pedagogic implications.

Teenagers were quick to adopt the new technologies. Historically, innovations have been accompanied by reactionary and institutionalised fear for groups perceived as needing protection from their ostensibly harmful consequences. Frequently, these groups have – or are assumed to have – little or no agency. For example, it was thought that learning to read books would be detrimental to women. Usually such groups appropriate and subvert new technologies for their own purposes. Therefore much recent work has focused on investigating the ways in which teenagers actually use their literacies online to negotiate a complex configuration of practices across diverse social and geographic spaces (Alvermann, 2008; Coiro, Knobel, Lankshear, & Leu, 2008; Coiro & Moore, 2012; Gee, 2003/2007; Leander & McKim, 2003; Livingstone, 2009; Moje, Peyton Young, Readence, & Moore, 2000; Thomas, 2007). This research continues to be motivated by concerns over disparate levels of academic

achievement amongst culturally diverse teenagers (Moje, Overby, Tysvaer, & Morris, 2008). Perceptions of the internet as a dangerous space have been incorporated into the discourse around adolescent literacy practices (boyd, d. [n.d.]; Livingstone, 2009). This is a broad and separate topic and is not the focus of this research, although related issues emerged in the data.

In South Africa, this epistemological trajectory is complicated by three fundamental differences compared with the international context. First, marginalisation as a state of being was enforced on the majority of the population by a more powerful minority. What it means to be marginalised or a member of a minority is thus inverted and problematic in South Africa; northern hemisphere assumptions about what these terms represent do not necessarily apply and continue to complicate research, policy and implementation in many sectors of South African society, not least, education.

Second, the concept of agency in processes of people's individual trajectories of transformation is disrupted by the political revolution achieved in 1994. Education shifted from being an instrument of oppression to an agent of social change. While not wanting to elide the continuing problems in the country in a simplistic portrayal of instant improvement, I do want to foreground the idea that the inexorable perpetuation of habituses does not necessarily always apply in South Africa. In some sense, a single event radically changed the opportunities available to most people. For example, some of the girls I taught described themselves as being the first members of their families to ever attend a 'white school'. The subtext of this is that they were being given opportunities for socio-economic advancement denied to their parents and grandparents. Simply put, children of generations of manual labourers could now become lawyers, doctors, accountants and engineers, for example.

The final difference pertinent to the South African context is the introduction of affordable mobile phones. The rate of uptake of this technology has proceeded along variant lines compared with more affluent countries. The widespread adoption of mobile technology across South Africa – to the extent that there are more phones than there are citizens – is motivated by factors that are intrinsically divergent from those operating in the developed world. Their potential to radically impact diverse aspects of everyday life, especially for those on the actual margins of mainstream, urbanised society, is significant. And bringing the discussion back to adolescent literacy

practices, key issues implicated in the local debate are the possible use and effects of mobile phones in education. These will be elaborated further in the discussion.

To sum up: focusing on adolescent literacy practices in South Africa is informed by some of the issues and epistemological pathways emerging from research contexts in the developed world. But a more nuanced view is needed. The complexity that fuses pedagogic contexts and social aspirations in this country needs to be explored together with how teenagers are negotiating literacy across a multiplicity of contexts. Acknowledging this has guided my study and framed the research question as I have sought to make sense of a situation that is both personally and professionally confounding.

1.3 Adolescent literacy on South Africa's agenda

Officially, South Africa's schools are divided into ordinary public schools and ordinary independent schools (DBE, February 2012). Anecdotal discourses reveal another layer of division in public schools: those that, under apartheid, were reserved for whites, and 'other' schools situated predominantly in rural areas and townships (Roodt, 2011). The formerly whites-only schools – in which English is generally the MOI – are commonly referred to as Model C schools. This colloquial usage will be adopted in this discussion for ease of reference.

The rates of academic achievement are higher in Model C schools. For example, in 2009, the grade 12 – or matric – pass rate was 94% compared with 60% in 'other' schools. In spite of the widely recognized problems associated with being taught in a second or third language, African pupils who attend Model C schools have a significantly increased chance of being academically successful compared with learners in rural or township schools. The reasons are manifold, complex and rooted in South Africa's historically fractured society which is well documented in the literature and will not be addressed here. However, it is the minority of all South African adolescents who attend these schools. According to the South African Institute of Race Relations, in 2009 only 13% of South African final year pupils attended these 'oases of excellence' (Roodt, 2011). Roodt goes on to call for practices in these schools to be researched and replicated across the country's secondary school classrooms.

Whether this is possible or desirable is part of a wider, continual debate in South African education which is not within the scope of the present discussion to resolve. But it is relevant to this investigation because the research site was one of these Model C schools in the province of KwaZulu-Natal, which has the highest number of pupils enrolled in ordinary public schools (DBE, February 2012).

A study of the literacy practices of a group of South African adolescents is positioned against this troubled backdrop of unequal educational achievement, contested language issues and the aspirations of people emerging from exclusion. And although its findings cannot be generalised, and cannot therefore reflect on the intersection between adolescent literacy and pedagogic practices in ways that might cause the ‘desert of [educational] mediocrity’ (Roodt, 2011) to bloom, the insights generated could inform directions for further research. Exploring the impact of mobile phone use on literacy and the potential for mlearning¹ is one of these possible directions and contributed toward the conceptualisation of this research project in a grade 9 Model C English classroom.

1.4 Mobiles, MXIT, and multiliteracies

In his *Manifesto for Media Education* (2011), Jenkins makes the observation that:

The invention and ongoing reinvention of digital and mobile communications media has resulted in the experience of constant cultural churn, as part of the ongoing process by which society adjusts to their affordances and capacities (p. 1).

The notion of ‘cultural churn’ resonates with the transformations experienced in South African society. The addition of mobile phones to this stream of changes adds a further dimension of complexity which framed this investigation. The teenagers in my classes were avid adopters of the new technologies. Teachers began to blame the use of these devices for declining standards of literacy. The chief culprit in our local context was thought to be the South African instant messaging program, MXIT,

¹ Mobile learning

which at the time of data collection was the dominant social media platform for mobile phones.

As an English teacher I was not convinced that this conclusion reflected the reality of the pupils' practice. In regularly having to mark the writing of approximately 175 students, I was not seeing overwhelming evidence of 'deviant' forms of instant messaging style. It could be that literate skills and activities were in a state of flux but not necessarily decline. Alternatively, in processes of convergence old and new media and literacy skills were interacting and impacting on each other (Jenkins, Manifesto for media education, 2011) in ways that still needed to be recognised. In my teaching context, the challenge seemed to be finding strategies for adjusting to these new technologies in a pedagogically responsible way within the 'cultural churn' that characterises the post-1994 society. Attempting to see the use of MXIT and other applications through the eyes of adolescents emerged as a priority.

1.4.1 MXIT on mobiles: A South African story

According to ITU, the United Nations' working group specialising in ICTs, there were more mobile subscriptions in South Africa by the end of 2011 than there are people.² As one of the BRICS countries, South Africa has a rapidly increasing mobile broadband growth – compared with a low rate of fixed broadband connectivity: only 2%. In short, mobiles are rapidly connecting more and more people to the internet/WWW. And given that, according to the latest available official statistics (2011), one fifth of the country's population is between the ages 10 – 19,³ it is likely that most adolescents, especially from medium income families, will have at least one mobile phone. Certainly, even in 2009, almost all the girls at Strelitzia High had their own phones.

One of the primary functions of adolescent mobile usage is chatting on MXIT. This is Africa's largest social network, originating in South Africa. Currently it has

² <http://www.itu.int/en/about/Pages/default.aspx>

³ <http://www.statssa.gov.za/publications/statsdownload.asp?PPN=P0302&SCH=4986>

approximately 50 million subscribers⁴. At the time of this project's data collection, it was the preferred method for sending messages to friends. It is a free application, and connectivity costs via the country's three major mobile operators are cheap. It is a popular platform for socialising with friends.

This last point is salient to the investigation and requires clarification. As relationships with my classes developed, and we spent time having informal conversations about their use of MXIT in particular and mobile phones in general, I discovered that there was one very strong social boundary regulating who could belong to MXIT. It was a social space reserved exclusively for teenagers. The girls jealously guarded this as 'their zone' and adults who impersonated teenagers to gain admittance were regarded as deviant and predatory. This posed a problem to me as a researcher wanting to investigate the specifics of this instant messaging application that formed an integral part of the fabric of teenage life. This will be explored further in the section detailing the research process.

1.4.2 Genesis of a hypothesis

Fascinated by MXIT, I explored the interface between formal English teaching and the girls' passion for the style of writing they adopted on this platform. For example, as part of the process of teaching narrative structure, I would ask them to write the stages of an original story, but in MXIT style. They would then have to translate these for me as I could not understand the highly idiosyncratic and contracted usage. We would do this collaboratively as an oral exercise. What it pointed to – usually with great hilarity at my expense – was the facility with which the girls were able to elaborate their instant message stories. Clearly they had a form of language use in their literate repertoire that I did not. It was almost a kind of secret code. My tentative hypothesizing was extended by clear evidence of their ability to develop their ideas into full length stories written in standard English.

Gradually I formulated an initial framework for a research project: I wanted to explore four areas of general interest: first, how adolescents perceived literacy; second, what their practices were and their attitudes to these; third, the extent to which

⁴ <http://site.mxit.com/>

the internet/WWW featured in literacy and last, their ability to control their writing across MXIT, Facebook, email, SMS and standard English. An overlay to this framework was the possibility that mobile phones could be effectively used for particular educational goals at Strelitzia High, a research site rich in the paradoxes, complexities, conflicts and conundrums typical of South Africa.

1.5 Formalising the research project

1.5.1 Teaching and researching at Strelitzia High

Strelitzia High is a well-resourced, efficiently run and successful secondary school with a pupil enrolment of approximately 1200 girls. These girls are mostly day scholars from the surrounding suburbs inhabited by medium-income families. The boarding establishment accommodates about 250 students from the outlying rural areas populated largely by farmers and their employees.

The city in which Strelitzia High is situated is characterised by a high proportion of schools which reflect the historic disparity in the educational system. In the suburbs, there are former Model C schools and independent schools; in the previously segregated satellite communities are ‘township’ schools. These terms are widely used by the pupils themselves. Perceptions of the quality of education available in these schools vary.

Strelitzia High is perceived by many learners and their parents as a prestigious gateway institution. It is the school of choice for families who do not want to send their daughters to one of the ‘other’ schools, or who cannot afford the fees of the independent schools. In sum, the school is broadly representative of the cultural and socio-economic diversity of the region.

At the time the research project was implemented, I had been one of six full-time English teachers for four years. I approached my teaching and enquiry from within the traditions and logic of both Applied Linguistics and English studies. This led me to formulate my research question in such a way that the tension inherent in this dichotomous perspective was harnessed as a generative dynamic.

1.5.2 Conceptualising the research question and data collection

My aim was to explore three main lines of enquiry related to the literate practices of adolescents: first, how they were using their semiotic resources across a variety of technologies and in a variety of contexts; second, to what extent were the girls able to control their semiotic resources in the written mode; and third, I wanted to investigate the perceptions teenagers had of their own literate practices. The initial conceptualisation of the research question was for a Masters degree and had three main data gathering stages. The first was to gather qualitative data about the social, educational and literate lives of the learners. The second was to explore their varying use of computer technology. And the third was to analyse their writing. Using a series of questionnaires which led to written dialogues in journals between the girls and me, I implemented the first stage of data gathering. Emerging from this was a decision to interview six girls as part of the data collection process for the Masters. This information has been retained and incorporated into this present study. The third stage was designed and implemented last, at the end of my year teaching the two classes, as a single writing exercise administered to both. It required them to write an appraisal – a film review – in ways that I thought would expose the degree to which they had control over their semiotic resources in the written mode across different technologies of literacy.

A component of the grade 9 teaching programme had been writing film reviews after watching the film *Juno*. Appraisals are an accessible and engaging genre to teach to teenagers. I spent approximately two weeks exploring the structure and lexicogrammatical features of the genre and guiding the girls to writing their final pieces as a series of revisions. Therefore I regarded this as a genre that would function as a fairly stable control mechanism and a foil against which their other types of writing could be compared. It is a mixture of formal and informal, standard and colloquial English requiring a reasonably sophisticated level of awareness of contextual variables and how these shape texts. I believed that they would have a good grasp of the purpose of a film review, and therefore of the structural and lexicogrammatical conventions.

The writing exercise required the girls to write an appraisal of any film they had recently watched. The instruction was simple and general, asking that they write

about the same experience in four different ways: first, as a MXIT message or SMS; second, as an email message; third as a Facebook message and fourth, a film review as they had been taught. The first and final specifications were deliberately arranged to create what I thought would be a continuum from least conventional to most orthodox and would thus enable me to discern how the girls' writing reflected variation along several dimensions across these different platforms and technologies.

It was problematic that I could not collect samples of electronic texts on their originating platforms, but the practical and ethical obstacles this entailed would also necessitate a totally different kind of research project which was beyond my technical expertise and the constraints of my role as an English teacher. To compensate for this limitation, the instructions for the writing exercise stressed that the girls use exactly the same semiotic and linguistic conventions they would as on the actual ICT applications. A final sample of twelve learners' writing, including the original six who were also interviewed, was selected for in depth analysis. As a researcher with a good grasp of functional linguistics and genre theory, I believed I would have sufficient resources to make sense of the data.

1.5.3 Seeing surprising structures and semiotics

There were three processes of data analysis for the writing samples. The first two drew on genre analysis, multiliteracies and multimodality. The aim was to analyse the texts to discern any common structural and semiotic patterns that might emerge.

What soon became clear was that the MXIT and Facebook messages, and the emails, were commonly structured in a substantially different way from the film review. There was not a single genre written in four different ways, but two distinct genres. A second interesting pattern was that, in terms of levels of idiosyncratic and unorthodox semiotic composition, the texts grouped along a continuum with the MXIT messages as the most unorthodox and semiotically varied, followed by the Facebook messages with emails third. Yet another direction the analyses revealed was that the shifts across these different contexts were controlled and subtle, culminating in film reviews that were almost devoid of any unorthodox usages or languages other than English. A final observation I was able to make was that, although in all four texts, the girls had followed my instructions to review a film, ostensibly fulfilling the generic purpose of an appraisal, there were other motivating goals and processes at work in the electronic

texts. It was as if the affordances of the individual technological applications enabled the subversion of a particular communicative goal to the girls' own social and affective purposes which helped to shape the texts in particular ways. The theoretical resources of functional linguistics and multiliteracies used thus far to analyse the data could not account for these novel and energising compositional forces.

I turned to the work of French philosopher Gilles Deleuze, and his collaborator Felix Guattari, for a third phase of analysis that sought to open out to description these imperceptible generative, structuring energies.

1.5.4 Immanence and immediacy as contextual variables

One of the strengths of a Deleuzean analysis is that it enables a way of thinking that can account for the role materiality plays in processes of creation. Intertwined with this, the imperceptible structuring and dynamic tendencies immanent to generative processes are derived from examining the actualised products. What it offers a theorist is not a framework but a set of conceptual tools that is flexible and can articulate with a multiplicity of different interacting contexts and variables. It provides a conceptual space for exploration and experimentation which is especially useful in thinking through how ICTs continue to change the literate landscape.

Portability, immediacy, connectivity, interactivity and digitisation, enabled by embodied mobile phones, are positioned as contextual variables in processes of text negotiation. Further, by problematising perceptions of a mind-body dichotomy, people's desires, intuitions, impulses and emotions can become contextual variables, which, together with the affordances of ICTs, exert powerful forces on how texts emerge in practice. These factors have been difficult to account for from within a traditional sociolinguistic paradigm.

Using a Deleuzean approach to add a third layer of analysis to the forty-five writing samples of the data set was productive. It opened out ways of accounting for processes of semiotic contraction and the inclusion of multimodal elements – songs, pictures and video clips – into the electronic texts. The motivating forces of immediacy and connectivity as resources immanent to communication also became evident. Additionally, how individual desires energised and shaped text structure and linguistic and semiotic choices emerged as implicit in text creation.

Approaching the data analysis from Deleuze's flat, process oriented ontology with its emphasis on immanence might be viewed as a radical departure from orthodox methods of linguistic and textual theorising. But it penetrated the rigidifying layers of conceptual frameworks that focused on accounting for contextual variables in static texts bound to pen and paper. The problematising of time, space and representation as variables in ICT textual milieus required a different intellectual encounter. This is explored in depth in chapter 7.

1.6 Future directions

Within the educational technology debate, there is a growing call for the use of mobile devices for mlearning. According to Steve Vosloo, UNESCO's project manager for mobiles and education in Africa, 'the future of education in Africa is mobile' (2012). In South Africa, the Shuttleworth Foundation and MXIT teamed up to pilot the Yoza Cellphone Stories project which aimed to get young people reading and writing stories using the instant messaging application. Organizations such as the CSIR's Meraka Institute, and the Praekelt Foundation, are exploring opportunities for mlearning. And within this particular research study, there is evidence of girls using their mobile phones for learning.

Yet as the trajectories of other technological 'revolutions' such as television and personal computers have demonstrated, merely adopting or inserting them into education does not automatically translate into improved academic achievement for pupils. Further, attitudes toward mobile phone use amongst teenagers are not straightforward and need to be factored in to a conception of their use in schools.

Teenagers have affective bonds with their mobile phones. One of the most cherished affordances of this embodied device is its subversive, sometimes transgressive, privacy. Further, its prominent role in social activities is one that teenagers might not want dislodged in favour of educational objectives. This is an area that demands further qualitative, even ethnographic, research.

As a repertoire of linguistic skills variously applied depending on differences in contexts, adolescent literacies need further exploration before reading and writing on mobile phones can be hailed as a one-size-fits-all solution to the problems in South

Africa's complex socio-cultural and educational landscape. Such investigation would need to be balanced by a clear formulation of pedagogic goals that factor in unique challenges in a country where access to educational resources continues to be profoundly unequal. A precise conception of how mobile phone technologies would expand and augment the range of literate practices for different sectors of adolescent society is needed. Progressing their skills beyond local literacies and into the globalised world of English for work and study is not a function of technology, but a consequence of structured and explicit mediation in pedagogic contexts. This must remain the focus of directions in future research. An exploration of the literacy practices of a group of young girls in an environment characterised by diverse processes of transition is an attempt to contribute to this project.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter positions adolescent literacy practices (ALP) as an epistemologically separate construct emerging from multi-disciplinary traditions of literacy research (Moje, Overby, Tysvaer, & Morris, 2008; Coiro & Moore, 2012; Gee, 2000; Jacobs, 2008; Leander & McKim, 2003; Rheingold, 2002; Thomas, 2007). It seeks to present the development of a theoretical plane that opens out the field to explicate the convergence of sociolinguistic theories of literacy within pedagogic contexts, and the impact of technology on teenagers. That adolescents are the focus of the ways in which new technologies and literacy are related is grounded in the possibility that ‘adolescents entering the adult world in the 21st century will read and write more than at any other time in human history’ (Moore, Bean, Birdyshaw & Rycik, 1999 in Moje, *et al*, 2000, p. 400).

The increased complexity of the interaction between foundational literacy and the emerging literacies of the informational age (Castells, 1996) is suggested by the development of multifaceted, interrelated and frequently overlapping theories of literacy. These encompass transliteracies; critical literacy; media literacy; information literacy; digital literacies; new literacies; New Literacy Studies; Multiliteracies and multimodality. Much of the research implicated in the emergence of these theories is concerned with recognising adolescents’ attainment of proficiency in a variety of literacies. Remaining central to the literacy debate is anxiety about the articulation of new forms of ICT enabled literacy with core literacy skills, and whether the former detracts from the latter in relation to mastery of literacy for learning. Issues of differential socio-economic access and inclusion; power and ideology and ethical civic engagement in a multicultural globalised world also inform the debate.

Ultimately the responsibility of schools adequately to respond to the challenge of preparing adolescents from diverse backgrounds to be literate in the 21st century is a pivotal concern (Cope & Kalantzis, 2000; Gee, 2000). This issue constitutes the central organising principle for the following discussion that plots the trajectory theorising adolescent literacy practices.

2.2 Dispensing with dichotomies and determinism

Conceiving literacy as a complex configuration of interacting skills is inextricable from three main lines of thinking: first, bridging the illusory split between orality and literacy; second, acknowledging that literacy is not the only semiotic mode implicated in cognition and third, avoiding determinism, be it cultural, linguistic or technological.

The concept of multiliteracies ultimately arose as a construct of sociolinguistics. The work of late 19th century anthropologists and evolutionists proposed that intellectual development and culture were causally related (Halliday, 1994; Hymes, 1994; Malinowski, 1994). More specifically, the idea circulated that a literate society, because of its literacy, is inherently more cognitively advanced than a society without reading and writing (Cole, Gay, Glick, & Sharp, 1971). Such positioning of Western literate societies as intellectually superior to oral societies laid the foundation for research and theorising which sought to refute this simplistic and ideologically skewed conclusion.

Prefiguring Street in 1911, Boas (in Cole, Gay, Glick & Sharp, 1971, p. 5) attacked this idea, asserting that observable differences in culture – where literacy is taken as a cultural practice – do not cause a fundamental variation in cognition. He asserted that ‘the functions of the human mind are common to the whole of humanity’ (*ibid*).

However, the link between differences in language and differences in culture remained a focus of investigation: linguists turned their attention to exploring this relationship. For example, Sapir and Whorf (1956 in Cole *et al*, 1971, p. 10) asserted that the patterns – the grammar – of different languages not only represent the world of the speaker and echo his ideas, but also divides, shapes or categorises the external world differently depending on which particular language is used:

Every language is a vast pattern-system, different from others, in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyses nature, notices or neglects types of relationship and phenomena, channels his reasoning and builds the house of his consciousness (Whorf in Hasan, 2005, p. 197).

And although this notion of linguistic relativity was subsequently criticised, originally Whorf stressed that no grammar of a particular language was inherently superior to the other: languages from the developing world were not intrinsically less powerful in their conceptual and explanatory potential than, say, English. For example, he stated that, in reference to one particular feature of linguistic analysis, ‘English compared to Hopi is like a bludgeon compared to a rapier’ (Whorf, 1956, pp. 84-85 in Cole *et al*, 1971, p. 11). Thus, the important contribution made by Sapir and Whorf to the development of thinking about the relationship between language and learning is the inclusion into the debate of the claim that ‘thought processes of all peoples are functionally equivalent and that they can be inferred from linguistic behaviour’ (*ibid.*, p. 12).

This view was later developed by linguists, notably Noam Chomsky (2002; 1986; 1965). One important aspect of this work is the emphasis that all grammars in human languages are capable of generating any infinite number of novel yet rule-governed utterances (Labov, 1969; Pinker, 2007a).

By linking these ideas a way of thinking about culture, language and cognition emerged that can be summarized: culturally situated linguistic behaviours are inextricably linked with cognitive processes, but with functionally equivalent potentiality for all languages. No single culture’s ways of speaking and thinking could be privileged over another’s.

This ideological move did not solve the problem of differences between culture groups in educational attainment and literate proficiency. If one could no longer claim that some cultures were more cognitively advanced than others because the potential of their language to express higher order conceptual thought was greater, then the problem of accounting for differing levels of academic achievement between culture groups remained.

Psychologists began to make their contribution to the work begun by anthropologists and linguists. Bruner, Olver and Greenfield surmised that some cultures ‘push cognitive development earlier, longer and better than others’ (in Hasan, 2005, p. 17) They concluded that exposure to schooling – most particularly the acquisition of reading and writing – speeds up problem-solving skills for example. They also theorized that where some kinds of cultural experiences accelerate a particular kind of

cognitive development, the absence of yet other kinds of cultural conditions will inhibit or preclude different developmental trajectories. The evidence for their conclusion was a study amongst the Wolof people of Senegal which made a substantial contribution to literacy theories.

Although progress had been made in moving away from characterizing different cultures along a simple dichotomy of 'primitive' and 'advanced', the isolation of writing as a particular cultural feature that conferred cognitive benefits resulted in what Street (1984) refers to as an autonomous model of literacy. This model, proposed in particular by Jack Goody (1977 in Street, 1984, p. 5) reframed the dichotomy as 'non-literate' versus 'literate'. This dichotomy was entrenched by various theorists' conclusions about the Wolof study, namely, Bernstein (in Hasan, 2005) who argued for concepts of varieties of language as restricted or elaborated, and Olson, Hildyard and Greenfield who argued that 'written forms enable the user to differentiate the logical from the inter-personal functions of language in a way that is less possible in oral discourse' (1978, in Street, 1984, p. 3).

The most salient feature of the debate up until this point is the enormity of the claims made for writing – as an aspect of linguistic and cultural behaviour – that lead to the development of higher order cognitive ability. This is the so-called strong version of the autonomous model of literacy. It is this view of the claims for writing and reading that functions as a major point of departure for linguists and sociolinguists who sought to expose these claims as being consequences, not of objective tests for cognitive ability, but rather as indicators of the specificity of the cultural contexts in which these tests were conducted (Graff, 1994). The work of Evans-Pritchard (1937); Levi-Strauss (1966); Labov (1973); Rosen (1972); Stubbs (1980); Crystal (1976) and others (in Street, 1984, p. 4) is material to the development of a new conceptualization of literacy: an ideological model of literacy (Street, 1984, p. 2). Furthermore, the seminal work of Scribner and Cole among the Vai people of West Africa (1988) did much to demythologize the putative benefits of writing and reading. They were among the first to contextualize writing as a cultural practice and specifically a social practice.

The ideological model of literacy is characterized by a focus on the specific social and cultural contexts in which reading and writing occurs. It exposes the inherent

determinism of the autonomous model which ascribes general cognition-enhancing potential to the modality of the written word and its decoding. Conversely, in the ideological model the singular situational variables of the social contexts in which literacy occurs are foregrounded. Reading and writing become embedded in specific cultural situations, each of which carries underlying assumptions about literacy. The ideological model looks at literacy as it is practised in various institutions in societies, and the implicit rules that govern ways of speaking, reading and writing in such institutions, for example, schools. The ideological model:

Distinguishes claims for the consequences of literacy from its real significance for specific social groups ... It concentrates on the overlap and interaction of oral and literate modes rather than stressing a 'great divide' (Street, 1984, p. 3).

However, while not wanting to revert to an oral/literate divide that ideologically privileges literate societies, the view that all languages are equivalent in the way they facilitate cognitive functioning now no longer has credence (Pinker, 2007a; 2007b). Indeed, not only has it been recognized that languages vary in their cognitive effects, but that varieties of language, and even different semiotic modes, result in different cognitive consequences. For example, even as Hasan appropriated and used some of Sapir and Whorf's ideas while incorporating those of Basil Bernstein and Lev Vygotsky, she demonstrated that socio-culturally delineated varieties of speaking give rise to different 'habits of the mind' (Hasan, 2005, pp. 194-214). The crux of the issue is the assertion that 'different kinds of activities encourage different forms of semiotic mediation and that 'semiotic mediation is [the] essential means of making human minds' (Hasan, 2005, p. 195). This claim continues to energise concerns around possible links between the ways in which adolescents are using ICTs to engage in multisemiotic activities, and varying levels of proficiency in using language for academic purposes.

Ultimately however, two very significant principles were incorporated into a model of understanding the role of literacy. First, politics enters the debate in that the role of reading and writing in maintaining the power base of a ruling class in gate-keeping institutions such as schools and universities was opened up for scrutiny. Second, as a consequence of refuting the autonomous model of literacy, the focus on the way in

which orality and literacy are intertwined in literate cultures was posited (Barton, 1994, p. 88). Recent work in ICTs analysing the linguistic features of instant messaging reinforces such intertwining (Thomas, 2007, p. 154; Crystal, 2006, pp. 247-256). Further, this shift in focus opened the way for the development of theories of literacy that included modes other than speaking and writing. And recent work seeking to understand how other semiotic modes are equally implicated in cognition has brought balance to the literacy debate and opens out the conceptual plane for a more nuanced exploration of the link between ALP and learning (Gee, 2003/2007; (Greenfield, 2008; 2003; Jackendorff, 1990; Kress, 1998).

The perspective of semiotic activity mediating cognitive dispositions, and in modes other than language, made a significant contribution to the development of a theory of literacies that could account for variation in educational outcomes across languages and cultures. As Hasan concludes, ‘those who educate [teachers] need to rethink the interconnections between the semiotic, the social and the cognitive’ (Hasan, 2005, p. 214). It must be noted here, however, that it is not within the scope of this discussion to causally link particular kinds of cognitive activity to particular forms of semiotic mediation.

2.3 The semiotic mediation of culture

Street’s ideological model of literacy forms part of the interpretative discipline of sociolinguistics, where language is viewed as a constitutive practice of culture in general, and social institutions in particular. Oral and written language is examined to reveal how it is used by people to accomplish social goals:

It seeks to discover how linguistic behaviour patterns with respect to social groupings and correlates differences in linguistic behaviour with variables defining social groups (Foley, 1997, p. 3).

This perspective of literacy allows for the study of adolescents as a social group with characteristic patterns and habits of language use. An examination of language as a form of cultural practice (Pinker, 2007b) is central to an exploration of the assumptions and actions underpinning culturally and socio-economically specific contexts in which literacy is practised. Looking at it as behaviour is also important in

terms of the processes implicated in language usage: literacy and orality are viewed as performative and constitutive. All language practice can become an object of study to examine how it is used to reiterate and reconstitute over time certain ways of being, thinking and doing among social groups because ‘as we create meaning in an on-going relationship, we carry our history of linguistic and cultural practices from many other previous relationships’ (after Bakhtin, 1981; 1986 and Geertz, 1973 in Foley, 1997, p. 7).

2.3.1 Language as cultural practice

Linguistic practices are one type of semiotic resource available to people to represent and understand their internal and external worlds and through which group behaviour – or culture – is coordinated.

Culture here is viewed as the things people do, un-self-reflexively to communicate in a recursive series of interactions that are reconstituted over successive generations. Bourdieu’s influential concepts of habitus and cultural capital form part of this view of culture (Bourdieu, 1977; 1990 in Foley, 1997, p. 14; Duranti, 1997, pp. 44-46). In examining school as a site of conflict between the habitus of learners and school culture, Lewis (2007) summarizes the relation between these two concepts:

Bourdieu (1977b) explains that cultural capital derives from one’s ‘habitus’ which he defines as ‘a system of lasting, transposable dispositions which, integrating past experiences, functions at every moment as a matrix of perceptions, appreciations, and actions’ (pp. 82–83). It consists of those cultural signals, dispositions, attitudes, skills, references, formal knowledge, behaviours, goals, and competencies that are rewarded within particular contexts, such as school, to achieve particular outcomes, such as high achievement or high aspirations (Bourdieu, 1977a in Lewis, 2007, p. 146).

Expanding the notion of what it means to communicate in a social group, and building on the work of Saussure, Geertz, among others, linked culture with language by describing it as ‘a system of public meanings encoded in symbols and articulated in behaviour seen as symbolic action’ (in Foley, 1997, p. 16; Duranti, 1997). Language

here then is viewed as the primary symbolic system by which humans enact and reconstitute ways of being that members of a social group would recognize as shared behaviours – as ‘their culture’. Or, as Foley asserts:

If cultural practices are those meaningful practices through which humans in relationships sustain on-going histories ... then foremost among these must be linguistic practices ... humans could succinctly be defined as social beings encultured through language (Foley, 1997, p. 24).

Contemporary views of semiotic practices accommodate the multimodal mediation of culture (Cope & Kalantzis, 2000; Jenkins, 2006; Kress & Van Leeuwen, 2006; Kress, 2000; O'Halloran, 2004). Whether this displaces language as the central sign system is uncertain.

Returning to an exploration of culture, and its mediation through language, an important clarification of these concepts made in 1997 by Duranti is salient to the idea that culture is not monolithic and that, the centrality of language notwithstanding, there is no interaction between humans and their environment (including other people) that is un-mediated: ‘We [always] have our culture with us’ (Duranti, 1997, p. 42). And if we think and speak in specific ways that have been shaped by our culture but are yet unique to every individual, and that culture is in turn interposed between us and our environment by our language, then we can see that there is an unbroken interface between symbolic systems as an instrument of mediation, the environment, and the individual. Every individual’s constant interaction with their environment is always uniquely mediated regardless of the particular culture group to which they belong or the language(s) they speak. However, this notion must be held in tension with the idea that, as individuals, we use our linguistic practices to build and sustain relationships with different communities, and that one individual may be a member of many different types of social networks that could cross linguistic and cultural boundaries. This view is especially salient to a consideration of adolescent literacy practices in a multicultural and globally networked world.

In sum: language is seen to be firmly embedded in its social context, inextricably linked with social interaction as one of a range of sign systems mediating culture.

Having established that both written and spoken language mediate peoples' experiences of the world, helping to shape that world as well as to reproduce it, attention can now be given to the consideration of the particular and different modalities of language, and to the work that has gone into conceptualizing a theory of language that can account for the differences and similarities between modes of communication. It is important to recapitulate that the discussion has moved away from the focus on orality and 'primitivism', or literacy and 'civilisation'. Rather, the essence of a comparison between modes lies in the varying constraints and/or affordances that each mode brings to communication, and the interaction between modes. Such a comparison prefigures New Literacy Studies as it opens a conceptual space for thinking about different modalities as comprising a repertoire of semiotic resources available for representation, mediation and communication.

2.3.2 Multisemiotics as social practice

Barton's concept of configurations of language (1994) contributed to a conceptualisation of speaking and writing as two inter-related technologies of semiotics as social practice. He further argued that:

The relation between written and spoken is specific to a language then, and is different for different languages. It is also a dynamic relationship which can change over time (1994, p. 91).

Acknowledging spoken and written modes as mutually interdependent interacting components of socially situated semiotic practice opened the way even further for a reconceptualization of literacy as comprising many technologies that together mediate culture within social groups.

Baynham (1995) extended Street's and Barton's contributions by positing seven principles for understanding literacy as a multisemiotic social practice. In his view, theories of literacy must be able to:

1. Explain the linguistic organisation of complete texts;
2. Account for the ways in which both spoken and written language is situated in and constitutive of social context;

3. Provide a framework for understanding how language encodes power relations;
4. Describe the differences and similarities between modes of language;
5. Provide a conceptual framework for describing how these differences are realised in a diversity of communicative contexts;
6. Describe the grammatical interaction in context between different modes;
7. Account for cross-cultural and inter-group variation in the functions of different modes (cf. Cook-Gumperz, 1986; Gumperz, 1982; Scollon & Scollon, 1981 in Baynham, 1995, p. 118).

Ultimately, theories of new literacy and multimodality, especially as articulated in the work of the New London Group (1996), sought to account for an articulation between modes that echoes Baynham's framework. Much of the impetus for this arose as a consequence of the increasingly complex literate landscape emerging in an ICT networked, globalised world where the interests of diverse cultures and social groups converge.

In sum, the contextual and semiotic variables implicated in theorising literacy as a repertoire of socially situated practices demanded a rigorous rethinking of models of literacy. As adolescents appropriated new technology, particularly on mobile phones, the pedagogic implications of theorising literacy added a sense of urgency to the project. This was prefigured in Baynham's assertion that:

Changing technologies can dramatically alter the shape of communicative practices ... simply by altering particular variables in the communicative context (Baynham, 1995, p. 138).

There can be no doubt that the constantly changing technologies of literacy available to 21st century adolescents have dramatically altered the variables implicated in communicative contexts. Consequently, novel communicative practices have emerged. Accounting for them remains a challenge for theorists attempting to keep pace with their pedagogic implications. The theoretical trajectory of the sociolinguistic tradition continues to make a contribution to this enterprise. The concept of literacy practice being comprised of a series of literacy events (Heath, 1983) maintains its conceptual purchase. The idea of literacy practice being a

multiplicity of differently applied behaviours, depending on context, shaped the debate in a more nuanced way.

2.4 Multiplicity: Characterising contexts, modalities and literacies

Strongly emergent in research and theorising about literacy then during the nineties and into the new millennium is an organising principle of ‘the multiple’. As Halliday described:

Literacy today includes many contexts ... where the functions of the written text have to be sorted out at various levels. To be literate is to operate in such complex, multiple contexts, to write with many voices, still ending up with a text, and to read such texts with kaleidoscopic eyes (Halliday, 1996, p. 364).

In grappling with what it means to be literate in terms of ‘the multiple’, various labels came to be assigned to the emerging theories of literacy. Street (Street, 1993), focusing on the social and cultural situatedness of different literate practices, describes his theory as multiple literacies. This is distinct from multiliteracies as proposed by The New London Group which emphasises the conscious use of the grammars of diverse semiotic modes in relation to preparing young people for participation in a multicultural globalised economy (Cope & Kalantzis, 2000). And further complicating the discourse is the conflation of the idea of *the new* with *literacies* giving rise to a confusing array of terms such as New Literacy Studies (NLS) and more generally, new literacies and digital literacies (Gee, 2010b). The nicety of the distinctions between these terms does not always contribute productively to the debate.

Problematising the development of a coherent theory of literacy as a multidimensional ‘unified notion of articulacy’ (Halliday, 1996, p. 367) is factoring in the internet/WWW. As Coiro *et al* (2008) noted: ‘we currently lack adequate theories, constructs, and methods to match the complexity of the question’ (p. 9). And as much as the WWW might be viewed by some as a hegemonising force, one which can result in digital divides between rich and poor, an originary principle of its conception

remains universal access to information. Its creator, Sir Tim Berners-Lee, envisioned a communications system that:

Must allow equal access to those in different economic and political situations; those who have physical or cognitive disabilities; those of different cultures; and those who use different languages with different characters that read in different directions across a page (Berners-Lee, 1999, in Crystal, 2006, p. 235).

Thus the above view of the internet/WWW as inherently a paradoxically unique and complex context for a multiplicity of literate resources has propelled research and theorising:

It is the internet, however, that has brought unprecedented dimensions to both the speed and the scale of change in the technologies for literacy, forcing us to directly confront the issue of new literacies. No previous technology for literacy has been adopted by so many, in so many different places, in such a short period of time with such profound consequences ... no previous technology for literacy has provided access to so much information that is so useful, to so many people, in the history of the world. The sudden appearance of a new technology for literacy as powerful as the internet has required us to look at the issue of new literacies with fresh lenses (Coiro *et al*, 2008, p. 11).

The work of the New London Group (1996) made an early and seemingly prescient contribution to this new vision of literacy and pedagogy.

2.5 The New London Group and the Multiliteracies Framework

The Multiliteracies Framework first published in *The Harvard Educational Review* (New London Group, 1996) sets forth a theory of pedagogic practice that seeks to articulate a futuristic vision of literacy in a changing world. It demonstrates an awareness of fundamentally shifting trends in economics, politics, culture and technology. Central to this framework is the pursuit of literacy pedagogy that makes learners aware of these changes, and prepares them to use their literate resources to be

active ‘designers of [their] social futures’ (*ibid.*, p. 65). Literacy is conceived as a multifaceted array of ways of engaging with different subjectivities in an increasingly complex and technologically interconnected world. However, Kress cautions against technological determinism, a qualification which should not be occluded in contemporary, sometimes overly exuberant celebrations of the incorporation of educational technology into literacy teaching. He makes the observation that:

Many of the changes happening in communication at the moment give the deceptive impression that they have their provenance in technological know-how. Technology is socially applied knowledge, and it is social conditions which make the crucial difference in how it is applied (1998, p. 53).

The Multiliteracies Framework is thus oriented toward a particular ‘view of mind, society and learning’ (NLG, in Cope & Kalantzis, 2000, p. 31), and hence literacy, which recognizes that the human mind is ‘embodied, situated and social’ (*ibid.*, p. 30).

There are four key concepts to the pedagogic framework: 1) *Situated Practice*; 2) *Overt Instruction*; 3) *Critical Framing* and 4) *Transformed Practice*. It is not a linear model of praxis but a recursive and intertwining complex of strategies grounded in research and theory across disciplines (*ibid.*, pp. 10-19).

Situated Practice takes into account work in the domains of cognitive science, social cognition and sociocultural conceptualisations of language and literacy (see Barsalou, 1992; Cazden, 1988; Lave and Wenger, 1991; Wertsch 1985 *et al* in Cope & Kalantzis, 2000, p. 31). It asserts that if learners are to master the discipline-specific forms of knowledge required in schools they need to be immersed in a community of fellow learners who authentically use these literacies. Integral to *Situated Practice* is the collaboration and interaction of learners who bring as Available Designs, understood as resources for meaning making, diverse skills, cultures, languages and perspectives; they form a multicultural epistemic community immersed in collaborative practices of meaning-making in a particular discipline. In these communities, the ‘affective and sociocultural needs and identities of all learners’ (*ibid.*, p. 33) are acknowledged and affirmed.

The *Overt Instruction* component of the Multiliteracies Framework emphasises the role of the teacher as a crucial mediator of new practices. Merely participating in an immersive, collaborative community of learners where differences are affirmed and discipline-specific literacies are practised runs the risk of apprenticing learners into little more than passive, uncritical reproducers of knowledge. The role of the teacher is to help learners develop a metalanguage that equips them with critical awareness and explicit control in processes of literacy negotiation. In mediating this, teachers recruit and build on the diverse life experiences of learners, focusing attention on these as resources for learning.

Critical Framing is the third component of the Multiliteracies Framework. Drawing on critical discourse theory, the goal is to enable learners to distance themselves from their worldviews and the communities of which they are a part through developing metadiscursive knowledge and skills. Developing an awareness of the ‘value-centred relations of particular systems of knowledge and social practice’ (*ibid.*, p. 34), including their own, enables learners to begin to uncover otherwise imperceptible shaping ideologies and discourses. This echoes Halliday’s notion of being able to ‘write with many voices’ and read with ‘kaleidoscopic eyes’ (Halliday, 1996, p. 364). It envisions learners being able to use their literacies as ‘active defence: resisting the disneyfication, as well as more ominous pressures; probing the disjunctures, and extending the semogenic potential of the culture’ (*ibid.*). It is this possibility of ‘extending the semogenic potential’ that is envisioned by the last component of the Multiliteracies Framework, that is, *Transformed Practice*.

Transformed Practice is the renegotiation of theory in which teachers mediate the application of insights gained through *Overt Instruction* and *Critical Framing*. It envisions that learners apply transformed practices to both the informal literacies of their everyday lifeworlds, and to the pedagogically validated practices required for academic success. It is this that is envisioned as equipping learners to ‘write with many voices’ and ‘read with many eyes’.

The Multiliteracies Framework is an approach to literacy that seeks to equip young people to function in what the NLG conceived of as a radically changing world. The concept of ‘functioning’ in this new world embraces three aspects – or ‘new universals’ (NLG in Cope & Kalantzis, 2000, p. 18) that they refer to as Working

Lives, Public Lives and Personal Lives. With the envisioned increasing publicisation of private spaces, individual experience is constituted in multilayered lifeworlds encompassing a plurality of subjectivities, affiliations and social networks. They therefore define the role of pedagogy as developing ‘an epistemology of pluralism that provides access [to social and cultural capital] without people having to erase or leave behind different subjectivities.’ They extend this with a bold declaration that this kind of pedagogy ‘has to be the basis for a new norm’ (*ibid.*).

From the perspective of a 21st century world in which people participate in a globally networked configuration of social-informational networks, the NLG’s contribution remains salient. It continues to be conceptually useful in considering how schools respond to teaching adolescents whose lifeworlds, subjectivities and literacy practices are incorporated into pedagogic contexts via embodied mobile phones. Personal, work and public worlds can converge and are traversed and intersect (Livingstone, 2009). The range of literate practices needed to negotiate this complexity has expanded; literacy pedagogy continues to evolve in an attempt to adequately empower young people to critically participate in a continuously changing literate landscape without devaluing the literacies they already use.

This perception is still being framed and explored in studies of children’s and adolescent literacies as the global rhetoric of an adolescent literacy crisis continues (Alvermann, 2008; Coiro & Moore, 2012; Leu, *et al.*, 2011). Whether a literacy crisis actually exists is contested:

Many of the complaints about a literacy crisis in fact reflect middle-class anxieties about status and privilege (Williams B. T., 2007, p. 179).

Conversely, it could be that teenagers are using their semiotic resources for literacies that are not considered legitimate in pedagogic contexts (*ibid.*, p. 180). Yet, some would argue that these remain valuable and powerful forms of literate expression that should not be isolated from the reality of a multiplicity of interacting practices.

For example Moje, Overby, Tysvaer, & Morris (2008) conducted a longitudinal study that investigated the semiotic resources used to construct a variety of texts by a group of 716 teenagers in one particular community. The aim was to describe what these adolescents were reading and for what purposes. They sought to use this account to

explore ways in which educators could support the development of ‘sophisticated academic, community and workplace literacy practices’ (Moje *et al*, p. 109). Many of these adolescents were not academically successful. Moje *et al* concluded that the adolescents in their study were reading and writing a wide variety of texts for a range of social functions, but that these were not necessarily the kinds of texts valued by adults. They also concluded that there was a vast disparity between the kinds of texts teenagers were expected to engage with and produce at school, and those they chose to engage with and produce in their private lifeworlds. Moje *et al* note that:

Future studies of adolescent literacy development should continue to examine how educational practice and policy can draw from and support – without co-opting, exploiting, or diminishing – the powerful literacy practices of young people’s everyday lives (2008, p. 149).

In sum, there is a need to ‘merge a social practice account of literacy with a description of communicative systems ... to mediate social practice with communicational networks to have an informed perspective on contemporary literacy education’ (Pahl & Rowsell, 2006, p. 1). Part of such an enterprise entails a consideration of multimodality as integral to textual composition.

2.6 Complementarity of Multimodality and NLS

Multimodality (MM) as a theoretical approach can be defined as the conceptualisation and analysis of a wide variety of signs, the processes of sign-making and the creators of signs. It seeks to frame an understanding of how signs are constituted both materially and symbolically in the range of meanings they can signify. The social context of the individual sign maker is also a consideration.

New Literacy Studies (NLS), as well as being a theory of literacy as social practice, is similar in its conceptual focus to multimodality, but focuses more particularly on the role of reading and writing in association with other semiotic modes. NLS recognizes that meanings vary across social spaces, across time, and across differential power relationships between the participants (Janks, 2010).

The significance of the development of NLS is that it foregrounds the gap between highly valued schooled literacies – powerful gatekeeping forms of specialized discourse – and the many other literacies in which learners from a diverse range of cultures, languages, ethnicities and interests, are engaging. It has also developed a conceptual framework and a vocabulary for understanding literacy in its social variation. One can speak of literacy events and literacy practices. Literacy events are the visible and explicit activities associated with literacy. Literacy practices refer to the subtle, implicit ways of understanding literacy events that are specific to social groups, and which may conflict with the underlying values of other social groups.

It is sometimes difficult to discern the difference between a study of multimodality and theories of new literacies. They overlap at some points; but each has a different emphasis, and it is in the interaction of these that the conceptual power of the two lies. Both multimodality and NLS merge in the Multiliteracies Framework. As Kress and Street assert:

While both approaches look broadly at the same field, from each of the two positions the field has a distinctive look: one that tries to understand what people acting together are doing [NLS]; the other tries to understand about the tools with which these same people do what they are doing (2006, p. 1).

In sum, it is possible to use, particularly in ethnographic style studies, both NLS and MM to ‘see identity and social practice in the materiality of texts’ (Pahl & Rowsell, 2006, p. 2).

Furthermore, a convergence of these two approaches has begun to reveal some of the theoretical interstices that are more difficult to conceptualise in the present time of rapid and hyperlinked technologies, and which researchers need to continue to theorize (see also Coiro *et al*, 2008; Thomas, 2007, p. 132). Although Barton’s seminal notion of ‘situated literacies’ is still applicable, it has become less simple to frame exactly the notion of context when one considers that internet literacies create their own spaces: we speak of our email address; we go home on a browser or particular web page; we navigate our way through cyberspace, we chat in chatrooms, and so on.

Time as a feature of context is also more variable: there is real-time or synchronous time as people engage in instant messaging conversations; there is virtual time – stored time in which texts are retrievable whenever the viewer chooses to access them. Additionally a NLS/MM approach also accounts for the complex interaction between local and global literacies, a situation which is relevant in a multicultural and multilingual educational context such as the one in this study.

In thinking about the ways in which the notion of literacies has become thoroughly complicated by the emergence of technology, it is important to keep in mind the role of the teacher in negotiating these new literacies. Education researchers have suggested that ‘online literacies form new hybrid textualities and possibly even new genres worthy of further analysis’ (Thomas, 2007, p. 132). (See also Cope and Kalantzis (2000); Luke (1997); Snyder and Green (2000); Lankshear, Peters & Knobel (1996); Snyder (2002) and Kress (2003) in Thomas, 2007). Thomas goes on to claim that ‘at this stage, very few scholars are investigating such hybrid forms of textualities’ (*ibid.*).

As one of the original scholars of The New London Group, the work of James Gee advanced and expanded a more complex view of literacy events as social and cultural practices rather than purely cognitive ones (2010b; 1992). As a convergent theory of literacy which draws on multidisciplinary research (1990/1996/2007; 2000a; 2000b), NLS attempts to explore hybrid textualities. Gee’s work continues to emphasise the roles of identity and institutional discourses implicated in these:

People don’t just read and write in general, they read and write specific sorts of ‘texts’ in specific ways and these ways are determined by the values and practices of different social and cultural groups (2010a, p. 7).

Further, he argues that literacy also entails how people use technologies and tools to enact a variety of literate practices (Gee, 2010b).

To sum up: this expanded view of literacy positions it as a culturally and socially motivated series of patterns of practices. These patterns are responsive to the influence of different contextual variables including tools and technologies of literacy. Halliday made a significant contribution to systematising and developing a language of description to account for how contextual variables function together in realising

social purposes in both spoken and written genres. It is to Halliday's work that this discussion will now turn.

2.7 Grammars, genres and technologies of literacy

Halliday's contribution to a reconceptualization of literacy ultimately cohered as Systemic Functional Linguistics (SFL) (1996; 1984). Drawing on Firth and Hjelmslev, and influenced by Whorf and Malinowski, Halliday asserted that grammar is a patterned and related system of choices that realise social functions, and not merely as a description of the generative rules of language. Different social and functional purposes within a culture are realised by the structural and lexicogrammatical choices that organise individual genres of oral and written texts around three metafunctions. Although Halliday is recognised as the central originating linguist in genre theory, which is underpinned by SFL, substantial contributions were also made by Jim Martin and David Rose (Martin & Rose, 2003); Christian Matthiessen (Halliday & Matthiessen, 1999) and Ruqaiya Hasan (Halliday & Hasan, 1976; Hasan, 2005).

SFL emphasizes that literacy – in the narrowest definition of reading and writing – is not at the opposite end of a continuum with orality: there is no oral/literate divide. However, orality and literacy are not conflated into a single construct that is interchangeable with all forms of social interaction. Listening and speaking practices and reading and writing practices are differentiated without privileging one over the other or asserting that one is more complex, more cognitively important. They are just different in the way grammar is used to realise diverse social functions. Of particular relevance for New Literacy Studies is that even in 1996, Halliday recognized that the 'interaction between them [speaking and writing] is one of the friction points at which new meanings are created' (Halliday, 1996, p. 341 in Hasan & Williams, 1996).

Theorists continue to debate the kinds of new meanings such friction points have generated as technology continues to blur the boundary between written and spoken modes (Crystal, 2008; 2006; Thomas, 2007). New forms of literacy seem synchronous with Halliday's 'friction points'.

An elaboration of Halliday's conceptualization of writing – and an examination of the many perspectives from which he approaches a social-linguistic consideration of it as different from but in interaction with speaking – is useful. It provides a metaphorical converging point for theories of speaking, listening, reading, writing and the ways these can interface with one another in new, multimodal media. His development of SFL is used by other theorists such as Gunther Kress and Theo van Leeuwen, in their work on visual grammar which contributed to an understanding of multimodal literacy, of New Literacies (Kress & Van Leeuwen, 2006).

Halliday first considers writing as an enacted process in which a child learns that it is different from although related to drawing and requires bodily engagement with technologies of writing: paper, pen, and chalkboard. In today's literate environment, the range of literacy tools has expanded to include keypads and screens. People learning to write have to spatially orientate the graphic patterns of writing in a particular medium: in a certain position on a page – from left to right, top to bottom, one 'line' under the other. People have to learn to orientate their writing on screens of varying sizes, choosing font styles and sizes, spacing arrangements and even colours, as appropriate to the text they are constructing (Crystal, 2006). Multiple functions of different keys on keypads also have to be mastered and used appropriately if one is to succeed at constructing a text that can be usefully understood, used and received by someone. The centrality of choice and principles of conscious textual design in negotiating ICT based literacies is apparent (Voithofer, 2005).

Furthermore, ICT based literacies are not only enacted in real space and time purely as texts; they are activated in virtual space and time: clicking on a link sets in motion concatenated chains of processes that can ultimately achieve particular material goals, for example, ordering goods or booking airline tickets. Literacy as an enacted process has become complicated in the online world; core skills of reading and writing have become inextricable from other embodied and cognitive functions (Alvermann & Hagood, 2000; Leu, Ian O'Byrne, Zawilinski, McVerry, & Everett-Cacopardo, 2009; Street, 2005).

In thinking of the development of the system of writing as a whole, Halliday's reminder that writing is not a completely novel medium of expression is salutary. Rather, writing 'arose out of the impact of talking and drawing – that is forms of

visual representation' (Halliday, 1996, p. 343; see also Eisenstein, 1985, p. 20). Writing is one semiotic form mapped onto a different yet pre-existing one. This has relevance for a discussion of new literacies: Halliday focuses on the functionality of different aspects of writing in specific language systems: for example, the English writing system.

A writing system is said to comprise not only the actual symbols – the graphology – but also prosodic and paralinguistic features. These varying aspects realize different functions in the overall construction of a complete text. A tag is added to Halliday's explication of these aspects of literacy which becomes significant in NLS: he asserts that 'all paralinguistic features are available as potential resources for constructing further systems' (Halliday, 1996, p. 344). In new literacies both prosodic and paralinguistic features of writing and other semiotic systems have been recruited to devise novel means of expression such as emoticons.

Different kinds of writing systems can influence each other – can affect identity as language is culturally situated and linked to identity construction (Buckingham, 2006; Fawcett, Halliday, Lamb, & Makkai, 1984; Gee, 2001; 2000a; 2000b; 1992; Halliday, 1996; Hasan, 2005; Heath, 1983). More significantly for the purpose of NLS, 'literacy in this sense has a great deal of effect on cross-linguistic movements ... as well as [on] the intersection of written text with other, non-linguistic semiotic systems' (Halliday, 1996, p. 345). However, Halliday emphasises that writing is not merely symbols. This caution is relevant to research and theorising that emphasises multimodality in educational settings (Gee, 2008; Kist, 2004). There is a risk that learner proficiency in the written mode is displaced as other modes of expression are incorporated into learning contexts. In situations where learner demographics are diverse in relation to dominant languages and discourses of power, this could be particularly problematic as, in celebrating the diversity of multimodal representational resources within a multicultural classroom (Stein, 2000), what might be sacrificed is the mastery of the very discourses of power needed for social access and inclusion.

Therefore, the question of the inter-changeability of semiotic systems is significant: can everything that is said be written down without losing or adding anything in the transformation? And in new literacies, can everything that is written be visually or aurally represented with equal semantic completeness as writing – and vice versa?

What are the effects of the interaction of writing with other semiotic systems across multiple technological platforms? Halliday anticipates the kinds of problems that are associated with a simplistic equation of one semiotic mode with another. In his consideration of the differences between speaking and writing, and in describing a grammar for both that can be used as ‘a tool for thinking’ (1996, p. 354). Halliday notes that speaking, organized primarily around the clause, creates a ‘common sense’ world, a world that is ‘moving and flowing, continuous, elastic and indeterminate’ (*ibid.*, p. 352). In contrast, the written word, organized around the lexically dense nominal group, creates ‘a world of things and structures, discontinuous, rigid, and determinate’. In sum there are two ways of thinking about language: as speaking, a series of dynamic, fluid processes and, as writing, a bounded, more static product fixed in some form of materiality – paper, metal, stone, wood – or, a digital screen. Moreover, an important difference in this comparison of the two modes is that spoken language is typically dialogic while written is usually monologic. These distinctions are becoming increasingly blurred with the advent of instant messaging applications.

A reconceptualised definition of literacy, in terms of Halliday’s views of the differences between speaking and writing would be: having control over the grammatical patterns typical of writing; differentiating the patterns of writing from the patterns of speaking (and, it could be added, other modes); recognizing the functional and cultural significance of different genres within each mode, and being able to choose appropriately depending on the situational context.

However, in thinking about new literacies on digital devices, the distinctions between speaking and writing are problematised; for example, instant messaging although a written text is very much like speaking. Another example is blogs: this genre has become privileged and prestigious among intellectuals, world-leaders and opinion-makers (Crystal, 2006; Rettberg, 2008). A blogger applies written conventions to create an archival, lexically dense text, representing the world of things or ideas, fixed variably in virtual space and time, and for a multitude of readers utilising different digital devices. Yet these readers are able to enter into dialogue with the author becoming personalised readers and co-authors. Although such negotiation of meaning does not happen instantly as it does in face-to-face speaking, the nature of the interaction remains dialogic and monologic, a hybrid, fixed and retrievable at the same time, whenever and wherever by either original author, or by a multitude of

global dialogue-authors. And, text is often accompanied by moving and still images, and sound. Halliday foresaw this overlapping of boundaries. He asserts that:

The two worlds [of speaking and writing] have been pushed about as far apart as they can go, and in the next period of our history they are bound to move together again. I think, in fact, they are already starting to do so, under the impact of the new forms of technology which are deconstructing the whole opposition between speech and writing (Halliday, 1996, p. 354).

That which Halliday refers to as the ‘consciousness barrier’ is salient here: speaking is spontaneous, offering little time for reflection and modification; writing is self-reflective, produced mentally and fixed materially. He argues that when the ‘material conditions of speaking and writing are most distinct, the consciousness gap is greatest’ (*ibid.*). However, with new, rapid communications technologies facilitating interaction between these two, the ‘consciousness gap’ is lessening: in speaking-as-writing, in text messages for example, interlocutors have more time to reflect on what they say: the power of the backspace and delete keys is significant. Conversely, in writing-as-speaking, on social networks or instant messaging, people are possibly less self-reflective about what they write.

Foregrounded in this perspective of literacy is not an obliteration, a ‘neutralising’ (Halliday, 1996, p. 354) of the boundaries between speaking and writing, but a recognition that technology ‘is creating the material conditions for the interaction between the two, from which some new forms of discourse will emerge’ (Halliday, 1996, p. 356; Johnson-Eilola, 1998, p. 190). New literacies are these ‘new forms of discourse’. In the world of globally interconnected social media applications such as Facebook and Twitter, the variables obtaining in the ways texts are socially situated have become greatly expanded and complicated (Coiro, Knobel, Lankshear, & Leu, 2008).

A definition of literacy therefore has to be broadened to mean participation, through the interaction of spoken, written, visual and aural modes in the various converging discourses and technologies of the information society (Leu & Kinzer, 2005; Smith & Curtin, 1998).

2.8 Convergence and participatory culture

Possibly the defining characteristic of this information society is the convergence of literacy, culture, society and economics, and more recently perhaps, politics in a constantly evolving web of technological applications (Jenkins, 2006). According to Livingstone (2009), a culture of convergence is defined by ‘personalisation, hypersociality, networking and ubiquity’ (p. 25). A decade ago, in discussing the adoption of mobile phone technology, Howard Rheingold observed that:

When you piece together [these] different technological, economic and social components, the result is an infrastructure that makes certain kinds of human actions possible that were never possible before (2002, p. xii).

It is the problematic ontological status (Sondheim, 2007; Voithofer, 2005) of this new, convergent infrastructure, sometimes called an ecology, that has energetically yet elusively fuelled research around the connection between adolescents as a cultural group, literacy and pedagogy (Coiro, Knobel, Lankshear, & Leu, 2008). Research and pedagogic debate reverberated with traditional anxieties related to the influence on literacy of technological innovation on the one hand, and a utopian technological determinism on the other (Buckingham, 2006; 2000). Central to avoiding either of these dichotomous positions is an attempt to identify key characteristics of the new literate landscape, and of those whose emergent literacies are required to traverse it.

Buckingham (2000) isolates media integration (p. 86), mass proliferation, digitisation and the fusion of information with communications technologies as major lines of convergence (pp. 81-82) within the overall infrastructure. His caution that, “attempting to separate ‘traditional’ and ‘modern’ technologies, and to isolate the social or cognitive effects of either, is [thus] increasingly fraught with difficulty” (pp. 82-83) makes a useful and balancing contribution to the discussion on new literacies. Further, he highlights intertextuality and interactivity (pp. 88-92) as two key convergences in the kind of reconceptualised notion of text prefigured by Halliday (1996).

As situated practice, these new texts arise in emergent contexts. Writing around the same time as Halliday, Smith and Curtin (1998) claimed that ‘computer cultures and discourses are the socializing context for children’ (p. 214). Looking at some of the

work produced in the late 1980s and 1990s which theorized the ‘futuristic’ social contours of urban, techno-wired adolescents, one has a sense of the breadth and accuracy of their vision. Quoting Smith, Sachs and Chant (1988, in Smith and Curtin, 1998), they state that ‘young people are culturally positioned by the pervasiveness of computer-based and media technologies’ (p. 211). Additionally, they refer to the work of Haraway who claimed that young people were making a culturally macrocosmic shift from ‘comfortable old hierarchical dominations to the scary networks’ - or to what Wexler terms ‘the semiotic society’ (1990, in *ibid.*, p. 212).

Another way of looking at those adolescents who seem so techno-savvy is occupying the space where youth identity and global technology intersect (after Green and Bigum, 1993, in *ibid.*). To summarise this futuristic view of the modern, urban, cyborg-like adolescent, Smith and Curtin assert that [then], young people ‘have acquired a repertoire of social practices that link computer-based artefacts to the structure of self.’ (See also Reinking, in Coiro *et al*, 2008, p. 1185.) They contended, in 1998, that by 2010, ‘the shift to the electronic revolution will have been achieved’ (Smith and Curtin, 1998, p. 223).

However, Buckingham again contributes a cautionary note to such rhetoric by problematising the constructivist notion of an active, technologically accomplished young cohort of participant-viewers (2000, p. 116). Rather, he argues for an understanding of “the *relationships between* technologies, institutions, texts and audiences, without conceding a necessary priority to any one of them” (*ibid.*, p. 120, original emphasis).

In his studies of youth engagement with the media, Jenkins (2006) extends this theoretical paradigm in his concept of convergence culture. Its relevance to literacy studies is focused on the notion of how the concepts of ‘media convergence, participatory culture and collective intelligence’ (p. 2) interact. Convergence as a construct is salient to how mobile phones have become carriers of multiple forms of media content. Further, Jenkins’ usage of the term to describe ‘technological, industrial, cultural and social changes’ (p. 3) broadens the theoretical gaze beyond literacy. This is a contingency necessitated by an ontological consideration of the complex, multidimensional ramifications of the internet/WWW as an informational, social, economic and civic technology.

Participatory culture as an aspect of convergence draws attention to the ways in which people employ various forms of literacy practices to interact with, author, and produce media. This contrasts with older conceptions of people as passive consumers of media. However, the very notion of participation has been amplified and expanded via mobile phone technology beyond even Jenkins' conception of it. Today's adolescent is able to participate not only in producing their own media content, but also in activities in the 'real world' beyond media production and consumption. For example, goods can be bought and sold; people and places can be located; events can be organised and even voting is done via mobile phone. This is participation in life, not merely in media production. And a crucial dimension of participation is that it is quintessentially a collective, socially interactive process that draws on a wide variety of types of literacies. As Jenkins notes, 'convergence occurs within the brains of individual[s] ... and through their social interactions with others' (2006, p. 3). In today's world, being literate has come to be associated with life's activities as enacted via the phenomenon of the internet/WWW. Unsworth (2008) states this more strongly, asserting that 'the extent of people's personal satisfaction ... will be influenced by the multiliteracies expertise they acquire' (p. 377). Rigorously conceptualising this phenomenon in relation to its profound and widespread effects, not only on literacy but on society, continues to energise research and theorising.

2.9 Differentiating lenses for a unified vision

Attempts at developing an ontologically integrative theory of the internet/WWW and literacy are evidenced in the work of Leander *et al* (2003) and Leander and Rowe *et al* (2006). The difficulty of incorporating continual processes of connecting; different spatio-temporal configurations, and mobility as variables within contexts for literacy emerge in these exploratory studies of the internet/WWW's impact on literacy practices. Recent work by Leu *et al* (2009) contributes a useful epistemological distinction to a reworked theory of literacy in an always-online literate landscape. They argue for a reconceptualization of the internet such that it is viewed:

As a literacy issue, not a technology issue, framing it in ways that make sense for the study of both out-of-school and in-school literacy practices ...[this] will permit researchers to integrate analyses of the online reading

of information with online writing, media construction, and communication, providing a richer understanding of how the internet should be used in school settings (p. 265).

This view draws together several strands of recent theorising and research that impact directly on the study of adolescent literacy practices which, owing to the prevalence of mobile phone and possibly tablet use in pedagogic contexts, transgressively or otherwise, can no longer be separated into ‘out-of-school’ and ‘in-school’ literacy events (Hull & Schultz, 2001; Livingstone, 2009). As Lewis and Fabos (in Alvermann, 2008) note of teenagers’ engagement with online reading and writing, trying to maintain a dichotomous view of domains of literacy could lead to teachers ‘schooling young people in literacy practices that disregard the vitality of their literate lives and the needs they will have for their literate and social futures at home, at work and in their communities’ (p. 14).

It is such ‘vitality’ that is the focus of this study of adolescent literacy practices. In keeping with the contemporary turn towards a philosophical and ontological gaze in theorising the internet as a literacy issue in pedagogic contexts, the discussion will now focus on a further development in theories of ‘the multiple’.

2.10 Multiple Literacies Theory (MLT)

The emergence of MLT, glossed as *reading, reading the world and self*, (Masny & Cole, 2009, p. 1) signals a paradigmatic shift in theorising literacy (Masny, 2006). The shift claims to move theories of literacy away from the phenomenological, social constructivist paradigms of post-positivism, primarily NLS. It is situated within a post-structuralist paradigm grounded in the work of Gilles Deleuze and Felix Guattari.

Its starting point is transcendently empiricist: the theory emerges from the materiality of the texts as new concepts are created in recursive processes of application of Deleuze and Guattari’s philosophy. As Masny and Cole (2009) assert, concept creation proceeds from an:

Analysis of the evidence [that] does not over-write ‘real life’ with ideology or assumptions, but teases the designation of multiple literacies from the evidence (p. 2).

2.10.1 Experience and Event: Differently perceiving life, literacy and affect

In sociolinguistics, experience is construed as meaning through language (Halliday & Matthiessen, 1999). In MLT, experience is an indeterminate, fluid, collective of events that flow through an individual and constitute memory, feeling, concept, percept, affect and desire (Masny & Cole, 2009; Semetsky, 2006). Experience is expressed not only in language, but in art, music, touch, movement – all sign systems, embodied or not. It is inherently an unstable category and therefore cannot be used as a predicate on which to base an account of literacy practices. The role of individual desire as a motivating, generative force in literacy is foregrounded in MLT; the self is seen as a text which interacts through ‘personal literacy’ (Masny, 2006, p. 6) with other texts and technologies. Conversely, in NLS and multiliteracies, the self-as-subject is inducted into purposeful, socially and politically emancipatory principles of literacy design, or is the marginalised victim of powerful ideologies that must be resisted.

A further important distinction between MLT, and NLS and multiliteracies, is that power in MLT is conceived as arising in and emanating from interactions between components of a multiplicity on a micro-cosmic level. These reverberate upwards to the macro-level, transforming communities and societies from the bottom up. In MLT, ‘actions and connections ... are disparate and complex and are not defined by any preconceived agenda’ (Masny & Cole, 2009, p. 5).

In sum, MLT resists many of the dichotomous binaries inherent in the sociolinguistic paradigm. It seeks to allow the imperceptible principles and dynamisms at work in non-linear, often random processes of interaction between different selves, literacies and literate communities to emerge as the structuring tendencies of what are visible as texts.

2.11 Concluding comments

This chapter has presented an account of how literacy has come to be conceived not only as an individualised cognitive skill limited to reading and writing, but also as a socially negotiated series of goal-directed interactions that are inherently multimodal. The relationship between genre and lexico-grammatical choice in realising the social functions of literacy is accounted for in Systemic Functional Linguistics. Theories of multimodality and New Literacy Studies draw on and extend SFL to account for similar relationships in visual and/or hybrid forms of texts.

Moreover, positioning literacy as multimodal has been crucial in opening out the conceptual space such that the emergence of the internet and its impact on literacy practices could begin to be theorised. As social, civic, economic, political and pedagogic dimensions converged in a globally networked, participatory culture that makes highly differentiated demands on literate skills, theorising has emphasised the increasingly ‘multiple’ nature of literacies especially those enabled by internet-networked mobile phones.

The difficulty of developing a flexible yet rigorous ontology of the internet as a technology of literacy continues to challenge and propel theorising in this field. The application of a philosophical gaze to this project is emerging as a growing contributor to a theory of literacy as an adaptive, continuously shifting configuration of multiple skills.

The next section, Chapter 3, sets into interaction the logic and traditions of sociolinguistics with an experimental Deleuzean approach, synthesising a theoretical framework that attempts to account for aspects of contemporary adolescent literacy practices which seem elusive.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

When the full impact of the internet on society in general and adolescents in particular started to become the focus of cultural theorists and researchers, especially linguists and linguistic ethnographers, (Buckingham, 2006; Castells, 1996; Crystal, 2008; Greenfield, 2003; Jenkins, 2008; Kress, 1998; Ling, 2008; Livingstone, 2009; Rheingold, 2002; 1994; 1993; 1991; 1985), the limitations of prevailing epistemologies, methods and languages of description became apparent (Coiro, Knobel, Lankshear, & Leu, 2008; Leander & McKim, 2003). Subsequently, the study of adolescent literacy practices (ALP) as a configuration of literacy, social behaviour and channels of technology has traversed disciplines and come to be called many things: transliteracies; digital literacies; multimodal literacies; multisemiotic literacies; multiliteracies and NLS. Problematised in these discourses is the ontological dimension of the internet itself and how this shapes ALP (Coiro, Knobel, Lankshear, & Leu, 2008; Leander & Rowe, 2006). Contemporary discussions continue to reflect the complexity of the internet as it is implicated in ALP:

Offline texts reside in familiar and bounded spaces that remain static over time, while online texts are part of a dynamic and unbounded information system that changes daily in structure, form and content ... these dynamic mediums foster increasingly complex interactions with texts (Coiro & Moore, 2012, p. 552).

The following chapter attempts to explicate this complexity. The materialist and processual philosophy of Gilles Deleuze will be applied so as to reconceptualise the sociolinguistic construct of ALP in relation to the internet and the World Wide Web (WWW).

The chapter is comprised of five inter-related components: first, a working definition of ALP relevant to this research project will be presented. Second, the contribution of Systemic Functional Grammar (SFG) to theorising ALP will be considered. Central to this will be a focus on the concept of language as a system of generative processes, construing experience as meaning, and enacting social functions (Halliday &

Matthiessen, 1999; Halliday, 1996). Third, and related to the influence of the functional linguists on evolving conceptions of ALP, the emergence of theories of multiliteracies and new literacies will be explored. Fourth, the discussion will be bridged by focusing briefly on the spatio-temporal paradoxicality of the internet as both a material and an immaterial system that is generative yet constrained, open yet closed, and how these paradoxes impact on literacy as a socially embedded practice. Lastly, a retrospective Deleuzean gaze will be applied in an attempt to open out and uncover some of the relational, dynamically creative forces implicated in ALP with a particular focus on embodied mobile technologies.

Each of these five sections contributes conceptually to the overall analysis of the data presented in Chapters 5, 6 and 7. The necessity for such a multi-leveled network of theoretical constructs points to the continuing difficulty of developing both a single coherent, cohesive analytical framework and a comprehensive external language of description to account for the complexity reflected in contemporary ALP. Appendix 1 is intended to function as an accompanying referential tool to illustrate the development of the theoretical framework.

3.2 Reconceptualising Adolescent Literacy Practices

The data presented in this investigation is primarily concerned with accounting for the different types of textual practices engaged in by a particular group of adolescent girls. The aim of the analysis is to explore these from the perspectives of: first, how the teenagers themselves perceive and explain the relationships and affective processes involved; and, second, within a pedagogic paradigm, to transcend the polarisation of these practices as either ‘good’ or ‘bad’ in order to simply see ‘what is’, to examine ‘the state of things’ (Semetsky, 2006, p. 2). Part of this will involve a structural and semiotic analysis of their texts, but beyond this, an attempt will be made to show the otherwise imperceptible and generative forces implicated in the production of many of these texts. For these reasons, a more fine-grained conceptualisation of Adolescent Literacy Practices (ALP) is necessary.

The construct of ALP as used in this investigation emerges from the broadly social-constructivist paradigms alluded to above, but is also informed by an applied Deleuzean perspective that seeks to locate the abstraction of a concept firmly within

the materiality of its context: form in substance. ALP are generated from both habits of human interaction and the materiality of the technologies of literacy with which they are associated. Internet linked computers and mobile phones are themselves implicated as embodied and ‘concrete assemblages’ (Deleuze & Guattari, 1987, p. 510) within which ALP operate (DeLanda, 2006; Semetsky, 2006). (‘Assemblage’ as an analytic category will be elaborated on its own terms further in the discussion.)

ALP are conceived as comprising three main components: the social, relational processes intrinsic to their generation; the multisemiotic texture of the texts themselves, and the embodied technologies of the texts. This construct of ALP deliberately conflates the established sociolinguistic distinction between literacy practices, and literacy events as instantiations of practice with ‘hidden, underlying conceptions’ (Pahl & Rowsell, 2006, p. 12). An applied Deleuzian consideration of an Event (see below) subsumes literacy practices and events in a way that opens out more nuanced lines of conceptualisation. Moreover, drawing on the pragmatics of Peirce, ALP is conceived as being grounded in experiences immediately available to perception, and which are available as a relational category in semiotic systems (Peirce CP 2. 308 in Semetsky, 2006) especially as enabled by digitisation. Human ways of relating are conceived as actualisations of deeper semiotic processes which, in turn, are realised in a variety of sign systems. This intertwining of human action and language was systematised in the development of a socio-functional theory of language, Systemic Functional Grammar (SFG) (Halliday, 1996; Halliday & Matthiessen, 1999).

3.3 Construing experience as meaning: SFG as a social semiotic system

The following section on the contribution of SFG is not intended to stand on its own as an exhaustive and detailed interpretive instrument. Core foundational constructs that resonate directly with the other elements of this synthesised analytic framework, as outlined in the introduction, have been selected for their relevance in providing conceptual grounding.

SFG emphasises the seamlessness of language and human behaviour. Culture as a social context in which humans do things is conceived as a network of semiotic systems, a ‘central problem [of which] is to interpret language in a way which enables

us to relate it to other semiotic processes' (Halliday, 1984, p. 8). Language as a social semiotic system remains the definitive mediator of human experience, 'the interpretive base' (Halliday & Matthiessen, 1999, p. 1). It constructs stores and changes experience: 'Being' is realised as meaning powered by the lexico-grammar of language in a cognitive landscape where semiotic and mental systems are not separate (Halliday & Matthiessen, 1999).

One of the strengths of SFG as an explanatory framework is the counterbalancing of social semiotic systems with a conceptualisation of the centrality of experience to the construction of meaning. Experience as a system of social and relational processes is primary as sensed and grounded in space and time, as 'a potential for understanding, representing and acting on reality' (Halliday & Matthiessen, 1999, p. 4). Further, in its cultural and contextual specificity, experience is viewed as a collective resource and hence, the negotiation of 'meaning is a social inter-subjective process' (Halliday & Matthiessen, 1999, p. 5). These notions of contexts of culture and situation are complicated by the disruption to experiences of space and time intrinsic to the internet topology. Nonetheless, as theoretical constructs in SFG, they open out a pioneering explanatory pathway which will be developed further in the chapter.

SFG as an analytic and descriptive framework presents a fourfold perspective on the construction of meaning as 1) a potential; 2) as growth; 3) as a shared resource and 4) as an activity. The role of language is conceived as two interactive, complementary and generative processes: 1) construing sensory and affective perceptions in space-time as the Ideation Base and 2) doing the work of enacting social goals within relational networks. This dynamic dialectic between experience, language and meaning contrasts fundamentally with previous linguistic and philosophical approaches in that it focuses on the generative and social processes of the complex (Halliday, 1984). Language construes experience as the Ideation Base which in turn is realised through language (Halliday & Matthiessen, 1999). There is no rupture between the material world, the ways of its human inhabitants, and the sign systems that have emerged to make experience explicit as conscious, reflective knowledge. A key insight is the non-essentialising, non-naturalist positioning of SFG: there is no previously conceptually ordered world that pre-exists lexico-grammar (cf. Pinker, 2007a). Thus 'meanings do not exist before the wordings that realise them ... they are formed out of the impact between our consciousness and our environment'

(Halliday & Matthiessen, 1999, p. 17) giving rise to the Ideation Base: a large semantic space organised paradigmatically as a system of what it is possible to express – meaning as potential.

This emphasis is important to understanding how SFG focuses on the renegotiation of individual acts of meaning in relation to what has been meant previously, or what it is possible to mean: semogenic processes (Halliday & Matthiessen, 1999). These processes function in three possible, yet not mutually exclusive, ways over time to expand the realization potential of the Ideation Base. First, new object/name complexes are construed. For example, newly invented or observed entities are lexicalised: *portable multimedia multifunctional device linked to the WWW via mobile telephony networks* becomes *tablet*. Second, the level of categorisation operating in the Ideation Base can be intensified: ‘tropical diseases’ becomes ‘cholera’ and ‘malaria’. The third way semogenic processes function to expand meaning potential arises from the capacity of the two components of individual words – the grammatical category (noun) and its ideational function (participant) – to be separated. A noun can then realise functions other than participant, and conversely, participants can be realised by words that are not nouns.

What these semogenic processes demonstrate is the inherent mutability of language as a semiotic system. This occurs over time in the development of individual languages and registers; in children’s language acquisition and in the discourse structures that evolve in particular contexts (Halliday & Matthiessen, 1999, p. 24). Hence:

Language embodies the potential for its own ongoing expansion and since the system is at any moment the repository of its own history, we can sometimes recognize disjunctions or interstices that offer a likely context for new meanings to appear (Halliday & Matthiessen, 1999, p. 22).

Another process implicated in the construal of experience as meaning pertains to the ways in which codification changes over time, both in a language and in an individual’s development of his/her linguistic repertoire. At the level of lexicogrammatical generalisation, meanings are either compacted or condensed. Compacting occurs in the organisation of the Ideation Base along the horizontal dimension: different name complexes are compacted to realise the same meaning.

For example ‘an infraclass of mammals whose young are born underdeveloped and are raised in the mother’s pouch’ becomes ‘marsupial’. Condensing occurs along the vertical dimension along the scale of conceptual and abstract delicacy, of types and tokens: Christianity; Hinduism; Islam are condensed as ‘world religions’. As intrinsic structuring tendencies of language (Halliday & Matthiessen, 1999) these processes are considered as unremarkable. At the level of the text, Halliday and Matthiessen assert that:

The changes in semantic styling that take place in the course of a text cannot be dismissed as simply ad hoc devices for making the text shorter or longer, more interesting or whatever. They should be seen as the operation of general semogenic principles in the specific context which is engendering and being engendered by that text (Halliday & Matthiessen, 1999, p. 25).

It is possible that a similar principle operates in other semiotic systems, or, facilitates semogenic processes across and between language and other semiotic systems giving rise to multisemiotic texts. This is salient to a consideration of ALP.

To summarise: there is a correspondence between the experiential and extra-linguistic (Context of Culture and Context of Situation) and the linguistic levels in the creation of texts. The relationship between these and their constituents is an inter-stratal one, with the extra-linguistic levels realised at the linguistic level in semantics, realised in lexico-grammar, realised in phonology, graphology and gestures (Butt, Fahey, Spinks, & Yallop, 1995). Importantly, SFG stresses meaning-making as a system of choices influenced by the three major metafunctions, or ‘modes of meaning’ (Halliday & Matthiessen, 1999, p. 29) of language that comprise the Context of Situation: Experiential/Ideational; Interpersonal and Textual. In addition, three aspects of the Context of Situation – Field, Tenor and Mode – elaborate how the metafunctions are realised at the lexico-grammatical level. In particular, it is in the interaction between the metafunctions, and the Context of Situation analytic metalanguage, that the explanatory relevance of SFG to an account of adolescent literacy practices becomes applicable.

The Mode of Discourse has become complicated by internet technologies on mobile phones. To try and open out this complication, Halliday's distinctions within this construct will be applied: 'medium' refers to whether a text originates as sound, writing or signs; 'channel' refers to the way in which a text is received: as a phonic, graphic or visual (Butt, Fahey, Spinks, & Yallop, 1995). Traditionally, visual has been understood to apply only to sign language. However, in light of the affordances of software applications which allow for the integration of writing, phonics and images in a single text, 'visual' will be appropriated to refer to moving and still pictures and symbols. The term 'technologies' will be retained to delineate whether a graphic and/or visual text originates and/or is delivered on paper or on a digital device.

The ways in which digital technologies allow for a multitude of permutations that flow between medium and channel is a core problematic of theorising ALP⁵ within existing theoretical paradigms. It points to the blurring of the boundaries between the sensed world and the sign systems that construe lived moments into meaning. For example, a video clip of a band performing a song originates in the medium of sound/performance-as-sign; it is then digitally captured and becomes a hybrid phonic/visual text which could also include the graphic channel – the words of the song. This assemblage could then be embedded into a text originating as writing and received in a channel comprising phonic; graphic and visual. Or, it could constitute an entire message originating then sent and received – even for a single individual – in the same medium and channel as part of the semiotic resource bank that is the WWW.

Halliday noted the emerging tendency of not only linguistic media and channels to converge, but also semiotic systems. However, SFG is a system of linguistics rooted firmly in a philosophy that privileges language: the mutually constitutive dialectic between human experience and language is sustained. There is therefore a strong relation of interiority between experience, knowledge and language as parts of a totality reducible to each other. This gives rise to 'the thesis of the linguisticity of

⁵ See below for discussion on the digital translation of sign language into text

http://www.jisc.ac.uk/news/stories/2012/03/sign.aspx?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ac%2FuabG+%28JISC+News+Web+Feed%29

experience' (DeLanda, 2006, p. 47). Therefore, although in a study such as this, a linguistic theory is useful to account for some aspects of ALP, the dynamism and complexity that digital technologies of literacy have introduced into adolescent experience, and which seems to energise their textual practices, is beyond its conceptual reach.

Simply put, the Context of Situation has been radically altered by internet linked mobile phones as platforms for the social enactment of literacy. Today's teenagers have amplified and augmented access to multisemiotic media and channels that immediately convey and shape their experience, impacting on how they construct that experience as meaning. What is needed is a way of accounting for a multiplicity of heterogeneous capacities that constantly shift in ever-changing interactions with each other - an assemblage of irreducible parts. For:

Each type of [experience] impression – not only visual, aural, olfactory and tactile, but also the plurality of passions, from pride and humiliation to love and hatred – possess[es] its own singular individuality (DeLanda, 2006, p. 48).

Amplified capacities in dynamic process have therefore given rise to a diverse and novel materiality of textual practices sometimes called new literacies or digital literacies, but which for ease of reference, will be from here on referred to as multiliteracies. The Multiliteracies Framework, as developed by The New London Group nearly two decades ago, is viewed as a bridging construct in tracing the development of a cohesive explanatory system for theorising ALP. Yet, as a social constructivist paradigm, it has limitations in accounting for newly emergent forms and practices of literacy.

3.4 The Multiliteracies Framework

The Multiliteracies Framework (MLFW) coalesced around the pursuit for a theory of communication that could account for the proliferation of new forms of representation within a rapidly changing world where flows of information were shaping society in novel ways (Castells, 1996; Cope & Kalantzis, 2000; O'Halloran, 2004). There are two key underpinning theoretical strands that historically ground the MLFW. The first

is that human communication is socially motivated and embedded in context specific relational networks (Barton, 1994; Barton & Hamilton, 2000; Baynham, 1995; Gee, 1994; Halliday, 1996; Heath, 1983; Street, 1984). The second is that human semiosis is always multimodal and organised according to the internal grammar of each sign system. The work of Kress, drawing on the logic of SFG, has made an important contribution to the analytic strength of multimodal literacy as a construct (Kress & Van Leeuwen, 2006; Kress, 1998; 1993). Both these concepts resonate strongly with the ontological stance underpinning SFG and reinforce Halliday's sense that modes of semiosis would converge as technology progressed.

The New London Group (in Cope & Kalantzis, 2000) consolidated multimodality and NLS in the MLFW by theoretically formalising the interaction between semiotic systems, social context and literacy technologies. The MLFW concepts of *Available Designs*, *Designing* and the *Redesigned* frame the broad construct of multimodality in ALP. Each of these three concepts foregrounds tenets central to the MLFW.

Available Designs emphasises text creation as an activity (cf. 3.3 above), an 'intervention in the world' (New London Group in Cope & Kalantzis, 2000, p. 23). It acknowledges the organising grammars of all semiotic systems, and the conscious co-articulation of these in multi-modal text design (*ibid.*, p. 28). Moreover, the notion of discourse as manifesting the power dynamics of a given social structure (Fairclough, 1989) is a third facet of *Available Designs*. Clearly, the very notions of social structures, institutional discourse and cultural communities – among others – are disrupted by the WWW.

As pedagogical approaches within the MLFW, *Situated Practice*, *Overt Instruction*, *Critical Framing* and *Transformed Practice* focus on making explicit the social contexts and processes shaping text creation. What could not be fully envisioned by The New London Group was the extent to which the 'multimodal relations between the different meaning-making processes' (New London Group in Cope & Kalantzis, 2000, p. 24) would be complexified by the incorporation of the literate landscape into mobile phone technology. As 'the great leveller', (Cope & Kalantzis, 2000, p. 232) digitisation has dislocated the conceptual parameters previously developed to theorise ALP. Accounting for the imperceptible dynamisms implicated in the contexts and

processes of multiliteracies requires therefore an ontological turn in considering the role of the internet and the WWW. Coiro *et al* assert that:

The internet needs to be respected as a unique context for literacy and used to build its own theoretical foundation (Coiro, Knobel, Lankshear, & Leu, 2008, pp. 10-12).

Building a conceptual foundation is the rationale for the inclusion in this theoretical chapter of the following section on the internet.

3.5 The internet/WWW as a space for multiliteracies

Theorising ‘the internet’ and how it relates to ALP is an ambitious undertaking that could form the substance of a complex study in its own right. What follows is a simplified and tightly focused delineation of ontological aspects of the internet/WWW as a ‘constitution of facticity itself’ (Hughes, 2009, p. 153; Sondheim, 2007).

Giving a conceptual account of these aligns with the ‘experimental attitude toward reality’ (DeLanda, 1997, p. 273) adopted throughout this study that seeks to account for the generative forces of the internet/WWW as a paradoxical entity of intermeshed material and expressive capacities (DeLanda, 2006; 2002; 1997). This entity is a synthesised actualisation originating in intensifying processes of imaginative desires and virtual concepts interacting with created material substances (Hughes, 2009). These are grounded in space and time but have generated a virtual-real, differently spatio-temporal zone: cyberspace (DeLanda, 2002). This section of the discussion therefore asserts the autonomy in reality of the internet/WWW as both an engineered system and a social entity (DeLanda, 2006, p. 1). It seeks to account for how this reality is implicated in ALP.

In contemporary use, the term internet conflates dimensions of the overall milieu in which ALP are generated. These need to be rendered explicit in order to account for ALP in a conceptually clear way. The diagram below illustrates these dimensions each of which will be briefly discussed.

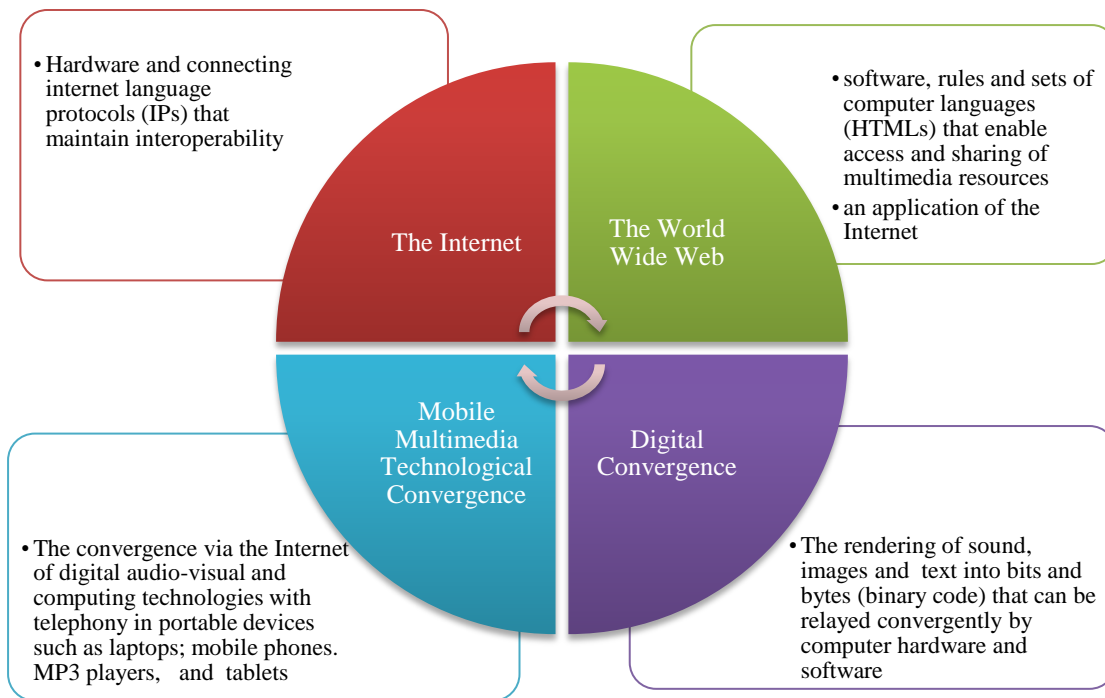


Figure 3.1 Singularities within the internet assemblage

3.5.1 The internet

The internet/WWW is a paradoxical entity, a ‘macro-assemblage’ (DeLanda, 2006, p. 16). It is ‘a whole [that possesses] synthetic [and] emergent’ parts with interacting capacities that intrinsically resist a reduction to an essence (DeLanda, 2006, p. 4). It is simultaneously material and ethereal; disparate yet connected; linear and asymmetrical; emerging from homogenizing tendencies but generating a high degree of heterogeneity (DeLanda, 1997). It has invariant properties that function to facilitate variation. Its governing ideology is that it has no ideology other than a commitment to remaining intrinsically accessible to all communities and individuals across the globe: “The internet is for everyone – there is no central authority that designates or permits different classes of internet activities”.⁶ It is constrained by technological conventions yet offers emancipatory powers to its end-users. The internet is overseen by committees of specialists who work to simplify it for non-specialists. In terms of the material hardware, it is territorialised – bound by space and situated in time – yet frees its users to traverse and capture these dimensions in a

⁶ <http://www.internetsociety.org/internet-invariants-what-really-matters>

two dimensional interactive plane of digitised compositional resources. And a stable characteristic of the internet is that it is constantly changing: difference is repeated in an infinite series of generative processes (DeLanda, 2002; Hughes, 2009).⁷

The Internet Society describes it as:

[An] unprecedented integration of capabilities [which is] is at once a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location.⁸

Originally conceived as a ‘Galactic Network’ across which social interaction could occur⁹, the principles of self-organised and self-sustaining growth¹⁰, connection, resource sharing and networking are inextricably bound up with the origins of the internet. It is a zone in which the metaphorical and the real merge as conduits of matter and energy relay flows of information and give rise to both hierarchical and networked process-products. These similarly enable and constrain the formation of new process-products around which information and social interaction flow and are replicated and/or destabilised (DeLanda 2002; 1997). Digitisation and the development and global adoption of the internet/WWW might be seen as a watershed in human experience that has triggered novel ways of doing what humans have always done: socialise, communicate and transact (DeLanda, 1997, pp. 254; 271). These Events (see 3.6 below) have become localised in novel ways.

The internet enables highly disparate series of heterogeneous singularities, entities defined in a Deleuzean sense as having ‘the power of making a difference’ (Colebrook, 2006, p. 30) – to function as information relay channels:

⁷ <http://www.internetsociety.org/internet/how-internet-evolving>

⁸ Leiner et al <http://www.internetsociety.org/internet/internet-51/history-internet/brief-history-internet#JCRL62>

⁹ *ibid*

¹⁰ <http://www.internetsociety.org/internet/how-it-works>

The internet is a vast network of networks, interconnected in many different physical ways, yet all speaking a common language specified by standard protocols.¹¹

The internet is no-place conceived and constructed as cyberspace, but used and transported by people in and through bounded space on mobile devices. As a multiplicity of virtual tendencies inherent in its topological architecture, it offers infinite trajectories and permutations for the actualisation of the virtual, where actualisation is understood as the development of particular applications that have diverse uses in the ways people live, work and interact. (For the purposes of the theoretical framework relevant to this project, the terms ‘virtual’ and ‘actual’ will be complicated and re-defined in relation to their function in Deleuzean ontology.)

In sum, this section has attempted to:

Take into account that the larger-scale structures that emerge from the actions of individual decision makers ... have a life of their own. They are wholes that are more than the sum of their existing parts, but wholes that *add themselves to an existing population of individual structures* operating at different scales (DeLanda, 1997, p. 271, original emphasis).

3.5.2 The World Wide Web

The World Wide Web (WWW) is an application enabled by the internet. One view of the WWW, presented by the W3 Consortium, is that it is ‘the universe of network-accessible information, the embodiment of human knowledge’.¹² Its creator, Sir Tim Berners Lee, describes it as ‘an abstract (imaginary) space of information’.¹³ It is a digital storage centre for human experience, configurations of different kinds of knowledges and social behaviour, captured in moving and still images; sounds of all kinds; frequencies and resonances; extensive multilingual sign systems and other

¹¹ <http://www.isoc.org/pubpolpillar/docs/internetmodel.pdf>

¹² <http://www.w3.org/WWW/>

¹³ <http://www.leidenuniv.nl/letteren/internethistory/index.php3-c=5.htm>

forms of abstract notation, and digitised libraries of ink-and-paper texts that were the previous repositories of human thought and experience. As an entity, it resonates with both Halliday's Ideation Base as a large semantic space of meaning potential (see 3.3 above), and with Deleuze's plane of immanence (see 3.6 below). In terms of the MLFW, it is a vast resource pool of *Available Designs* that are transformed through *Designing* processes into the *Redesigned* (see 3.4).

Further, the WWW has generated structured applications, such as Facebook, where language, sounds and images mediate each other into social knowledge which is shared across extensive social networks organised as a function of the software. All information stored on the WWW is available as semiotic resources that are combined in apparently disjunctive ways 'offer[ing] a likely context for new meanings to appear' (Halliday, 1996, p. 22) and new ways of interacting.

In trying to account for how new contexts allow new meanings to appear, and how in this different milieu experience is socially mediated, domains outside social and linguistic theory have had to be included (O'Halloran, 2004, p. 109). Part of a re-worked conceptualisation of context thus involves how time and space are implicated. Here too, the theorising is inherently paradoxical: it is in the apparent collapse of time and space as constraining variables, as experienced by space-time bound people, that the generative energy for the types of texts typical of ALP emerges (DeLanda, 2002). Text-generating processes are relayed and received instantly in synchronous time; or stored, sent and received in asynchronous time. These generative processes of text creation can be dyadic or 'polyadic' – occur simultaneously among many different participants.

In SFG terms, the three metafunctions of language – Ideational; Interpersonal and Textual – and the parameters of Context of Situation – Field; Tenor and Mode – become problematised and malleable in relation to the WWW as a multimodal text generating milieu. The function of language as the interpretive base for construing experience as meaning has been greatly supplemented by other semiotic systems and technologies, singular among these being digitisation.

3.5.3 Digitisation: Real-actual becomes real-virtual becomes real-actual

Digitisation has reified the philosophical stance that ‘language and the world form a single semiotic fabric, that is, things in the world also function as signs’ (Semetsky, 2006, p. 78). It is a peculiar, energised reification: a concept has become materialised, yet its materiality is intangible though available to affect, perception and cognition. It becomes productively manifested in the corporeal and incorporeal behaviours and generative processes it enables. It is a highly functional reification that facilitates, even controls, flows and exchanges of experiences, information, ideas, resources and social events of all kinds in a multitude of sign systems.

The rendering of what is available to our senses into bits and bytes of data that can be relayed across the internet and incorporated into processes of text negotiation has exponentially expanded the compositional plane – the Ideation Base, the meaning potential - for the construal of experience. Providing a conceptual account for this is facilitated by an ontological consideration of the roles and processes of what, in assemblage theory (AT), are termed material and expressive components (DeLanda, 2006; 2002; 1997). These will be elaborated below and then shown to be relevant to theorising the impact of digitisation, and in particular, the development of binary code, in a consideration of the SIA and ALP.

Material components are the things, the stuff of the world. For example, computer hardware, cabling, electricity and all people using computers could be considered to be material components of the internet/WWW assemblage. Expressive components are information patterns that reflect the identity of physical entities or social structures: for example, fingerprints and social norms respectively (DeLanda, 2006). It is important to note that these kinds of information patterns do not have a separate functionality from the entities they merely reflect.

Both material and expressive components are subject to forces that either stabilise or destabilise the structure of an assemblage; crucially, both forces can be exerted simultaneously. Stabilising – or territorialising – forces tend to homogenise and rigidify the structure or identity of an assemblage by synthetic processes. They can assume both spatial and non-spatial dimensions. For example, non-spatial processes of categorising and segregation lessen the degree of flexibility and permeability within an assemblage (DeLanda, 2006). Similarly, spatial processes of

territorialisation literally restrict – for a time – objects and people to a particular space: for example, a teacher instructing a class of learners in a classroom.

Destabilising forces render assemblages susceptible to adaptation and interaction with other assemblages by weakening the homogenizing tendencies, or by extending spatial boundaries. A component in an assemblage can exercise both stabilising and destabilising capacities simultaneously. For example, the internet/WWW assemblage, which in its materiality is bound in both time and space, liberates its users from these constraints by the immateriality of its digital connectedness.

However, there are, in AT, kinds of expressive components which are considered to have exerted a unique influence by greatly amplifying the complexity and combinatorial possibilities for the formation of assemblages (DeLanda, 2006; 2002; Hughes, 2009; Williams J., 2008). In a Deleuzian ontology, there are two kinds of expressive components that constitute ‘critical thresholds in the history of the planet when physical expressivity has become functional’ (DeLanda, 2006, p. 14). These are genes and language. Crucially, these specialised capacities interact with components of assemblages in unique, exteriorizing ways that catalyse further interactions and formations. What enables them to do this is the liberation of their information patterns from the material carrier of those patterns. So, with language, its grammar and syntax is ultimately autonomous from the embodied voice of the speaker (cf. Halliday & Matthiessen, 1999): it can be written down or stored and transformed in diverse ways (DeLanda, 2006), interacting with the capacities of components in many different assemblages. The combinatorial power of language is what makes it uniquely powerful.

This autonomy facilitates a second synthesising, stabilising process in addition to territorialisation (see above): coding. It seems paradoxical, but coding further establishes the identity of an assemblage, *and* it allows for greater diversity of *kinds* of social assemblages possible because of the combinatorial resources of language set free from their human carrier. So, for example, organizational mission statements; codes of conduct; formal registers of writing and speaking; different kinds of laws, are examples of a variety of codifying processes linked to language, but appearing in diverse assemblages. Conversely, decoding is a process giving rise to weakened boundaries: so, conversations between family, friends or lovers would be decoded.

In sum then, linguistic processes of coding and decoding, together with the non-linguistic processes of territorialisation and deterritorialisation are recurrent, exteriorizing processes which variable yet potentially simultaneous repetitions give rise to different populations of assemblages. What such a framework achieves is the creation of a conceptual space that allows for the impact of the materiality of components on assemblages, and repositions the constitutive role of language in social assemblages. It is both the stuff of the world and language that give rise to social configurations.

Thus, in considering the role of digitisation in the SIA and in ALP, it is in this conceptual space that the functionality of binary code is posited as a third ‘critical threshold’ in human action. It is functional in that it is a system of information patterns that is operationalized to maintain the identity of that which it is encoding, linguistic or not. At the same time, these replicating information patterns are liberated from their material origin *and* from the people that experience them: analogue is converted into digital. This autonomy sets into action processes of deterritorialisation which allow that which has been digitised to be changed and manipulated in seemingly infinite ways.

Moreover, processes of coding – the operation of computer languages – function to stabilise and synthesise the overall internet/WWW assemblage. At the same time, they also destabilise the whole system because they facilitate, by relations of exteriority, interaction with the components of many other kinds of assemblages giving rise to many of the interfaces – or ‘apps’ – currently used. They thus allow for an enormously complex and flexible entity that arises from a synthesised, stabilised, hierarchical yet networked system.

So both digitisation and specialised computer coding have exponentially expanded the combinatorial resources available to the formation of diverse assemblages - and to human communication. It is this augmented combinatorial power that is implicated in the emergence of particular kinds of adolescent literacy practices within the social-informational assemblage.

In sum, the interaction of computer hardware and software; electricity; people and their imaginations, motivations, reasons, social networks, passions and minds; and

their semiotic resources, all are caught up in a paradoxical, swirling system of stability that enables continuously differentiating movement and exchange.

Therefore, the processes generating texts will be dynamic in relation to the diverse functions motivating them and the structuring parameters of particular software applications. The semogenic principles evident in language could also cross-apply in multisemiotic composition. Kress pointed to these ‘changes in the semiotic landscape’ (Kress, 1998, p. 75) before the full impact on ALP of convergence technology became apparent. There is therefore a need to perceive texts as the materiality of events, evidence of ‘the potential immanent within confluence of forces’ (Parr, 2005, p. 87) operating in the internet/WWW assemblage, but in a substantively different way from the logic of traditional sociolinguistic account (Pahl & Rowsell, 2006).

With digitisation as a fundamental singularity of the internet/WWW, the ‘active intervention in the world’ (New London Group in Cope & Kalantzis, 2000, p. 23) envisioned in the MLFW is amplified beyond the reach of the concept as first envisioned: a visual text virally disseminated can ignite a revolution, launch a musical career or destroy a reputation.

Theorising the pedagogic implications of this with reference to the MLFW’s civic agenda (Cope & Kalantzis, 2000) becomes a complex project. This complexity has been intensified by the advent of mobile phone technology and its impact on ALP.

3.5.4 Mobile phones: Palm-sized multisemiotic digital devices

Conceptually, mobile phones can be compared to membranes: although material and visible, their functionality as an interface between the exterior and the interior world of adolescents is imperceptible as a generative element in text negotiation. They are the threshold across which teenagers’ subjectivities, actions, social encounters, internal desires, thoughts and words flow in continual interaction.

Mobile phones are embodied carriers of the internet/WWW set into interactive motion with the world of adolescents as digitally captured in moving and still images and sounds. In SFG terms, the Ideational, Textual and Interpersonal metafunctions can be realised in profoundly more diverse and semiotically elastic ways than when technologies of communication and text negotiation were restricted. The prolific variables that have become implicated in the Context of Situation – Field, Tenor and

Mode – are key to this diverse realisation. In MLFW terms, the ways in which *Available Designs* can be *Designed* into the *Redesigned* are qualitatively different in that they are not static: they are processes in ceaseless motion and flux, ever changing both in the face of constantly new experiences and especially as new applications, particularly social media, are offered to adolescents. These new applications will exert both constraining and liberating pressures on the kinds of texts generated within them.

The mobile phone is then a multi-layered zone of convergence, a ‘complex place[s]’ (Semetsky, 2006, p. 67). It is an embodied technology of multisemiotic mediation through which the inner and outer worlds of teenagers’ lived experiences are enfolded together via the internet/WWW and digital functionalities to form a flat plane of compositional resources (Colebrook, 2006; Jenkins, 2008; Rajchman, 2000; Semetsky, 2006; Williams J., 2008). It gives rise to a configuration of textual, material and embodied practices and that function as a social-informational assemblage (SIA).

The relational processes by which these compositional resources are constituted as socially situated texts challenge received notions of representation and text negotiation. The affordances of the SIA compel the development of a different conceptual space, one that:

Tries to work with zones that are precisely or not completely determined or localizing, where things may go off in unseen directions or work in unregulated ways (Rajchman, 2000, p. 5).

Thinking about the SIA and ALP as such ‘zones of indetermination’ (*ibid.*), qualitative multiplicities arising from within a different logic of social practice and new technologies – ‘uncommon forces’ (Rajchman, 2000, p. 7) - is what Deleuze’s philosophy affords a theorist. Figure 3.2 presents a simplified diagrammatic of this approach.



Figure 3.2 Summary diagrammatic representation of the conceptual plane

3.6 Playgrounds of desire: Constructing a Deleuzian conceptual plane

3.6.1 The emergence of the new

For Deleuze, accounting for newly emergent entities demands thinking by exploration and invention so that what is thought is not a re-cognition of something prior (Colebrook, 2006; DeLanda, 2002; Hughes, 2009; Rajchman, 2000; Semetsky, 2006; Williams J., 2008). His philosophy is ‘vitalistic and devoted into enquiry into events and signs ... of [the] ordinary experiential situation’ (Semetsky, 2006, p. 24) that aims to show the processes by which entities are constituted, the real but indistinct generative forces. A Deleuzian approach asserts that ‘thinking is not just a theoretical matter. It [is] to do with vital problems. To do with life itself’ (Deleuze, 1995, p. 105 in Semetsky, 2006, p. 81). As a materialist ontology it is therefore relevant to ALP in which technology is a key component of adolescent life.

Further, Deleuze recognised that the communications landscape of a networked digital world was an emergent social and economic force that demanded not only a new language of thought, but a new way of thinking about the relationship between language, thought and subjectivity (Rajchman, 2000; Semetsky, 2006). For Deleuze, both form and substance, abstraction and materiality, function “ ‘within concrete assemblages’ [Deleuze and Guattari in Semetsky, 2006, p. 65] that may assume the form of human behaviours that embody habits” (Semetsky, 2006, p. 65). Crucially

then, language is seen as both form and substance, behaviour and embodied action in relationship with technologies of linguistic expression.

Similarly, thinking itself must be diagrammatic, laying out the conceptual field (Colebrook, 2006; DeLanda, 2002; Semetsky, 2006) that shows a system of differentiating forces at work. Simply put, Deleuze posits a pre-philosophical ontology of a flattened multiplicity of planes that include material, 'aesthetic, affective and social dimensions' (Semetsky, 2006, p. 21) from which concepts must be derived to account for the nature of an object of study. Key to this is thinking in the spaces in between that which is already given to thought, as opposed to the linear, classificatory Cartesian approach:

In the framework of Deleuze's philosophy, thinking takes place in the disjunction – that is, negativity or a cut – at a structural level – yet, in its functional sense, it performs a constructive, conjunctive role (Semetsky, 2006, p. 37).

So it is in the movement of connections – tracing lines of flight – between conceptual points that thinking about new structures can emerge. Accounting for such structures is thus 'embedded in the perplexity of the situation' (Semetsky, 2006, p. 73), and is immanent to and unfolds from it. Such an unfolding focuses on the qualitative relationships between components in a constituted entity as they exert generative forces on each other.

However, the purpose of the present discussion is not to recapitulate Deleuze's elastic and complex conceptual vocabulary in its entirety: this would be a negation of his intellectual project, his pedagogy of concept creation (Peters, 2012). But, nor is it to complicate the data analysis by introducing a novel, idiosyncratic language of description. Rather, the purpose is to refractively apply aspects of his philosophy to the social constructivist tradition of literacy analysis; to attempt to respond to the challenge of accounting for that which seems impossibly unaccountable using existing approaches. The nature of the data gathered in this study presented analytic dilemmas that forced a search for an expanded paradigm.

What is seen in the adolescent literate landscape is a meeting between old and new ways of text negotiation in a new communications milieu. Deleuze's radically

materialist ontology can illuminate this meeting point which is ‘manifest[ed] by its material embodiment in the form of [an] artefact or new knowledge’ (Semetsky, 2006, p. 114). Therefore a selection of foundational Deleuzian constructs will be explicated in order to provide a theoretical framework that attempts to account for how old and new forces generate ALP in the social-informational assemblage (SIA). The applications and interpretations of several key Deleuzian scholars will be referenced.

3.6.2 Departures: Externalising the interior

Attempts to account for contemporary ALP from within the logic of the sociolinguistic tradition have been grounded in the dialectic of mutual constitution between individual agency, culture, language, experience and knowledge. Parts and wholes are mutually constituted by relations of interiority (DeLanda, 2006). In some instances, this has resulted in complex and elaborated conceptual systems with high degrees of verticality, for example, SFG. Such a system contributes much to accounting for the emergence and functions of language within social contexts, and particularly for the role experience plays in the construal of meaning. The analytic purchase of SFG to accounting for how experience, meaning and social function are inter-twined is acknowledged in the present discussion (see 3.3 above). However, the incorporation of sophisticated communications technologies has introduced a component of literacy which capacities are, by their very nature, resistant to totalising and essentialising, and therefore lie outside existing linguistic and communications theories. Rather, the explanatory capacities of these have to be set into interaction with the capacities of other components of literacy to theorise assemblages that are characterised by relations of exteriority (DeLanda, 2006; 2002; 1997). Assemblages are organised and emerge from within multiplicities.

3.6.3 Qualitative multiplicities: Infinite lines of connecting movements

Because Deleuze’s philosophy is networked by a ‘logic of multiplicities’ (Rajchman, 2000, p. 50) any theorist using his ideas must begin by making connections with what ‘a multiplicity’ is. It is considered by some to be Deleuze’s most important concept (Parr, 2005, p. 176), one which, in an oeuvre characterised by deliberate lexical variation and conceptual complication (Semetsky, 2006; Williams, J., 2008), ‘remains one of central importance with almost unchanged meaning and function’ (DeLanda, 2002, p. 9).

So 'any given multiplicity is like one area on the plane' of immanence (Semetsky, 2006, pp. 35-36). Immanence is that non-hierarchical, unbounded zone of interwoven continua where there are no binaries between inside and outside; subject and object; process and product; signs and signifiers; mind and body (Deleuze & Patton, 2004). Here, for example, there is no ontological distinction between a teenager and their mobile phone; between what they experience and what they write, or between the semiotic tools they employ. All is immanent in the relations that structure their lives.

But this plane of immanence:

Has to be constructed, so one area tends to link to another one, they may form multiple connections and they may overlap on the surface. If anything in fact is essential, it is those very linkages, rhizomatic multiplicities, a 'ceaseless activity' (Deleuze, 1995, p. 147) of relations, a process of becoming (Semetsky, 2006, p. 81).

Further, a multiplicity is not equivalent to diversity, variety or 'the manifold' (Rajchman, 2000, p. 54; Parr, 2005, p. 176). It is not a fixed totality comprised of discrete components determined in 'stable' relation to each other (Hughes, 2009, p. 134; Semetsky, 2006). It is not a static set of elements; it is an open, self-organising system (Semetsky, 2006, p. 56) within which dynamic singularities coalesce and emerge to synthesise 'multiple assemblages' (Rajchman, 2000, p. 55; Semetsky, 2006, p. 67). Self-organising, newly emergent multiplicities are never the same. Their founding principle is one of repetition of difference (DeLanda, 2002; Hughes, 2009; Rajchman, 2000; Semetsky, 2006; Williams, J., 2008). A multiplicity 'is a kind of potential for bifurcation ... in an open whole' (Rajchman, 2000, p. 54) in which 'the properties of the whole emerge from the interaction between parts' (DeLanda, 2006, p. 32).

And a multiplicity is a structured 'space of possibilities' (DeLanda, 2006, pp. 30-31; DeLanda, 2002, pp. 9-11) that is 'prior to unity' (Williams, J., 2008, p. 102). It is also a process in which heterogeneous 'differential elements, differential relations and singularities' (Hughes, 2009, p. 134) interact in synthetic relations of genesis. A multiplicity opens up 'new points of connection' (Rajchman, 2000, p. 56). Multiplicities themselves change in relation to changes in the singularities that give

rise to them. They have no goal or end point but are forever in process. They are always ‘in the middle’, folding and unfolding processes in constant dynamism, ‘constantly differentiating’ (Rajchman, 2000, p. 59).

Multiplicities can be both ‘segmented and non-segmented’ (Rajchman, 2000, p. 99), sometimes being found together, and both possessing diagonal lines of connection that open out new planes of contact giving rise to different multiplicities. It is an apprehension of the importance of these moving connections – continuously pulsating lines of creation – that gives the Deleuzian gaze its productive potency.

Multiplicities are not transcendent, but immanent, possessing ‘quality and extensity’, substantive entities in the world (Hughes, 2009, p. 140). They are ‘intensive and continuous’ (Semetsky, 2006, p. 35): any single change ripples through and changes the entire structure. Multiplicities comprise ‘relations of qualities’ (Semetsky, 2006, p. 73).

At a macro level, the ‘qualitative multiplicity’ (Semetsky, 2006, p. 20) of human existence is an inter-locking of two spaces of possibilities in relation to one another: actual ‘states of affairs’ and the ‘particular intensive movements of change’ that reflect and are reflected by these ‘states of affairs’ (Parr, 2005, p. 177). In turn, everything implicated in human existence is itself a multiplicity (Semetsky, 2006). To remain true to Deleuze’s antipathy to anthropocentrism (Williams, J., 2008, p. 38) this must be qualified by viewing language, that most human of faculties, as not being the causal factor for events-effects. Rather, it is understood as a ‘process [which] provides a set of conditions for the expression of sense’ (Semetsky, 2006, p. 34). (‘Sense’ is used here in its Deleuzian particularity and will be elaborated below.) Semiosis in general can be conceived similarly, different forms of which enter into relations with one another.

Simply put: at an ontological level, Deleuzian multiplicities oppose essences and totalities. Multiplicities are characterised by relations of exteriority between their components – or singularities. The relations and processes operating between these singularities, as their individuating capacities are set into interaction with one another, are foregrounded in the notion of multiplicities. It is the lines of connection and movement between singularities that are the structuring, generative force in multiplicities and the assemblages that emerge from these relational processes. These

processes are set into motion as a consequence of the inherent differences in the singularities interacting in the multiplicity. All human experiences and processes in the apprehensible world, and artefacts arising from these, operate together as mutually implicating – not merely constituting – multiplicities. Human subjectivity and semiosis – language in particular – are therefore multiplicities which interact with other qualitative multiplicities giving rise to many inter-acting assemblages. One of these is the social-information assemblage (SIA) (see 3.5.4 above) in which the world, human activities, semiosis and technology are co-implicated.

3.6.4 Assemblages: Depositing the dialectic

The development of Deleuze's notion of assembly into assemblage theory (AT) (Colebrook, 2006; DeLanda, 2006; 2002; 1997) is useful for emphasising certain concepts that constructively – yet simply – relate to the data analysis. AT has 'a unique way of approaching the problem of ... bridge[ing] the level of individual persons and [the] largest social entities' (DeLanda, 2006, p. 17).

Firstly, assemblages emerge from relational processes between singularities in a multiplicity; it is the differences between the interacting capacities of variably heterogeneous components (DeLanda, 2006) that generate assemblages. These components are 'self-subsistent' (DeLanda, 2006, p. 11). There is therefore no mutually constitutive dialectic between an assemblage and its singularities: the relations that give rise to the assemblage are external to it and its constituents. At the core of assemblage theory is an opposition to essences and totalities.

Secondly, AT offers two dimensions pertaining to the roles and processes of singularities that mediate a reconceptualization of adolescent literacy practices (ALP). These are diagrammatically represented below:

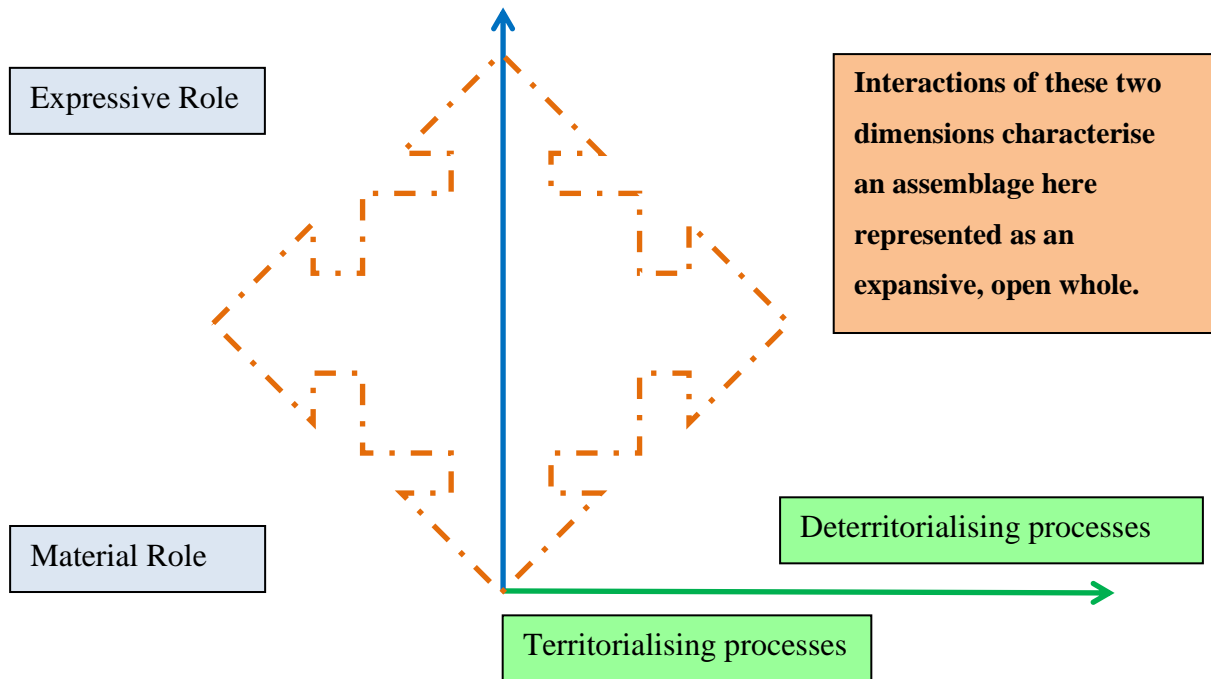


Figure 3.3 Interacting dimensions of assemblages

The components of an assemblage may function materially or expressively, or as a variable mixture of both. Thus both the technologies of literacy (its materiality) and its multisemiotic resources (its expressivity) are conceived as possessing capacities that interact with each other in unique and ever-changing relations of inter-implicated movement.

Furthermore, the notion of expressivity also includes affective attributes such as desire; belief; behaviour and markers of identity (DeLanda, 2006), the ‘more elaborate mechanisms’ (DeLanda, 2006, p. 22) of subjectivity implicated in human semiotic systems. It is these that, in AT, are posited as having a catalysing, motivating force, a suggestion which opens out an explanatory space in accounting for some of the aspects of contemporary ALP. Desire, in particular, features strongly in a Deleuzian orientation to ALP and will be elaborated further in the discussion. Ontologically, the notion of catalysing effects is necessary to a consideration of those apparently unpredictable and spontaneous forces that change the character of assemblages. So in rethinking ALP, a conceptual space is created for the internal forces unique to an individual in relation to the shifting paradoxical ‘externality’ of internet networked mobile phones and semiosis.

The processes of territorialisation and deterritorialisation describe how the nature of an assemblage is rendered stable or unstable respectively by forces acting on it, whether arising internally or externally (DeLanda, 2006). These notions are key in reconceptualising ALP because, inherently, the practices and the analytic constructs that exist to theorise it are subject to stabilising and destabilising forces, as is the evolving teenage identity. Similarly, the SIA itself is constantly shifting and then settling, both literally as the embodied phone moves with its teenage owner, and as its affordances and fads mutate. For example, new instant messaging applications such as WhatsApp and BBM¹⁴ have begun to rival MXIT, and programs such as Twitter have emerged as additions to Facebook in the adolescent literate milieu. Each has likely given rise to novel elements in ALP.

Theorising adolescent literacy practices has to be able to account for typically teenage textual practices and their seemingly unorthodox semiotics. In assemblage theory, both the material and the immaterial capacities which interact are factored into the analytic processes. Therefore, for the purposes of this project's analysis, the SIA is broadly conceived as a structured 'space of possibilities' (DeLanda, 2006, p. 29) in which objects and incorporeal entities interact and produce, or constrain, teenage literacy. Such an orientation unsettles the strict dialectical relation obtaining in the sociolinguistic tradition without negating that, once emerged, assemblages nonetheless still act on and affect in enabling and constraining ways their independent constituent parts. This gives rise to an open, continuously shifting entity similarly in process with other entities at various ontological scales.

3.6.5 Assembling experience, semiosis and subjectivity

The emphasis on the relations subsisting between entities in an assemblage, rather than the nature of the entities themselves, is essential to applying the analytical force of Deleuzean thought. Such emphasis was, for him, not 'a principle, [but is] a vital protest against principles' (Deleuze, 1987, p. 55 in Semetsky, 2006, p. 4) which opens out objects of study to the constant movement of change. Subjectivity, semiosis and experience are therefore conceived as relational entities – each one an assemblage –

¹⁴ Blackberry message

in a constant dynamic of interaction with each other. This ontological move generates a conceptual space in which ‘thought and matter, therefore, as inscribed in the body, are not opposed to each other’ (Semetsky, 2006, p. 4). This perspective facilitates an account of how teenagers as subjects-in-process respond to their experiences in the material world via internet-linked, embodied mobile phones. It is a crucial line of enquiry in being able to account for the generative forces implicated in ALP ‘where the subject emerges as relations of exteriority are established among the contents of experience’ (DeLanda, 2006, p. 47).

3.6.5.1 Experience

The totality of experience is what the mind-body is able to do in collective interaction with other entities in contact with ‘the stuff’ of the material world. And the ‘capacity to exist and act is defined as the body’s power, the latter expressed by means of multiplying and intensifying connections’ (Semetsky, 2006, p. 4). From this perspective, the SIA intensifies the adolescent’s power to act in their world, amplifies and augments their experiences and enables an expansion and intensification of their connections with other entities in the assemblage. For Deleuze, whether or not the intensity of feelings, skills, connections, intentions or actions increases or decreases is crucial to a sense of being in ‘full possession of [the] power to act’ that, for him, is life itself (Deleuze, 1992, p. 269 in Semetsky, 2006, p. 22). Variations in intensity are reflected in the kinds of texts created on MXIT, Facebook and to some extent, email. Teenagers have acquired new skills that have destabilised – or deterritorialised – their literate behaviour, but not necessarily diminished it. Where there is a reduction in intensity and connection, and therefore a territorialisation or stabilisation - it is also reflected in the data, predominantly in the formal film reviews.

Moreover, the empiricist and pragmatic AT view of experience incorporates, with materiality, the pre-linguistic sensory impressions as the ground of subjectivity (DeLanda, 2006; Hughes, 2009; Semetsky, 2006). It also includes passions, habits, beliefs and values as motivating imperatives. There is then an ontological divergence from the social constructivist tradition in general, and Halliday’s SFG in particular: the dominant, constitutive role of language is unsettled. Perception, cognition and identity are not constituted solely by the mediation of experience by language; semiotic representation cannot account for the totality of generative forces

constituting texts, but is itself ‘in semiotic terms ... a relational category’ (Semetsky, 2006, p. 48).

Experience includes pre-linguistic sense impressions. It also includes Events, happenings that are subjectless and always in process, shifting in and out of the spaces between assemblages in a qualitative multiplicity. They become localised as they are experienced by individuals (Colebrook, 2006; DeLanda, 2002; Hughes, 2009; Parr, 2005; Rajchman, 2000; Semetsky, 2006; Williams J., 2008). For example, ‘to connect’; ‘to share’; ‘to pose’; ‘to like’ and ‘to friend’ are Events that have become localised in the experiences of teenagers using social media. ALP arise as Events ripple through the spaces of interaction between the assemblage of a teenager’s subjectivity and the affordances of the embodied mobile phone. Relations of exteriority exert a generative force on these, giving rise to novel forms of textual practice in the SIA: to the kinds of texts seen in the data.

3.6.5.2 Language

The choice to include SFG (see 3.3 above) as a component of an analytic framework for this study’s data set resonates, to some extent, with assemblage theory: first, it emphasises the importance of experience; second, the organisation of grammar around social functions is explicated by rigorously systematised terms of description: the combinatorial power of language is accounted for (Halliday & Matthiessen, 1999; Halliday, 1996; 1984). It therefore plays a crucial role, at one level, in analysing the data from a semiotic perspective. However, it is not able to fully account for the pre-conceptual, expressive but non-linguistic sense impressions that are implicated in human semiosis. Ontologically, it departs radically from these, asserting instead:

That the conception of ‘knowledge’ as something that exists independently of language, and may then be coded or made manifest in language is illusory. All knowledge is constituted in semiotic systems, with language as the most central; and all such representations of knowledge are constructed from language in the first place (Halliday & Matthiessen, 1999, p. 3).

Further, debating the relevance of other linguistic theories (Chomsky, 2002; 1965; Jackendorff, 1990; Pinker, 2007b) to the analysis of the data is not the purpose of this

discussion. It would unnecessarily complicate, rather than open out, new conceptual ground for accounting for ALP.

An ontological move, however, that posits the role of language (and possibly other semiotic systems) as that of exponentially augmenting, rather than construing, human experience and subjectivity (DeLanda, 2006; 1997) creates a more experimental space in which ALP might be explored. Both the materiality and the intangible yet expressive generative forces that interact in the SIA then become available as concepts in accounting for features of the data. In such a Deleuzian shift, the intensity of these intangible qualities encountering each other, and the capacities of other singularities, bodies and Events, become a creative force: the power of life itself, the power to act and become: ‘there is a profound link between signs, events, life and vitalism’ (Deleuze, 1995, p. 143 in Semetsky, 2006, p. 86) such that it is ‘intensity that makes a life vital’ (*ibid.*)

To reiterate: in AT, language is one among a variety of sign systems through which both the inner lived worlds of individuals and their outer sensory encounters with the world, are mediated into consciousness, actions and habits. AT thus assumes a pre-linguistic intelligence (DeLanda, 2006). Real and immediate intuitions and impressions – sub-representative intensities – are connected with conscious conceptual information. In bringing these together as two terms in a logical relation, new possibilities of being and knowing emerge. Communication, memory and association act as synthesising powers that bring the ontological possibilities of desire, intuition, insight and imagination into relationship with the physicality of the material world. This opens out pathways – lines of flight – that structure the emergence of completely new entities. In the Deleuzian lexis, this is known as the logic of sense (Colebrook, 2006; DeLanda, 2002; Hughes, 2009; Rajchman, 2000; Semetsky, 2006; Williams J., 2008) and is a key methodological move which strives ‘to bring into being that which does not yet exist’ (Deleuze, 1994a, p. 147 in Semetsky, 2006, p. 33). Bringing language and experience together then, a Deleuzian orientation positions semiotic reality as ‘the totality of experience that emits signs [where experience] is the milieu that ensures that things are had prior to becoming known’ (Semetsky, 2006, p. 40). The linear dialectic of the linguisticity of experience is thus disrupted to enable the imperceptible and immaterial structuring complexities to be brought into analytical play in theorising adolescent literacy practices.

To apply this to the data: the internal world of teenagers is brought into relation with their sensed, experienced, sign-filled outer world via the mediating processes and semiotic systems implicated in the SIA. What they hear, see, say, and do, all that happens to them – the totality of experience emitting signs for their interpretation – interacts with their inner sensations and intensities, their desires and imagination. Running through all of this in a dynamic dance of chance localisations are Events, happenings that erupt or irrupt against assemblages. Mitigating against the effects of chance is a perception of the power of the SIA: teenagers experience some sense of being able to govern, to mediate, and to some extent control, the ‘brute facts of experience’ (Semetsky, 2006, p. 29). The SIA renders the world, for adolescents, a playground of desire and compositional resources, suffused with possibilities for acting on their curiosity; their passions; their interests and their experience in relation to their subjectivity-in-process. The texts created in this playground emerge as contemporary adolescent literacy practices.

Using AT therefore enables a multi-scaled view of ALP. There are multiple assemblages interacting synchronistically that give rise to the kinds of texts evident in the data. These texts are themselves assemblages. Crucially, each assemblage has both material and expressive components that function to either stabilise or destabilize it via processes of territorialisation or deterritorialisation. For example, an adolescent’s sense of themselves has embodied and affective dimensions; an IM conversation, as an assemblage (DeLanda, 2006), involves the materiality of the body in contact with technologies of literacy, and the expressive resources of semiosis and affect. How conversations happen have been destabilised by the affordances of the SIA interacting with feelings and desires of teenagers. Therefore new forms of semiosis have emerged that are momentarily stabilised ways of conversing.

3.6.5.3 Breaching boundaries: Subjectivity as object

The development of human subjectivity is inextricable from processes of experience and communication. Crucially, a Deleuzean ontological stance to subjectivity as collective encounters with the world asserts the mutability of boundaries: the Outside and the Inside are interrelated. There can be no dichotomising, rigidifying split between human mind and the body moving through and interpreting its world; signs and signified are inter-implicated. Inner sub-representative intuitions, sensory

impressions and semiotic representation interact continuously and recursively upon one another: affects, percepts and concepts emerge as thought (Semetsky, 2006). Product and process are not separate. But dynamic processes of becoming reassert themselves as the components and capacities of various assemblages reverberate throughout a multiplicity. So adolescent subjectivity is conceptualised within this framework as an ‘open ended process-structure’ (Semetsky, 2006, p. 53), an assemblage interacting with many other assemblages. In this view, the world and a person’s experience of it are inextricable:

The dynamic of the process is enabled by continuous, recursive and self-referential interactions that defy an absolute dichotomy between such binary opposites of modern discourse as objective reality and subjective experience, facts and fantasy, profane and sacred, private and public, thereby overcoming a ‘process-product objective-subjective split’ (Doll, 1993, p. 13 in Semetsky, 2006, p. 53).

From this perspective, private adolescent subjectivity becomes concurrently public object. This notion is useful in accounting for the ways in which teenagers deliberately objectify how they portray themselves on social media. Such an objectification in turn becomes available for processes of semiotic representation in the SIA in a continually recursive and self-referential series of feedback loops circulating in a multitude of networked interactions. Subjectivity becomes a component of the internet/WWW’s objective resource reality. Profile pictures and personalised ‘statuses’ – publically displayed individuating comments reflecting an aspect of subjectivity – become the objects of other people’s experience. Similarly, the lived moments and emotions of a teenager’s day become the object of many instant messaging conversations: processes of living converge with resources and products of expression.

What is also clear is the ease with which the distinction between private and public is blurred in this new subject-object space of the social-informational assemblage. It is in this other-worldly zone between older stabilised boundaries and differently emerging material-expressive assemblages that newer forms of adolescent subjectivity ceaselessly arise. It is here that:

Subjectification means the invention and creation of new possibilities of life by means of going beyond the play of forces; as such the subject becomes constituted in the process (Semetsky, 2006, p. 16).

The inter-spiralled texture of whom teenagers perceive themselves to be, what they experience, and what they communicate is central to the emergence of new forms of becoming as expressed in adolescent literacy practices. Conversely, the practices of literacy in pedagogic contexts are more closely aligned with stabilising, static and dichotomised processes and products which preclude the dynamism and expressivity of the SIA. In a paradoxical literal-figurative sense, school is no longer the alternative space to home in which their subjectivities are constructed. The SIA both bridges and splits these spaces, a contingency which is strategically managed by adolescents as they move in and between different actual and online worlds. The semiotic, stylistic and lexical variation of the data in this study is suggestive of how this paradox is reflected in the diversity of texts teenagers are able to create. It also suggests that there is a multiplicity of networked self-organising systems (DeLanda, 2002; Hughes, 2009; Semetsky, 2006) operating in the textual landscape, not merely miasma of semi-literate chaos.

3.6.6 Desire: A generative intervention

Desire as a key concept, deeply influenced, even derived from the ‘pure’ disciplines of physics and mathematics, was reworked by Deleuze to yield a highly flexible system of thought that is intentionally productive across many disciplines so that:

Informed by the seemingly abstract notions of multiplicities, flows, arrangements, and connections, the analysis of the relationship of desire to reality ... yields answers to concrete questions (Foucault in Deleuze & Guattari, 1977, p. xii).

A Deleuzean view of desire sees it as a generative force that enters into and comes into the middle of the world of everyday life; it is an active, positive force rather than a reactive negative one (Semetsky, 2006). For Deleuze, ‘desire produces reality’ (Semetsky, 2006, p. 56). Desire arises in the midst of absences, in the gap between

what is and what is possible, or what is perceived as a need or a longing. It is a force emerging from disequilibrium. It thus establishes lines of movement between the components and capacities of an assemblage. This is especially characteristic of entities that exhibit, to some extent, properties of a self-organising system (DeLanda, 2006; 2002; Semetsky, 2006). Such properties are evident in the internet/WWW as a whole, and among the social networks interlinked in the SIA.

New entities come into being along these lines of movement – deterritorialising lines of flight. Desire implicates ‘the entire surroundings which it traverses, the vibrations and flows of every sort to which it is joined and in which it introduces breaks and ruptures’ (Deleuze and Guattari, 1987, p. 30 in Semetsky, 2006, p. 56).

Adolescents’ worlds are suffused with desire and longing. Events and experiences flow in a ceaseless, rippling zone of movement, both material and expressive, as the gaps between things had and things desired are traversed. They and the things in their worlds are immanent to them as semiotic resources. Their mobile phones are immanently implicated in this zone of ontological and actual movement. Language traces the paths of these deterritorialising lines of flight, itself breaking open to show the blurring of semiotic boundaries:

The language of expression ... comprises heterogeneous levels and is unstable, described by ‘style [that] carves differences of potential between which ... a spark can break out of language itself, to make us see and think what was lying in the shadows around the words, things we were hardly aware existed’ (Deleuze, 1995, p. 141 in Semetsky, 2006, 63).

3.7 Conclusion

It is the ‘sparks’ that have broken out of language in adolescent literacy practices that motivated the search in this study for ‘what was lying in the shadows around the words’. Using Deleuze’s philosophy as a refractive analytic device splits open the field of forces and entities immanent to the pulsating, ever in process, habits of meaning making used by adolescents within the social-informational assemblage. The theoretical framework has, in a very Deleuzian way, been created from within the object of its own study. Examining ‘what is’, ALP as a qualitative multiplicity

forced a destabilisation of received analytic constructs to reveal some of the structuring singularities in process with each other.

CHAPTER 4: RESEARCH METHODS

4.1 Introduction

Bassey asserts that, within the interpretive research paradigm, ‘categorization is a dangerous game’ (1999, p. 64). Academic rigor, however, demands that an attempt is made at locating a particular study within a clearly conceptualised framework of acceptable research method. This study is a ‘study of singularity’ framed as a case study (*ibid.*, p. 47) and relies on empirical research for its academic integrity. The singularity under study is the adolescent literacy practices (ALP) and the texts these generate of a cohort of twelve teenage girls.

Within this broad category, there are multiple variables, such as literate experience; schooling; socio-economic situation; access to technology; language and affective issues that will be considered (Babbie & Mouton, 2001, p. 281). An investigation of these issues in one particular South African context might be shown to be ‘typical of something more general’ (*ibid.*, pg. 62). However, this is not to claim a principle of generalisability for this case study.

4.2 Classifying the study

This study is defined as a micro-ethnographic, descriptive case study. It is necessary to locate this definition within the field of education: this is both a study in educational research and a study of a discipline in an educational setting (Bassey, 1999, p. 39). The rationale informing these distinctions will be elaborated below.

Although generally pertinent to this study, Cohen and Manion’s definition of a case study as the observation of an individual unit of analysis’s characteristics to reach a deep understanding of phenomena (Cohen and Manion, 1989, p. 124-5 in Bassey, 1999, p. 24), it is not as precisely relevant to this project as Yin’s ‘technical definition’ (in Bassey, 1999, p. 26)

Yin defined a case study as an ‘empirical enquiry that investigates a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and context are not clearly evident’ (in Bassey, 1999, p. 26). This is

useful when considering adolescent literacy practices as the phenomenon under study, and the real-life context as the apparently seamless in-school/out-of-school world afforded by the embodied use of digital technology. The mobile phone has created a situation where phenomenon and context are hard to separate.

Yin goes on to distinguish three further features of his technical definition, which are salient to this study: He asserts that a case-study inquiry:

- (1) Copes with the technically distinctive situation in which there will be many more variables of interest than data points;
- (2) Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion; and as another result,
- (3) Benefits from the prior development of theoretical propositions to guide data collection and analysis (in Bassey, 1999, pp. 26-27).

The cross disciplinary nature of studying adolescent literacy practices is characterized by a diverse array of variables of interest which the researcher has had to take care to contain in designing data collection methods. Yet, at the same time, careful planning is needed to ensure that sufficient sources of evidence are collected, and that they do ‘converge’ to yield credible analyses. Methods for this will be elaborated below. The ‘theoretical propositions’ that will guide data collection and analysis are drawn from ethnography; sociolinguistics; multimodality; multisemiotics; functional linguistics; and cognitive linguistics..

I have used the term ‘micro-ethnography’ to describe this study (Bassey, 1999). In calling it ‘ethnographic’, I am drawing on what Goetz and LeCompte (1984, p. 7) refer to as an ‘archetypal construct’. By focusing on the emphasis that ethnography places on ‘qualitative methods; validity of results; holistic analyses of phenomena, and process variables’ (*ibid.*, p. 7), they make a broad distinction between ethnographic research and positive studies. This broad distinction becomes more particularly applicable to this study in their elaboration on the intention of ethnographers: “[it] is the generation, clarification, refinement and validation of constructs” (*ibid.*, p. 9) related to a particular phenomenon or phenomena. In studying the phenomenon of adolescent literacy practices, my intentions align with typically ethnographic orientations to research.

However, while this study is ethnographically oriented because it relies on the tradition of the researcher as participant-observer, and the desire to understand subjects' actions from their perspective (Durrheim, 1999; Neuman, 2000), it cannot be described as an ethnography in the traditional sense because there are two critical limitations. First, the extent to which I am a participant in the literate lives of adolescents is problematic. Clearly, I am not an adolescent; my role as teacher-participant is only as a part of the overall research context in which I engaged in frequent interactions with the research subjects (Radnor, 2001). However, that I am inextricably implicated in the emergence of one type of literacy artefact, the film review, complicates this view that I am not a participant. What is clear is that I am not an interlocutor in instant messaging, Facebook and email conversations. Although, some subjects did communicate with me on MXIT: this provides a contextualising orientation; none of these exchanges is included in the data set.

The second reason why this is not a traditional ethnographic study is that it is not preoccupied, over a long period of residential participant-observation, with 'the interpretive description and explanation of the culture, life ways, and social structure of the group under investigation' (Wolcott in Goetz & LeCompte, 1984, p. 17).

Rather, it is intensively focused on individual experience of one aspect of a particular socially constructed group characterized by linguistic, cultural, racial and ethnic diversity in a particular set of circumstances. Hence, the affix '*micro*' captures a small but important qualification to claims that this study is ethnographic.

Finally, an attempt to situate this study within a broad research paradigm is succinctly summed up by Street:

In his Introduction to ... *Ethnographies of Literacy*, Baynham refers to the notion of 'a third generation' of empirical contributions to the ethnography of literacy paradigm. He locates all three generations within three overarching concerns: the orientation to literacy pedagogy; the definition of literacy in a period where multimodality is salient; and the relationship between the local and the global (Street, 2004, p. 326)

These three 'overarching concerns' substantially inform this inquiry and thus locate it within this 'third generation' of ethnographic-style study of literacy.

4.3 Distinctions: Educational research or research in educational settings

Returning to the distinction between *a study in educational research*, and a study of a discipline in an educational setting (see above), the following definitions are useful: First, “educational research is critical enquiry aimed at informing educational judgments and decisions in order to improve educational action” (Bassey, 1999, p. 39). In attempting to give an account of adolescent literacy practices in a medium socio-economic South African government high school this study seeks to inform educators, possibly influence their judgment of what teenagers are doing with literacy, and point to ways in which literacy pedagogy might become more effective. By investigating individual learners’ levels of written competence in English across a variety of modes, genres and registers, it is hoped that educators might be challenged to reflect on their own methods of teaching writing in English.

Second, the definition of *discipline research in educational settings* as that which ‘aims critically to inform understandings of phenomena pertinent to the discipline in educational settings’ (Bassey, 1999, p. 39) is relevant for two reasons: 1) The phenomenon under investigation – adolescent literacy practices – is pertinent to the particular school subject discipline of ‘English Home Language’ and, 2) the phenomenon of multisemiotics in adolescent literacy practices is pertinent to the broad academic disciplines of semiotics and linguistics, which in turn, inform the discipline of teacher education in subject English.

4.4 Research context

The primary site of access to informants for the study is a well-resourced, quintile 5, girls’ only state controlled high school (Strelitzia High) in Pietermaritzburg, the capital city of the province of KwaZulu-Natal. The school is frequently still referred to by some learners and parents as a ‘white school’. This reflects lingering inequality in the South African education system. Public perception distinguishes between rural schools, township schools, former Model C schools (‘white schools’) and independent schools.

Strelitzia High is approximately ninety-two years old and prides itself on maintaining very high academic and sporting standards. It has been recognized by various sectors

of the South African Department of Education for its excellence, particularly its success in transforming the racial demographics of the school since 1994.

It is one of only a small minority of *Dinaledi* schools in the country. This indicates that Strelitzia High is a highly functioning, successful school that has ‘the threshold capacity required to benefit’ from the *Dinaledi* programme (Fleisch, Taylor & Shindler, 2007, p. 56). In terms of the profiles of South Africa’s schools, it is salient to acknowledge that the privilege which characterized Strelitzia High when it was an all-white school still applies although the school is now racially integrated. This is significant because it could reflect the best hope of the ideal of equal educational opportunity for all and the consequent growth of South Africa’s skilled, multi-racial middle class. Or, as Fleisch *et al* posited in 2007 in defence of exceptional resource allocation to *Dinaledi* schools, ‘the second line of argument in defence of a differentiated approach is that *Dinaledi* schools will provide role models for other schools to follow, and indeed, the expansion of the programme in the last two years indicates that this strategy may be bearing some fruit’ (*ibid.*, p. 66).

Accounting for adolescent literacy practices amongst pupils in such supposedly ideal schools could yield valuable insights that might make a contribution to the project of improving the quality of secondary education in South Africa.

At Strelitzia High, this possibility is borne out by the maintenance of academic success throughout the process of intense political, social and educational reforms which have characterized the past two decades: the school has had 100% matric pass rate for approximately forty consecutive years.

This is an intriguing scenario given the volume of research, predominantly emanating from the Northern hemisphere, but also from Australia, which positions learners from non-mainstream – that is non-Western – cultures as the marginalised other, usually failing to achieve educational equality when inserted or assimilated into a Western oriented educational institution. For South Africa, this would translate as the inclusion of indigenous majorities into previously all-white schools. Much of this research focuses on literacy practices, and so-called cultural mismatches between home and school, particularly with regard to debates surrounding differences between the MOI and maternal languages, and the impact these have for achievements in literate proficiency and on overall educational achievement.

Strelitzia High provides an interesting, broadly anomalous context in which to explore the literacy histories and practices of teenage girls. Furthermore, a context which excludes boys – apart from the institutional mandate for this – is also relevant to a study of adolescent literacy in particular, and educational achievement in general. Both internationally, and locally, girls remain in secondary school longer than boys, (Fleisch, Taylor and Shindler, 2007, p. 31) and exhibit a generally greater level of literate proficiency (Williams B. T., 2007; 2006).

A secondary site for this study's research draws on the out-of-school, or everyday lifeworlds, of learners. 'Site' is marked to indicate the problematisation of this concept given that the advent of mobile phones, a key component of modern adolescent culture, has unsettled the boundary between in-school and out-of-school, or the boundary between phenomenon and context. (See reference to Yin's 'technical definition' of a case study above.) Thus, digital platforms could themselves be considered a sub-component of the situational context of this study.

The learner body from which the sample is drawn is comprised of girls who come, mostly, from medium income families where the parents are professionals or engaged in commerce. However, there are also a number of families who have yet to attain this socio-economic status.

4.5 Sampling, selection and ethical considerations

My units of analysis are the individual learner and their written artefacts. The initial, opportunistic, sample comprises the sixty-two Grade 9 learners to whom I taught English in 2008.

The two classes – Grade 9Z and Grade 9Y – were differentiated by the school according to perceptions of academic ability. Grade 9Z was a streamed class of academically proficient learners comprising the four main race groups; a variety of ethnicities is represented. Grade 9Y was regarded as a mixed ability class and was not as racially and ethnically diverse as Grade 9Z. I was the English teacher to these two classes throughout 2008. I was also responsible for compiling the Grade 9 learning programme. This meant I had a high degree of control over the content, assessment tasks, and the sequencing and pacing of the learning programme.

I believe I had a good relationship with the girls in both classes and gained their trust (Radnor, 2002, p. 39). In 2007, I informed the school principal of my project and the possibility that material generated in the course of my teaching might be required, retrospectively, to be used as a platform for refining the data gathering. She gave me her consent to do this. A letter was sent to the parents informing them of my project (Appendix 27). It was explained to the parents and the learners that the work they would be helping me to do was confidential; would in no way negatively prejudice the learners' academic assessments, and, most importantly, would be completely voluntary. Eight learners elected not to participate in the research process reducing the initial sample size to 54.

4.6 Research methods

Goodson and Sikes acknowledge that, researching 'the complexity of the various aspects of school and schooling' should be, despite historical criticisms of various ways of doing qualitative research, a rigorous endeavour (Goodson & Sikes, 2001, p. xi). It is recognizing this complexity, and the need for academic rigour, that presents a researcher with the challenge of designing a range of data collection methods. These need to be sufficiently subtle and intuitive to attempt to capture the nuanced daily experiences of real people, yet also be conceptually coherent. Such 'methodological eclecticism' (*ibid.*, p.12; Goetz & LeCompte, 1984, p. 11) requires that 'qualitative research involves the studied use and collection of a variety of empirical materials' (Denzin and Lincoln, 1994, p. 2 in Goodson and Sikes, 2001, p. xi). The goal of striving for empirical expansiveness while holding in tension a clearly reasoned conceptual and ethical framework for data gathering has been a guiding principle in this study's design. A wide variety of methods and instruments were used. Further, in keeping with the Deleuzian philosophical turn the study took, it is also a nomadic enquiry (Semetsky, 2006).

4.6.1 Data collection

This study began as a dissertation-only report in fulfilment of the requirements for a Masters in Education degree. For the purposes of this present study however, a chronological distinction needs to be made between processes of data collection and data selection. There was one initial phase of data collection, analysis and selection

of an original sample of six learners. But there was a second phase of data selection: although occurring at different times, the processes of analysis used to select an additional six respondents' for this present study followed the same logic as the first selection phase with the exception of the one-on-one semi-structured interviews; the rationale for this exclusion is described below.

The original data collection consisted of the administration of three Literate Life History questionnaires (LLHQs) (Appendices 2-4) and a multi-genre writing exercise (Appendix 5) to all learners in classes 9Z and 9Y. Semi-structured interviews (Appendix 19) were then conducted with six purposively selected respondents (Babbie and Mouton, 2001, pp. 501-502; Goodson and Sikes, 2001, p. 24). No new data were gathered for this doctoral study although the set for analysis was expanded to include the writing samples and LLHQs of an additional six learners. Processes of selection will be discussed below.

No interviews were conducted with the additional six learners as it was not possible to gain access to them within the framework of the ethical clearance initially granted for the Masters degree: I had left the school in 2010. Further, interviewing the additional six girls outside of my role as their English teacher would have skewed the overall research context. As static artefacts, their LLHQs and writing samples could be consistently analysed in the same way as the original six: however, the dynamic, interactive processes of interviewing, when the girls were three years older, would have constituted an entirely new data set and unnecessarily complicated the analyses, particularly in light of new mobile technologies which have emerged, and which form a substantial strand of the analyses.

By marking my role in the research processes the fundamental centrality of the self-reflexive researcher as a 'research instrument' in traditional interpretivist enquiry is acknowledged (Goodson and Sikes, 2001, p. 10; p. 62; Plummer, 2001, pp. 205-231). Further, Eisner's three claims for the importance of the researcher as the primary research instrument are relevant. These are: discerning significance; contextualizing social phenomena, and perceiving subtlety in discourse analysis (Eisner, 1988, p. 197 in Radnor, 2002, p. 31). The implication of this is that the intuitions, motivations and ideas of the enquirer are immanent to the processes of data gathering and analysis; affect, percept and concept come together in a way that, to some extent, positions

objectivity as somewhat irrelevant to that which ultimately emerges through generative processes of enquiry (DeLanda, 2006; Rajchman, 2000; Semetsky, 2006; Williams J., 2008). But to formulate ‘recognizable characterisations’ (Giddens, 1993, p. 169 in Radnor, 2002, p. 22) of the data, some structure must be imposed.

4.6.1.1 The LLHQs: Qualitatively rich and a basis for selection

There are three LLHQs which have, in part, been used as an initial grounding for the selection of the final group of twelve subjects. The data contained in these also informs the qualitative and descriptive elements that attempt to portray the individuality of each girl as an author of a range of text types that convey nuanced aspects of her unique voice.

It might be considered misleading to use the term life history. The study of the twelve respondents ultimately selected does not constitute twelve life histories as they are traditionally understood. Yet, there are aspects of this approach which, when applied to gaining insight into the development of adolescent literate practices, provide a useful framework for data gathering.

First, is what Goodson and Sikes, acknowledging Dollard (1949,) refer to as ‘linkage’: “the life historian ‘can see his (*sic*) life history subject as a link in a chain of social transmission” (Goodson and Sikes, 2001, p. 9; pp. 17-18; p. 77; pp. 86-88), where attention is given to socio-historical context. Any study of literacy in South Africa has to take account of this. Second, is the notion of the ‘disruption of normal assumptions’ (*ibid.*, p. 7). In the case of adult perceptions about adolescent literacy, this is important. There is a plethora of assumptions linked to many facets of adolescents’ use of technology in text negotiation (Crystal, 2008; Moje, Overby, Tysvaer, & Morris, 2008) and this study attempts to unsettle these. Third, life historians traditionally analyse discourse to look for ‘common verbal patterns’ that mark members as having a particular group identity (Casey, 1993, p. 23 in Goodson and Sikes, 2001, p. 49; p. 31). Given my research focus on semiotic features of the literacy practices of teenagers as a socially differentiated group with a particular identity construction, this aspect of life history research is also useful (*ibid.*, p. 15; pp. 23-24; p. 45). Moreover, this approach has been used to accommodate the linguistic variation within the overall sample. Fourth, there is a narrative element to the Literate Life History Questionnaires, as they formed the basis for dialogue between the

learners and me which yielded valuable information beyond the concepts in the questions (*ibid.*, p. 34).

4.6.1.2 Semi-structured interviews

Goodson and Sikes view the semi-structured interview as an aspect of life history research, and for reasons cited above, I have adopted this perspective (Goodson and Sikes, 2001, pp. 27-34). The main purpose of these interviews was to narrow the focus on the affective issues related to adolescent literacy practices, and to provide an opportunity for the girls to tell their stories in relation to adult concerns around their use of literacies, both at home and at school, and within the imperceptible yet real digital space that now bridges these two hitherto mutually exclusive domains.

Interviews were conducted with only the initial six respondents selected for the Masters project (see above). These interviews were recorded with the respondents' consent. Respondent anonymity is preserved through the use of pseudonyms of their choosing.

I transcribed the interviews, seeing them as 'grounded conversations' (Goodson and Sikes, 2001, p. 28) and used this process as an opportunity to begin listening for commonalities from which a grounded framework for understanding aspects of adolescent literacy practices could inductively emerge (Babbie and Mouton, 2001, pp. 498-501).

4.6.1.3 Genre writing exercise

The exercise was administered to both classes of learners. It was designed to test their ability to control their register – of what was initially conceived as a single genre, a film appraisal – through semiotic variation. The subsequent data analyses presented in Chapters 5, 6 and 7, show that this initial conception is an example of the type of assumptions that research into adolescent literacy practices needs to interrogate.

The girls were asked to communicate their opinion of a film they had recently watched. The instructions directed them to write their paper-and-ink texts as if they were sending a MXIT instant message; an SMS; a Facebook message and an email. (Refer to Appendix 5.) Finally, they had to write a conventional film review

according to the linguistic and generic conventions they had been taught by me earlier in the year over approximately two-and-a-half weeks during April and May.

The timing of the data collection and the conditions under which it was administered are salient to the analyses that followed. Although not an examination, the exercise was administered during two sessions of the November examination period, one for each class. I was assigned to monitor these classes on two separate occasions for a two-hour study session. I was given permission to use this time to administer the genre writing exercise. During these sessions, the girls were not permitted to talk to each other or to me. Of further significance is the interval between when they had originally been taught the film review component of the task and the time the data was gathered, a gap of approximately five-and-a-half months. The film review genre had not been re-taught and the girls had not been instructed to prepare for the data collection task.

It is acknowledged as a limitation of this study that the MXIT instant messages, Facebook texts, SMSs and emails could not be captured, represented and analysed as they originated in their respective electronic formats. This points to the inherently problematic and paradoxical nature of researching ALP. Data collection is rendered ethically complex given the privacy issues: electronic texts are exchanged in milieus that depend on admission to a closed circle of interlocutors among whom certain norms and behaviours are understood to govern literate practice. Whether or not an adult teacher-researcher would be admitted to such a circle is uncertain. And practically, the very process of rigidifying, and rendering static, texts which originate in series of dynamic relays of communication is also fundamentally opposed to the ontological and epistemological considerations pertaining to the internet/WWW as a technology of literacy. Overcoming this dilemma would necessitate a deeply divergent mode of conceptualising and reporting research. Preserving the electronic integrity of data would likely require dispensing with the conventional paper-and-ink research product, a possibility fraught with obvious difficulties.

Nonetheless, the texts as literacy artefacts have been analysed by factoring in an ontological consideration of the nature of the internet/WWW in order to try and obviate their decontextualized rigidifying. It is suggested that this illuminates aspects of ALP that withstand scrutiny to yield a productive account of some features of ALP.

4.6.2 Analyses

4.6.2.1 *LLHQs*

The purpose of the LLHQs was to refine by recursive analytic processes of verification or refutation my initial, intuitive selection of respondents. My criteria for a final sample cohort of respondents were: linguistic, ethnic and socio-economic variation; diversity in academic proficiency and attitude to school; variation in attitudes to reading; evidence of anomalies that might challenge assumptions about ALP; and evidence of differing degrees of technological know-how and usage.

The LLHQs were analysed by content analysis, specifically what Babbie and Mouton usefully refer to as ‘latent content’ (2001, p. 388-389) analysis. This was instrumental in bringing together the explicit content codes imposed by the questions, and the extra information provided in the ensuing dialogues between me and the learners.

In the initial Masters project phase of data collection, the LLHQs were additionally used to inform the selection of six respondents for interviewing. The criteria were aligned with those outlined above. Where applicable, the interview data has been used in this Doctoral study. It does not form a major component of the data set as it did in the Masters dissertation.

4.6.2.2 *Multi-genre writing exercise*

The LLHQ information and the multi-genre text samples were reread in a recursive, reiterative although experimental manner. These readings were used to inform the final selection of the twelve respondents’ text sets. These have become the main data component of this study as discussed in Chapters 5 and 6.

The processes of analysis of the four different text types, although grounded in genre theory and multisemiotics, were problematic, dynamic and exploratory, emerging as I attempted to engage with the compositional variation and materiality of the texts while simultaneously accounting for the impact of the internet/WWW as it converges in mobile phones and computers. Three phases of analyses were undertaken, each with a different methodological focus. Slightly different conceptual sub-frameworks were used in Chapters 5 and 6. Owing to their specificity, they are outlined in depth at the beginning of each chapter. The intention of this strategy, rather than to describe

them in detail in this section, is to preserve the clarity of the varying theoretical and conceptual foci as each data chapter unfolds.

4.6.2.3 A multiplicity of qualities

A final phase of the data analysis was to apply a Deleuzian philosophical and ontological gaze to both the qualitative data derived from the LLHQs and the interviews, and to the literacy artefacts. This was done as an exploratory, integrative process of conceptualisation to attempt to account for the imperceptible yet dynamically generative processes suggested by preceding and more conventional multisemiotic genre analyses. A more elaborated rationale is provided in Chapters 3 and 7, again to maintain the clarity and cohesion of the overall discussion.

4.7 Concluding comments

This micro-ethnographic, descriptive case study of the phenomenon of adolescent literacy practices is both a study in educational research and an investigation pertinent to the study of English in an educational setting. This perspective allows for an exploration of the interaction between English literacy practices that are positively sanctioned in the subject English classroom, and those that a particular group of teenage girls appropriate for a range of purposes determined by them. The diverse data collected allows for reiterative processes of analysis as different theoretical and conceptual gazes are applied. Emergent from these recursive and grounded analyses is a multi-layered account of some of the ways literacy in English is manipulated across different situational contexts using a variety of semiotic and linguistic resources. Insights gained from this study could stimulate further research in different contexts and contribute to a nuanced approach of the complexities facing teachers of English in multicultural classrooms in modern, urban communities

CHAPTER 5: PATTERNS OF TEXT STRUCTURE

5.1 Introduction

This is the first of three chapters that present findings from the analyses which view each learner's texts cartographically – as maps of a territory – the contours of which emerge as successive analytical lenses are applied to the data (DeLanda, 2006; 2002; Rajchman, 2000; Semetsky, 2006). This perspective sees the texts as complex creations arising from the interaction between school-going adolescents and their subjective inner worlds and the materiality of their experiences in different contexts. The mediating functions of both teaching and, crucially, technology are intrinsic to this interaction. Implicit in this is the notion that the texts are not only static products fixed in time and space but are evidence of dynamic processes continually at work. It is the goal of this study – in momentarily capturing these texts – to uncover what these processes might be and how they are implicated in shaping adolescent literacy practices (ALP) in unexpected ways.

Processes of analyses used to derive the findings in the first two data discussion chapters originate broadly in sociolinguistics. Genre theory is applied to uncover the discourse structure of texts created in four ways: as a MXIT message; a Facebook text; an email and a film review as taught in subject English. The structures are then viewed from the perspectives of the New London Group's Multiliteracies Framework (MLFW) and analysed using select broad constructs from Systemic Functional Linguistics (SFG) and traditional linguistics. In the third chapter of data analysis, these conventional, stable approaches are opened out to an experimental mode of thinking: the texts are subjected to analytic processes which seek to look between their semiotic and structural components, to gaze between that which is repeated in the discourse structures so that:

Repetition is not the repetition of identical elements, but what functions below these elements and actually constitutes them (Hughes, 2009, p. 71).

Adolescent literacy practices are seen as the materialised, embodied actualisations of an array of assemblages continually interacting with each other.

The rationale for adopting an experimental approach emerges from the previously mentioned Masters project (Watson, 2010, unpublished thesis) in which data was analysed using traditional sociolinguistic constructs. These were developed prior to the incorporation of mobile phone technology into the adolescent literate landscape and could not adequately account for patterns emerging in the data.

5.2 Organising rationale

This section begins with exemplar structural analyses of five learners' texts summarised in tabular form. Only five learners have been used here so that the reader's initial encounter with the data and its analyses provides a succinct and clear introductory overview which is extended in subsequent chapters and in the Appendices. The exemplar analyses are followed by methodological and theoretical justifications for the extended tabular analyses. The intention of this is to set forth a range of examples from the data which clearly show the extent to which learners vary their writing across the four different text types, to allow the data to 'speak for itself' before the researcher's interpretations are applied. The rationale for the analyses is then set out in section 5.3 and in Tables 5.2 and 5.3. The overall discussion of the findings begins with section 5.4. Initially, to provide an illustrative focus on variation across the four different text types, Learner 22's (Pamela U) texts are discussed relative to the other four learners' texts.

In most cases, the extracts from the texts in the tables are abbreviated but Appendices 6-17 present the fully transcribed original texts of each learner: the MXIT conversation; the Facebook message; the email and the film review. These texts attempt to replicate as faithfully as possible elements of design. All errors, corrections and omissions are retained. In the Appendices, each learner's text set is followed by a table of structural analysis of the text as per the exemplars included in this chapter.

The complete list of learners is given below, with those presented in this chapter highlighted in blue.

Table 5.1/...

1	L10	Jane S	Appendix 6
2	L19	Nancy P	Appendix 7
3	L22	Pamela U	Appendix 8
4	L27	Justine T	Appendix 9
5	L31	Charlene B	Appendix 10
6	L31	Tegan H	Appendix 11
7	L38	Nosipho Z	Appendix 12
8	L39	Sindiswe N	Appendix 13
9	L41	Zinhle N	Appendix 14
10	L55	Nandi M	Appendix 15
11	L56	Michelle M	Appendix 16
12	L57	Anne M	Appendix 17

Table 5.1 List of research subjects

The exemplar texts of Nancy P; Pamela U; Charlene B; Zinhle N and Anne M are each presented separately on the following five pages. L22's texts are given first because they are the most structurally and semiotically uncomplicated; they are therefore an effective introduction to the data and the methods of analysis used in this chapter.

Learner 22's text structure table/...

L22: Pamela U: Death at a funeral: Texts 1-3











Text	Greeting	Appraisal	Recommendation	Response Invitation	Farewell
MXIT	Hey my lunatic!	i wchd this gr8 movie 2day n i cnt w8 4 u 2 c it! i was rofl ¹⁵ ! its cldd Death @ a Funeral	n i thnk that ull luv it	Hope dat ur well!	Lotsa loony lv, Pamela :-)
Facebook	Ola Amigo!!! Hws life going my loony pal?	Just wanted 2 tell u bout this coolio movie that I wchd this weekend. Its cldd Death @ a Funeral and its one in a million!!! I havnt laughed so much at a movie in AGES!	Pleeeeeeeze, watch it!	Call me once u've seen it cos I wanna knw what u think.	Check u l8a my moose! =) =) =) =)
Email	Hey my partner in crime!	Just wanted to let u know about this awesome movie that I just watched. It's called 'Death at a Funeral'	And it'll have you gasping 4 breath it's so funny! It's a british comedy that does lunatics like <u>us</u> very proud, haha.	Call me as soon as u've seen it!	Keep well MK! =) Lotsa love Ickle Pickles =)

Text 4: Film review

Banner Text	Detailed Appraisal	Recommendation
Death At A Funeral: A unique comedy that will have you gasping for breath.	It is not often, in todays society ... movies many qualities.	I truly rate this the must see for the season!

¹⁵ ROFL: initialism for Rolling On Floor Laughing

L19: Nancy P (*Nix*/You): High School Musical 3: Texts 1-3

Text	Greeting	Appraisal	Recommendation	Response Invitation	Farewell
MXIT	<p>*Nix*:U will never guess wat my new fav mvie is??  (excited face)</p> <p>Sweetie pie: Wats it now?</p> <p>You : HIGH SCHOOL MUSICAL 3 !!!!! Im inlv wit it!!  (inlove face)</p> <p>Sweetie pie: How was it? I've been dieing 2 watch it?!</p>	<p>You: U wil love it they r all so grown up and mature. Da music is awsum exept 4 1 song ... zac does 4 her in da movie r so nunuz</p>	<p>Sweetie pie : R u being serious it sounds lyk a gr8 movie we 2 go watch it 2getha </p> <p>You : O! most def!!  (happy face)</p>	<p>You: ... Now I know wat u cn buy me 4 my bday!!  (goffy face)</p> <p>Sweetie pie : Na wats dat?</p> <p>You: Da high school musical CD  !!!! (excited face)</p>	<p>You: [...] luf u Gtg bye mwa.</p>
Facebook	<p>Hey Hey ... Hello pap How u been??</p>	<p>well I watched da 3rd 1 and I am inlv wit it. Its da best movie eva . Its my fav movie ... its so romantic</p>	<p>[You must def go d c it, u wil enjoy it so much]</p> <p><i>[Embedded in appraisal stage]</i></p>	<p>Let me knw if u wana go watch it I'll come wit .</p>	<p>Chat lata MWA Nan</p>
Email	<p>Hello my dearest sister  aka big sis </p>	<p>OMG!! Milsi u have got 2 watch High School Musical 3 ... it was the perfect ending 4 them!</p>	<p>I def recommend u go nd c it!!</p>	<p>I wil def come wit u again 2 c it!!:) </p>	<p>Miss u nd love u lots Love ur lil sis!! </p>

Text 4: Film review

Banner Text	Detailed Appraisal	Recommendation
High School Musical 3	This movie is the best movie anyone ... all going on to bigger and greater things in their future.	Spoil your children and take them to go watch it.





Indicates structural functions overlap in shared realisations



Indicates one structural stage embedded in a previous one

L32: Tegan H (Me): Broken Promises: Texts 1-3

Text	Greeting	Appraisal	Recommendation	Response Invitation	Farewell
MXIT	<p>Me: Awe cuz ☺</p> <p>Tazzy: Jas, hw u nw?</p> <p>Me: Hai me im luka n u?</p> <p>Tazzy: I'm topz wnj?</p> <p>Me: I jst klaar wm n u?</p> <p>Tazzy: Awe luka im jc wmuw?</p> <p>Me: Urhmmm</p> <p>Broken promises u watchd it?</p> <p>Tazzy: Nah bt I heard of it, it it luka tmbi?</p>	<p>Me: Yoh u haven't watchd dat muvee hai cuz wher u been ay bt ja hah it is luka joh it's a ful rip ... she neva vrek</p>	<p>Me: [...] ill vys u wen u cum blom by ma house</p>	<p>Me: [...] ill vys u wen u cum blom by ma house</p> <p>(Refer to L32 in Appendix 11 for Tazzy's response)</p>	<p>Me: [...] g2g mwah</p> 
Facebook	<p>Hey chana</p>	<p>I'm just updating you on dis l awesome muvee ... and losing custody of her child how sad</p>	<p>maybe we can watch it again</p>	<p>maybe we can watch it again</p>	<p>love u </p> <p>Chow Your chana</p>
Email	<p>Hola Hops Tazzy Ay you know what? Hai I bet you don't well then let me tell you isn now this weekend I went to watch a movie with Kelly 😍</p>	<p>[Subject: The best movie ever]</p> <p><i>Embedded as subject line</i></p> <p>Right the movie was about ... and she lost custody of her child.</p>	<p>but when you we visit we can hire it and watch it together k</p>	<p>but when you we visit we can hire it and watch it together k</p>	<p>Mwah Teegz</p>

Text 4: Film review

Banner Text	Detailed Appraisal	Recommendation
HUMOUROUS CINEMATIC TREAT AND GOOD ENTERTAINMENT	This humorous film I think that it is a very sad but funny film.	-----



Indicates structural functions overlap in shared realisations

L41: Zinhle N (Hotwings): Stomp the yard: Texts 1-3

Text	Greeting	Appraisal	Recommendation	Response Invitation	Farewell
MXIT	<p>(me)Hotwings>> Aweness, ystrdae I wnt 2 da mall 2 watch STOMP THE YARD!! ☺</p> <p>Drumstick>> Ayoba gal, hw was it?</p> <p>(me)Hotwings>> It ws da best dance film I hv eva seen, da dance mvcs wre just 2 HOT!!! ☺</p> <p>Drumstick>>Really? I wish I cud hv gone 2 watch it ☺</p> <p>(me)Hotwings>> Lol. Gal u missed out ...</p>	<p>(me)Hotwings>> > It ws da best dance film I hv eva seen</p> <p>Embedded interlocutor's questions and prompts effect a progression through the Appraisal as a function of turn taking</p> <p>... Da stryline out of 10, 5 and da moves 20!! ☺</p>	<p>(me)Hotwings>>Lol. Gal u missed out</p>	<p>(me)Hotwings>> Y dd u log out? :-x</p> <p>Drumstick>>crk crk ... its Thabo my bby bro</p> <p>(me)Hotwings>> Watever – so wat r u doin?</p> <p>Drumstick>>JC</p>	<p>(me)Hotwings>> Oh well g2g</p> <p>Drumstick>>Shot – chat l8er!!</p>
Face Book	<p>----- [A post on her wall therefore not addressed to one specific person]</p>	<p>Just watched STOMP THE YARD and it was amazing ... and competing with other dancers.</p>	<p>To all wannabe's of hiphop this movie is 4 u!!</p> <p>Go watch it and learn the dance moves.</p>	<p>Check out these cool pics of the dancers, actors [pics of the cast of STOMP THE YARD]. Enjoy reading my wall hope u will go and watch STOMP THE YARD!!! <u>ASAP</u></p>	<p>-----</p>
Email	<p>HHola lumkz</p>	<p>Just watched STOMP THE YARD “its out of the door”... made me glue to the TV screen.</p>	<p>Thanx 4 telling me abt watching this phenomenal movie, it will really help with our little club “The Phenomenals”.</p>	<p>Please email me back your response!!! [pic of stomp the yard battle scene]</p>	<p>-----</p>

Text 4: Film review

Banner Text	Detailed Appraisal	Recommendation
<p>NEW HOT DANCE FILM !!!</p>	<p>This phenomenal dance film ... who are into stomping and krumping.</p>	<p>This new hot dance film will rock your world and will keep you glued to the screen so you must go and watch it, its worth spending on. I personally loved it the set was magnificently designed and filmed and will capture you from start to end.</p>

← - - - Indicates one structural stage embedded in a previous one

L57: Anne M (\$p!R!t): A Walk to Remember: Texts 1-3

Text	Greeting	Appraisal	Recommendation	Response Invitation	Farewell
MXIT	<p>\$p!R!t...: Hey! My frnd, I jus saw distly depressin film 😱 cried lyk a bby ... (sigh)</p> <p>b@b@yZ: Gosh! Hre we go agen. tok 2 me sis wam 😊</p> <p>\$p!R!t: Itz cald a Walk 2 rememba.</p>	<p>\$p!R!t: Itz cald a Walk 2 rememba. C, dis chick ... n then ... she ...dies 😞</p>	-----	<p>b@b@yZ: N then?</p> <p>\$p!R!t is now grumpy</p> <p>\$p!R!t: N then ... wel datz it 😊</p> <p><i>[Interlocutor prompt for further Appraisal; does not effect progression]</i></p> <p>b@b@yZ: O ... ryt</p>	<p>\$p!R!t: k g2g. duty callz. Cxx C u at yoof 2nyt.</p> <p>\$p!R!t is now offline</p>
Facebook	-----	<p>Just saw this total gem of a film ... do you have any Twin Savers on hand? LOL</p>	Enjoy! ←	<p>Click on this link [YouTube clip] to check it out.</p> <p><i>[Embedded in Appraisal]</i></p>	→ Enjoy!
Email	<p><i>[Start of message: as if in response to previous email]</i></p> <p>No ways! That's like a whole years allowance! Besides, I did way more than just gawk at shoes. I saw this total tearjerker called A Walk to Remember. Let me tell you mon amie,</p>	<p>I ain't never cried like that ... It's sad how it ends really. Many a mascara ran today.</p>	You should really go see it.	Promise you won't regret it	Toodlez!

Text 4: Film review

Banner Text	Detailed Appraisal	Recommendation
-----	It is rare in the film industry to see teen movies of good quality. ... their stellar performances must be commended.	This film is bound to be a classic feature in your DVD collection.



Indicates structural functions overlap in shared realisations



Indicates a dependent or independent connection between stages



Indicates one structural stage embedded in a previous one

5.3 Deriving text structure

Martin and Rose (2003) describe genre as a ‘staged, goal-oriented social process’ (p. 7). Emerging as it does from SFG and informing in part the development of the MLFW, this construct is integral to the preliminary stages of the data analysis. It is also an underpinning framework for the pedagogic practices that were used by the researcher to teach the formal film review component of the data. There is thus a degree of synchronicity between the context for the data gathering, the data itself and the methods used to analyse it. Importantly, as previously mentioned, there is also a disjunctive analytic rupture introduced in order to open out new lines of thinking.

In genre theory, the interstratal relationship between the extra-linguistic dimensions of Contexts of Culture and Situation, and how these are realised in different levels of language and organised around the three metafunctions of language, enables a systematic method of identifying patterns of structure in texts (Martin & Rose, 2003). These patterns are then deconstructed and separated out into stages or phases within the text as a whole (cf. Unsworth, 2001). To the extent that these patterns are coherently present, the text can be identified as a particular genre that either does or does not achieve its social and communicative purpose.

In identifying texts for detailed pattern analysis, a broadly representative sample of twelve was selected from a complete set of fifty-four responses. Several initial selection criteria were used: 1) maximum response in terms of the four different text types required by the research task (see Appendix 5); 2) degree of semiotic diversity as a representative variable of the entire sample; 3) variation in literate proficiency and academic achievement; 4) variation in attitude toward reading and writing; 5) ethnic and linguistic diversity (refer to Chapter 4).

These twelve learners’ texts were then scrutinised in detail with the point of departure being the constraints imposed by the design of the research task itself. This initial process immediately revealed levels of complexity and dynamism that were anomalous relative to the specifics of the task. However, patterns of text structure did emerge.

5.3.1 Distinguishing genres

One of the key distinctions made in genre theory is that between culturally specific spoken and written genres (Martin & Rose, 2003). A genre is defined as a type of text ‘that enact[s] various types of social contexts’ (Martin & Rose, 2003, p. 7). An aspect of social context common to all types of texts specified in the research task was that of ‘watching a movie’ and recounting that experience. There is no distinction made between writing and speaking: clearly all texts are written.

Along the Interpersonal dimension, parameters were set for the MXIT and Facebook texts: social intimacy was a requirement. None was given for the email, and the film review relied on the conventions of writing for an anonymous implied audience as had been taught in subject English some six months prior to the time of data gathering. Only this last text type had been overtly taught as a particular genre with compulsory and optional structural moves and lexico-grammatical patterns. Significantly, however, these moves were not labelled and taught as they are in the above data samples.

The generic distinctions that were made in the research task (Appendix 5) were those between a ‘message’ and a film review. Within the ‘message’ category, the instructions distinguished between three electronic software formats in the order of MXIT, email and Facebook. They also acknowledged the use of other semiotic modes and encouraged the respondents to remain as true to their use of these electronic formats as possible. For the film review, the learners were reminded to write as they had been taught. In terms of genre theory, only one Experiential metafunction is commonly specified (*a film that you have really enjoyed watching recently*). These loosely framed parameters allowed for the emergence of patterns of text structure that originate with the learners themselves and are elaborated below. For ease of reference, the MXIT, Facebook and email texts will be referred to as Texts 1-3 or the electronic texts.

5.3.2 Discerning textual stages as patterns

5.3.2.1 Analysis and categorisation

Drawing on genre theory, the functions of different stages in the texts have been identified as follows:

1. Greeting
2. Appraisal
3. Recommendation
4. Response Invitation
5. Farewell

The functional criteria used to differentiate between these stages in the electronic texts are described in the following table:

Greeting	Appraisal	Recommendation	Response Invitation	Farewell
<p>Initiates communication between interlocutors.</p> <p>Establishes an interpersonal connection.</p> <p>Can immediately signal an online presence in synchronous time and is an invitation to communicate.</p>	<p>Conveys attitudes and recounts discrete aspects of the film particularly salient to the writer.</p>	<p>Suggests that the experience of watching the film should be shared; there is benefit to watching it.</p>	<p>An invitation to one interlocutor or a collective to respond to some aspect of the shared experience or to a query.</p>	<p>Signals the end of the message.</p> <p>Also signals withdrawal of online presence.</p> <p>Conveys affect.</p>

Table 5.2 Table of criteria for differentiating stages in electronic texts

Similar analytic processes were applied to the film review. Three stages emerged as a structuring pattern:

1. Banner text
2. Detailed appraisal
3. Recommendation

The functional criteria of these are given below in Table 5.3.

Banner Text	Detailed Appraisal	Recommendation
A type of headline: functions to capture the reader's attention and suggests the genre of film being reviewed.	Conveys attitudes and recounts details of the film with regard to plot; acting; themes and other salient features. Is an evaluation of the quality of the film. Includes elements of personal response.	Comment on the worth of the film relative to particular audiences. Attempts to guide the reader in relation to the film.

Table 5.3 Table of criteria for differentiating stages in film reviews

5.3.2.2 *Applying the categories*

The first clear pattern to emerge is that structurally, the texts vary along a continuum from written speech (MXIT) with clear conversational turns to texts with some conversational elements (Facebook and email). Some of these are directly facilitated by the affordances of the electronic medium, channel and technologies on which they are enacted.

The second pattern to emerge in the analysis is that the texts vary in register; this would be expected given the conversational nature of the electronic texts relative to the film review, and differences between participants. However, the learners have organised their texts according to register in a different order from that specified in the task instructions. The degree of formality shifts along the continuum from MXIT to Facebook, email and film review. In the instructions, they were asked to write the email after the MXIT text. This register shift forms the basis of the discussion on semiotic variation in Chapter 6.

The third pattern to emerge is that the three electronic texts share similar structural phases to enact the Experiential metafunction – to construe experience (Martin & Rose, 2003, pp. 66-109). Given that it is not within the scope of this study to undertake a complete and detailed SFG analysis of the texts according to each of the three metafunctions, the boundaries of these categories are not absolute but are intended only to point to functional patterns of stages within the texts. The researcher's experience in teaching and applying genre theory – particularly in the

ways that the three organising metafunctions of language operate together in texts – is therefore used as the initial guiding analytic framework.

Moreover, SFG does not have analytic constructs that can account for the materiality of functions simultaneously effected by different stages of text creation; for example, establishing an online connection between two individuals' mobile phones (refer to the Greeting in Table 5.2). So the purpose of the present analysis is to focus on the adolescents and their practices as pioneering authors of novel texts in the social-informational assemblage (SIA) in which they are implicated. It is also to create a productive space in which actual practices that lie outside the parameters of existing formal theories are allowed to emerge as aspects of ALP.

5.4 Applied perspectives on patterns of text structure

5.4.1 Introductory overview: An exemplar analysis

From a pedagogic perspective, the texts produced by learner 22, Pamela U, are the most successful: they represent an ideal of adolescent literacy practice that resonates strongly with claims that teenagers are not unaware of the contextual demands on linguistic choice (Crystal, 2008). Further, they also resonate with the claims made for the power of Multiliteracies Framework as a pedagogic practice (New London Group in Cope & Kalantzis, 2000).

Pamela demonstrates a high degree of control over both the sequencing of her texts' stages, and the shift in register across the different text types. None of the stages of her texts is missing or is embedded in any other; each fulfils its function in progressing the purpose of the texts toward their conclusion. In MLFW terms, Pamela has used a variety of *Available Designs* in processes of *Designing* to create *Redesigned* texts.

In SFG terms, Pamela has successfully negotiated particular meanings from within the Ideation Base available to her, including emoticons. Her linguistic choices relative to Contexts of Culture and Situation are regularised around the appropriately realised Experiential, Interpersonal and Textual metafunctions. The shifts in orthography and

register across the different software applications further demonstrate an awareness of these as variables in the Context of Situation. There is a high degree of cohesiveness in all her texts: they are entities with a stable – or territorialised – identity. It is relatively easy to classify texts 1-3 as belonging to the same genre, with the formal film review representing the successful transition to writing a conventionally acceptable genre in standard English.

Based on these apparently ideal literate accomplishments, it would be tempting to assume that Pamela is the learner with ‘the best’ linguistic and literate skills. The data does not support such a simplistic conclusion particularly in relation to the ethnic and linguistic diversity represented within Strelitzia Girls’ High School: English is not only the medium of instruction, but is taught to all girls as a Home Language rather than as a First or Second Additional Language (FAL/SAL). This places unique demands on the many learners who are multilingual in the home and which are represented in the complete data set.

In addition, relative to the data sample as a whole, Pamela’s texts are atypical. She was one of only thirteen learners out of a total of fifty-four who did not write her MXIT text as a conversation. In the final sample of twelve, she is singular in this regard. The entire text is constitutive and monologic and cannot therefore be categorised as a written conversation in the same way as the majority of the learners’ MXIT texts. There are no hyperlinks to other resources in the compositional plane in any of her electronic texts. They are therefore relatively static, and do not evince any of the potential of the technology for dynamic processes of connection. There is little sense of the affordances of the SIA as a space where Events become shared as subjective experiences in processes of interaction with the subjectivities of one’s close friends and family. Simply put, there is no indication in any of the electronic texts that they could possibly be composed using anything other than paper and pen technologies. This is not the case in the majority of the other samples. It is unclear whether Pamela’s literacy practices are representative of the particular socio-cultural construct that has been defined as ALP. The implications of this will be further developed throughout the data analysis.

5.4.2 Structural stages as dynamic zones

This section will focus on each stage of the texts and discuss salient aspects relative to the interconnected theoretical constructs applied in this analysis.

5.4.2.1 *Holler! The Greeting*

5.4.2.1.1 Email

For seven of the twelve learners, the greeting in the email texts is recognisable as the beginning of an informal written message to a friend or family member (L19; L22; L27; L31; L32; L38; L41; L56) intended to reinforce the relationship and share information. Learners 10, 39 and 55 omit this stage from the start of their message: this could be because the addresses of the emails clearly indicate the recipients making it unnecessary to name them. Learner 57 is different in that, not only has she omitted a conventional greeting, but her message begins as if in the middle of a conversation: the message is constructed as her turn in an already initiated email exchange with her friend, *mon amie*. Her subject line indicates the context of her experience (*Mall hopping*) a part of which includes the film about which she wants to tell her friend.

This points to the affordances of this type of communication as enabling, at a broader level than instant messaging (IM), a flow of conversation organised around the sharing of experiences which can be resumed in asynchronous time, thus obviating the need for contextual reminders of previous correspondence. The construal of experiences through language can be permanently stored and instantly retrieved – in an electronic ‘space’, at a personal address, via the resources of the SIA as a feature of the internet/WWW. This personalised repository is thus always available as a resource for further meaning making – theoretically throughout an individual’s life. The semogenic potential of language has been intensified both by the speed at which processes can function and the scale at which an individual can access the accumulation of all their authored texts. Other semiotic modes are embedded in language in this semantic collective.

5.4.2.1.2 Facebook

Learners 39, 55 and 56 did not use Facebook. For Learners 19, 22, 27, 31, 32 and 38, their greetings suggest that they have written private messages directly to the recipients rather than as posts on the shared communal Wall, or message board. There is little to distinguish these greetings from any other type of informal written greeting between close friends or family. Learner 41 has indicated that she is posting a public message on her wall (*Zee's wall*): there is no greeting in this message which suggests, together with the overall tenor of her message, that it is intended for a general audience. Learner 57 has sent her message to three individuals. It could possibly be construed that her subject *Check this link out* functions as a kind of greeting although its imperative mood – compared with the conventional interrogative – would be unusual in a greeting. Learner 10 uses a similar strategy although she does not name recipients. Her message begins with the hyperlink [*You Tube clip*] and is therefore perhaps an implied imperative. Using this technological functionality, together with the specificity enabled by electronic addresses, is a kind of shortcut away from a traditional greeting and points to new ways of establishing a shared context that makes it redundant. It also reflects the continual connectedness that the software applications enable: learners are more or less constantly in conversation. These variables as structuring tendencies of text creation are difficult to account for using existing theories of ALP as mentioned in the preceding chapters.

5.4.2.1.3 MXIT: Is anyone out there?

Continual conversational potential is especially obvious in the MXIT Greetings which perform several functions simultaneously. As indicated in the tables, most of the Greetings comprise several turns; MXIT as an IM technology operating in synchronous time (although messages can be stored) is structured to facilitate this. A learner's online presence would be signalled by an icon indicating her availability to chat.

Learners 10, 32, 38 and 56 begin their Greetings in ways strongly reminiscent of face-to-face conversations: a general enquiry about wellbeing and then a lead into enquiries about experiences (Refer to Appendix 23, Excerpt 1 and Appendix 25,

Excerpt 1, for perspectives on greeting conventions). These are developed by the learners into an introduction to the film appraisal. Learners 31, 57, 41, 19, 27, 39 and 55 use MXIT's facility of immediacy specifically to share their response to the film they have seen. The extent to which the Greetings in many of these texts share functionality with the other stages of the overall messages points to levels of complexity that are implicated with the affordances of the technology. For example, Learner 41 embeds aspects of her Appraisal and her Recommendation within the dynamism of the exchange between her and her interlocutor.

Greetings serve to attract attention and explicitly flag online presence (*U will never guess wat my new fav mvie is?*, L19; *I juz came on 2 tl u sumthin*, L31); they establish a general sense of connection by enquiring about a friend's wellbeing or activities; they convey affect especially excitement, disgust, fear and desire. These are also indicated by the widespread use of emoticons and exclamation marks. Greetings also convey opinion (L39; L41; L55; L57). Of particular interest is the way in which some learners have structured their Greeting so that the lead into the Appraisal functions as a request for information from their interlocutor (L32; L38; L39; L56). The absence of an experience is foregrounded as a prompt for further information and opens the way for the Appraisal to develop. This points to the dynamic, processual nature of the SIA – and MXIT in particular – as enabling a unique, spontaneous kind of literacy. It suggests a level of textual sophistication within the Greeting as a mini-genre, with its own compulsory and optional stages that realise all three metafunctions of language. Moreover, the functions of the Greeting resonate with Ling's (2008) assertion that mobile communication facilitates 'forms of ritual interaction' (p. 3) that strengthen social bonds.

Learner 22, as previously mentioned, is singular in the data set in that her entire MXIT message is monologic: all the stages common to the three electronic texts are collapsed into one turn and rely on sequencing to progress the genre through all its stages. While this is a tightly cohesive text and achieves its communicative purpose as specified in the task instructions, richness and complexity of the interpersonal dimensions and affect present in the other texts is absent. She also does not use any

of the other compositional resources available as Design elements via YouTube, for example. Her Greeting is thus not like the mini-genre within the other learners' texts.

Pamela comes from a family with a very strong reading culture in English as the primary home language and in which the standard variety is privileged. At the time the data was gathered, she was a library monitor in Strelitzia High's school's media centre, saying that she *love[s] the calm atmosphere' of the library and 'often ... feel[s] that I wish I had more time to read all the books* (response to Question 5, LLHQ 1, Appendix 2). When the research task was being executed, she completed hers very quickly and then read for the remainder of the two-hour period allocated. Temperamentally then, Pamela presents as 'a model English student' in a school context: quiet; compliant and already possessing a deep love of reading in English.

As previously mentioned, it is tempting to conclude that this learner is a proficient English writer because she loves reading and that her complete, tightly structured MXIT text is evidence of this. This positions the processes of writing against a very narrow range of orthodox, standard written varieties and ignores the richness of stylistic interplay that is potentially available depending on variation in contexts traversed by the learners. Further, it arises from a territorialised view of writing which dichotomises it as either constitutive or ancillary. In today's literate landscape, writing can be both simultaneously. It can be ancillary to Events of immediate sharing; connecting; belonging; networking; reassuring and comforting as well as constituting the entire interaction in writing together with other semiotic resources. Learners who might have experienced difficulties with reading and writing, or who do not enjoy reading (L19; L27; L31; L39), can still use their expressive resources to achieve a wide variety of communicative and social functions. These could be very beneficial to their overall sense of possessing a power to act in their worlds, an intrinsic capacity to intertwine that which is external to them with that which is internal in the work of developing their subjectivity (Colebrook, 2006; DeLanda, 2002; Deleuze & Guattari, 1977; Hughes, 2009; Parr, 2005; Rajchman, 2000; Semetsky, 2006; Williams J., 2008).

Further, the data suggests that learners who have to negotiate a diversity of social, cultural and linguistic situations demonstrate a degree of control over their stylistic

boundaries which is marked, and worthy in its own right given the socio-economic, linguistic and ethnic diversity of the sample being educated in an English MOI school. Other learners who claimed to love reading are Jane (L10) who says *Its nice*; Tegan (L32) who *adore[s] learning new words*; Nosipho (L38); Zinhle (L41) who *feel[s] ecstatic* when reading for pleasure; Nandi (L55); Michelle (L56) who when she reads is *full of imagination* and Anne (L57) who describes herself as *addicted* to reading (responses to Question 5, LLHQ 1, Appendix 2). None of these learners comes from homes where standard English is the dominant or exclusive home language.

Out of the entire sample of twelve learners, therefore, only one both loves reading and comes from a home where English is spoken as a mother tongue. This is Pamela, Learner 22. Against the backdrop of diversity represented amongst the other learners, it seems unremarkable that she is able to write the way she does. Conversely, the intense and controlled variation across the different texts of each of the other learners hints at the intriguing processes and skills at work that have motivated the overall purpose of this study.

5.4.2.2 *Its gr8! go c it! Appraisals and Recommendations*

Almost all the learners have included both these sequenced stages in all three of their electronic texts. None omit the Appraisal, while five of the learners omit the Recommendation in some of their electronic texts. It is possible that in this genre a Recommendation is an optional structural move.

The Appraisal compacts the most salient details of the film and the writer's response to it: the name of the film; basic plot outline; some informally expressed indication of the genre; comment on one or two specific features such as the actors or the music, and expression of affect which functions to convey opinion: *hot* (L10); *so nunuz* (L19); *coolio movie* (L22); *legendary* (L27); *so kwl* (L31); *I awesome muvee* (L32); *funi & very swt* (L39); *amazing* (L41); *such a nastified muvi* (L38); *this kiff movie* (L55); *2 flipin scari* (L56); *total gem of a film'*(L57). Responses of laughing, crying, being afraid, and envying or feeling in love with the actors also feature in this stage.

In nine of the samples, the Appraisal is given in response to interlocutors' questions or interjections on the basis of information shared in the Greeting. In some cases, it is

the missed experience of seeing a film (L39; L41; L56) or feeling a particular response of excitement (L27; L55) that elicits from the interlocutor a demand to hear more about the story, thus initiating the Appraisal. In other cases, the Appraisal arises in response to a general enquiry about wellbeing or activity (L10; L38). Anne (L57) shares her feelings of sadness after watching *A Walk to Remember* to initiate the conversation and elicit an empathic response. From the humorous *Gosh! Hre we go agen tok to me sis wam* (Gosh! Here we go again; talk to me, my sister) it is clear that this is a ritual with which her friend is familiar. This functions as an invitation to begin the Appraisal. A similar process is at work in Nancy's (L19) text. Another feature of Anne's Appraisal is that in the Facebook message, it is constituted in part by a hyperlink which also functions as a Response Invitation. Anne has omitted the details of this film from the Appraisal and structured it only as her affective response and the hyperlink: this move obviates the need for her to write any details. The invitation is to the reader to see for themselves by watching the trailer. Nandi's (L55) Appraisal is interesting in that it arises as a rebuttal to her friend's criticism of and rejection of her response to *High School Musical 3*.

In some of the electronic texts, the Recommendation is embedded by some learners in their Appraisals (L19; L27; L31; L41; L56). (In the text structure tables, overlapped and/or embedded stages are indicated by arrows.) Nancy (L19) has shared this stage between her and her interlocutor. Tegan (L32) structures all three of her electronic texts so that this stage is shared with the Response Invitation and takes the form of a suggestion that they both watch the film a second time, but together. This is interesting because it points to a way in which the ostensible purpose of the written genre (recounting the experience of watching a film) is recruited as an opportunity to strengthen an existing social bond. Other learners who merge the Recommendation with the Response Invitation (L31; L39) write this stage as a request which suggests that part of the purpose is to reinforce their friendship through the shared experience of having watched the same film. This being so, the next stage, Response Invitation, emerges clearly as functioning similarly.

5.4.2.3 *Check it out! The Response Invitation*

Characterising this stage across the three kinds of electronic texts is that it serves primarily a social or affective function rather than being part of the evaluation of the film itself. Nine of the twelve learners use this stage in one or all of their texts to persuade their friend to do something so that the film experience can be shared, either directly by going to see the film themselves (L27; L31; L39; L41; L56) or vicariously through following a hyperlink – or both (L27; L31; L41). Justine (L27) invites her friend to listen to a *High School Musical 3* song she likes via a hyperlink.

Some learners use this stage to set the scene for a follow up conversation: for example, Sindiswe (L39) in her email says *Chat agen afta uve watchd it!* and Jane (L10) invites her friend to respond to her email: *reply wen you finish watching it! lol and tell me wat u think!*. In all of Tegan's texts 1-3, she consistently uses this stage to invite Tazzy to spend time with her watching the film thus emphasising the social function this stage performs. L19, Nancy, uses her Facebook and email text stages similarly. Nandi (L55) uses this stage only in her MXIT text and it seems to serve a purely playful, teasing function which is in keeping with the somewhat combative tone that drives the text (see 5.4.2.2. above) and is evidence of the social intimacy between these two conversation partners.

The features of this stage in Zinhle's (L41) texts are especially intriguing. The analysis has assigned a section of the MXIT conversation to this stage although it has no direct relation to the Experiential function shared between the other stages. The rationale for this is that it would be highly contrived and artificial to separate it out from the complete message, and it contains two questions – two invitations to respond. That it is followed by a definitive ending stage – the Farewell – suggests its position as part of the overall text. Such an analytical move asserts the embedded nature of multiple functions in these sorts of dynamic texts that are evidence of social, material and technological processes continually at work and which are fundamentally different from conventional notions of literacy. They are also evidence of how the SIA works in unpredictable ways to generate texts.

This stage contains two separate questions: the first relates to a prior temporary loss of online presence, an event blamed on *Drumstick's* baby brother's interference; the second asks for details of the activity immediately occupying her. *Drumstick's* answer – *JC* (just chilling) – does not close off the possibility of the conversation continuing immediately, but Zinhle does this in the Farewell stage that follows.

In her Facebook wall posting, Zinhle provides a hyperlink to pictures from the film. Similarly to Anne, she uses this to substitute for written details of the film, rather giving her readers an instruction to *check out* the link. Her email functions in a similar way. This has been interpreted as an invitation to the readers to respond in an embodied way – to *click on this link* – to her shared experience of the film. As an aspect of literacy, this functionality points to the complex interplay between the technological capabilities of the SIA, the multisemiotic nature of electronic texts and the way in which the body's actions are directly implicated in digital, networked literate artefacts. There are different, energetic structuring principles at work in the creation of these texts compared to texts written on paper. It is asserted that these differences are evident in the contrasts seen in the data between the electronic texts and the film reviews.

Simply put, in the construct of ALP, 'practices' can include a series of disparate material and expressive processes that operate concurrently in relation to subjectivity and socialising. Expanding the 'practice' part of this construct has crucial implications for how adolescents' literate habits are evaluated and for how they are taught in subject English.

5.4.2.4 g2g! The Farewell

Across texts 1-3, this stage seems to perform three main functions. The first, seen especially in the MXIT texts, is to simultaneously signal that other matters require the writer's immediate attention but that further conversations or meetings are possible; for example, Anne (L57) says, *k g2g duty callz. C u at yoof 2nyt* (okay; got to go; duty calls; see you at youth tonight). Charlene (L31) is called to do the dishes but adds *meet up g2g*. Sometimes the understanding that further interaction is likely is expressed by the conversation partner as with Zinhle (L41) where *Drumstick* responds

to her 'g2g' with *Shot – chat l8er!* (No problem. Chat later!). Or turn taking inverts this as in Michelle's (L56) where her interlocutor signals the need to end the conversation with *Ey gal g2g* (hey girl got to go) and she responds *k l8a* (okay later). Nosipho's (L38) email Farewell also performs this kind of function.

What this points to is the way in which adolescents are using their literate skills in combination with mobile phone technology to do several things at once: first, signal that they are about to withdraw their online presence because the immediate material environment in which they have been writing is going to change. In this case, paradoxically, adolescents are required to use their literate skills to end, in the materiality of the mobile connection, the possibility of interacting. This is indicated by both Nosipho (L38) and Anne (L57): *Nonjy/\$p!R!t is now offline*. Again, what this points to is the inextricability of the material and expressive components of writing on the SIA as dynamic processes that push literacy to do things it has not had to do before.

The second function performed by the Farewell stage is to affirm that the reason for leave taking has nothing to do with any kind of disagreement or offence that might have arisen during the conversation. The use of emoticons and onomatopoeic coinages such as *mwahz* reinforces this, as well as the reassuring acknowledgement from the interlocutor. Third, indication is given that further interaction is likely (which could be online or face-to-face). The Farewell cements the overall function of the interaction as primarily an intensely social experience; it offers the promise of a unique potential for a seam of connectedness between the times the friends chat online and when they actually see each other. This could serve to strengthen rather than weaken social bonds.

The final function served by the Farewell stage is to express affection. This is both written and graphically represented, sometimes using symbolic images alone to convey affect as does Justine (L27) in her Facebook Farewell. The prevalence of these very strong feelings across all three types of texts by most of the learners, with L41, L56 and L57 excepted, is further evidence that an important function of ALP is to strengthen social bonds (Ling, 2008).

5.4.3 Film reviews: Zones of stability

The relationship between social distance, the affordances of the SIA, and text structure is strikingly evident in the contrast between the electronic texts and the film review. None of the learners in the sample include a Greeting in their film reviews. The data indicates their awareness that the variables of Context of Situation require them to employ different linguistic resources to gain their reader's attention and lead them through to the appraisal of a film. In the Banner Text, the Experiential, Interpersonal and Textual metafunctions are realised in lexico-grammatical patterns and semantic content that successfully achieve the textual purpose of the stage. Only two of the twelve learners omit this from the body of the text, although the overall design of their original texts fulfils a similar function. The name of the film, and other salient details were included in the text box, a reflection of the MLFW process of *Overt Instruction* where the process of *Designing* was consciously foregrounded (refer to instruction 4 in Appendix 5).

Similarly, there is no Farewell stage. And, although there are elements of a type of invitation to respond in some of the Recommendation stages (L19; L31; L41; L55), it clearly does not function to establish a sense of shared, connected experience; it is more of an intensified effort to persuade the anonymous reader that the film is worth watching – it is a Recommendation.

A further observation is that most learners structure the stages of their texts in the same sequence and do not embed one stage in another, or stretch a stage to perform multiple functions. Only Michelle (L56) and Sindiswe (L39) embed their Recommendation in their Detailed Appraisal while Justine (L27) and Tegan (L32) omit the Recommendation altogether.

That the film reviews emerge as a different genre to the electronic texts is unremarkable owing to the difference in Tenor as a variable in the Context of Situation. The influence of differing participant roles, status and social distance shapes the structure. Furthermore, they were explicitly and carefully taught to write a film review as a distinct genre in a particular social context. As previously mentioned, however, they were not taught to construct it in the stages given in this

analysis. More attention was given to design and layout, and content and lexis, particularly as effecting register shift.

What is interesting is that the learners, in a single act of creating four different types of texts in one instance of writing, have determined and maintained the intrinsic generic structure of the electronic texts across three different software platforms. They have accomplished this in addition to maintaining a strong generic distinction between these and the film review while at the same time reflecting the shared organising Experiential variable of both. Moreover, they have simultaneously pushed and subverted the textual purposes of each stage to accomplish other, primarily social-affective functions in texts 1-3. Additionally, they are able to manipulate the register of the texts along a continuum using a wide variety of lexical and semiotic resources and strategies. This will be discussed more fully in Chapter 6.

The data suggests that the affordances of the SIA have infused the Textual metafunction of language with an added, energetic and processual dimension that enlivens generic structure without annihilating it. Texts 1-3 seem to resonate with asymmetrical movement, a kind of vitality, playfulness, emotion and colour while retaining coherence and cohesion. They are strange material and immaterial purposively designed hybrids, incorporating links to still and moving visual sequences, music and an affective lexicon of symbols.

Standing in stark contrast to this are the fixed, self-contained, linearly sequenced film reviews: texts apart from the social connectedness and multisemiotic resources enabled by the SIA. Such a controlled contrast suggests a degree of literate skill frequently assumed to be absent in ALP.

5.5 Concluding comments

The core aim of this contrastive analysis has been to emphasise four things: first that the electronic texts share structural features which suggest that they belong to the same genre; second, that within these texts, the Greeting stage of an IM has its own structural conventions which serve multiple functions; third, that although some stages are embedded in others in the electronic texts, overall they are ordered in a

similar sequence as the formal film review but are co-opted to perform interpersonal functions that are not essential to the texts' ostensible purpose as Appraisals; last, that there is a marked distinction between the maintenance of boundaries between stages in the film reviews which suggests that learners respond well to the genre approach as a pedagogic strategy in subject English.

CHAPTER 6: SEMIOTIC VARIATION: A META-LITERATE RESOURCE

6.1 Introduction

The previous chapter sought to apply Martin and Rose's (2003) model of genre analysis to explore the relationship between Contexts of Situation and genre as a series of structural stages in texts. This model constructs register as realizing genre where register is defined as a category of text types that have the same experiential, interpersonal and textual features and therefore shared lexico-grammatical patterns which vary according to differences in Context of Situation.

However, Martin & Rose acknowledge other models of exploring this relationship in view of the fact that the SFL register variables of Field, Tenor and Mode 'remain relatively underspecified theoretical constructs' (Martin & Rose, 2003, p. 255). They further acknowledge that Mode, as a variable of register incorporating technologies of language, is 'sensitive' in the way it affects register (Martin & Rose, 2003, p. 246) and that the field is under-researched. This caveat opens out a way for unsettling the notion that register realizes genre. It is from this perspective that the data has been analysed to explore and interrogate the notion that 'genre *is* a pattern of register patterns' (Martin & Rose, 2003, p. 254, emphasis added) particularly in light of the role structure plays in determining genre, as explored in chapter 5.

The previous chapter suggested that generic patterning is influenced by the unique affordances of ICTs. This chapter will demonstrate similarly that ICTs have exerted an influence on register that diverges from Martin & Rose's model, problematising – yet not opposing – the unambiguous correspondence between register and genre. It further disrupts the model which accounts only for how 'register variables are a pattern of linguistic ones' (Martin & Rose, 2003, p. 254) to include patterns of multisemiotic resources as register variables.

This chapter asserts two broad findings: first, that register shift occurs within a genre according to variations in the intensity of patterning with which the variables of Field, Tenor and Mode are realized in multisemiotic choices. These are available from

within the Ideation Base (see Concept-Data Table, Appendix 1) as semantic resources extended by the affordances of the SIA. Other semogenic and orthographic processes are also implicated in register shift. In other words, within a single genre, defined according to shared structural patterns, there is evidence of register shift. Second, as a feature of ALP, the meta-literate skill of shifting register in a controlled, progressive and nuanced way is applied to the point where register and genre become intertwined such that a particular register does align with a distinct genre.

Register is thus conceived as both an intra-generic and cross-generic cline, the trajectory of which is determined by a more complex configuration of variables than has traditionally been applied in SFL approaches. Ultimately, however, the analysis aligns with the original model in that the data demonstrates a clear relationship between two different genres, and register patterns as a system of semiotic choices implicated in realizing generic differentiation.

6.2 Processes of analyses

6.2.1 Identification and counting

The analysis that follows emerges from a multi-level series of processes. Text type as one unit of analysis is the first level. The second level is the semiotic components of each text. These are discretely identified by their function as complete semantic elements (Crystal, 2008, p. 55) or instantiations of meaning. For example, *rofl* (rolling on the floor laughing) would be categorised as one semantic element. Similarly, an emoticon, or a collection of punctuation marks such as *!!!!??* would also be categorised as a whole semantic element. Simply put, any combination of multisemiotic elements which stands on its own as a unit of meaning is counted as one component of the text. Counting and classification co-occur simultaneously.

In each text type, only the body of the message has been included in the count. MXIT naming conventions; Facebook markers; email addresses and subject lines have been excluded. In the film review, the information box and by-line have been similarly excluded although the headline has been incorporated as part of the text.

The rationale for this is to focus on the learners' creativity and linguistic proficiency in as unambiguous manner as possible rather than on layout features.

Correct or incorrect conventional usage of hyphens, commas, semi-colons, colons, full stops, and single question and exclamation marks is omitted from the count. The rationale for this is that they constitute an unmarked usage across all text types and therefore do not have significant impact on register shift. Ellipsis is included as a semiotic element as it is deployed for effect by some learners (L55 for example).

MXIT identification tags are excluded, and the writers' names or nicknames in the body of other texts are also excluded. Names of film stars referenced are included.

Selected components which exemplify this process are presented below. Each semiotic element is numbered. In order to maintain clarity of focus, only the four exemplar texts included in Chapter 5 have been referenced here. However, all learners' texts were analysed using this method. The results of the analyses are graphically summarised in Appendix 18.

Text type	Text	Number of semiotic components
L39: MXIT	<p>Sasha: He¹! we² gal³, yesterdae⁴ I⁵ finali⁶ watchd⁷ <u>Thee⁸</u> <u>Movie⁹!</u></p> <p>Sexc ladie: Whch¹⁰ one¹¹?</p> <p>Sasha: Collage¹² Road¹³ Trip¹⁴! 😊¹⁵</p> <p>Sexc ladie: Hawe¹⁶ ma¹⁷ girl¹⁸!!¹⁹ Dang²⁰ u²¹ lucki²² ★²³ hw²⁴ ws²⁵ it²⁶?</p> <p>Sasha: It²⁷ ws²⁸ the²⁹ bomb³⁰, hayi³¹ Raven³² &³³ Martin³⁴ mke³⁵ a³⁶ gud³⁷ team³⁸.</p>	38
L27: Facebook	<p>Insert¹ ❤️² [music clip]³</p> <p>Attach⁴ bear⁵ hug⁶ 🧸⁷ [You Tube clip]⁸</p>	8
L55: Email	<p>Then¹ she² reveals³ ...⁴ ooh⁵ can't⁶ tell⁷ you⁸ that⁹ but¹⁰ here's¹¹ a¹² clue¹³ ...¹⁴ Then¹⁵ again¹⁶ no¹⁷! Hahahaha¹⁸</p>	

Text type	Text	Number of semiotic components
	LOL ¹⁹ ! Eeevil ²⁰ !	20
L31: Film review	This ¹ is ² a ³ young ⁴ , music ⁵ , romanced ⁶ movie ⁷ for ⁸ all ⁹ age ¹⁰ there ¹¹ something ¹² very ¹³ spectacular ¹⁴ about ¹⁵ this ¹⁶ movie ¹⁷ which ¹⁸ focuses ¹⁹ on ²⁰ young ²¹ teenages ²² and ²³ there ²⁴ school ²⁵ life ²⁶ together ²⁷ and ²⁸ how ²⁹ they ³⁰ over ³¹ came ³² any ³³ difficulties ³⁴ that ³⁵ came ³⁶ there ³⁷ their ³⁸ way ³⁹ , it ⁴⁰ also ⁴¹ has ⁴² lots ⁴³ of ⁴⁴ intresting ⁴⁵ music ⁴⁶ that ⁴⁷ is ⁴⁸ sang ⁴⁹ in ⁵⁰ the ⁵¹ film ⁵² ..	52

Table 6.1 Exemplar count of semiotic elements

6.2.2 Classification

For the sake of clarity and simplicity in demonstrating how respondents shift their style and register, the counted semiotic elements have been classified according to six categories (see below). These categories were derived using a grounded approach that draws together conventional linguistic definitions (Crystal, 2008); a MLFW approach to elements of design; digital functionality, and the resources of basic subject-English teaching knowledge.

Each element identified is classified according to one of these categories, or sub-categories (refer to Table 6.2 below). Where textual elements reflect usages from more than one category, they are classified only once. For example, *Frshmatic* (L56) would not be doubly categorised as a contraction and an example of lexical variation. Lexical variation is addressed separately in section 6.3 (see Table 6.5); classifying items more than once would exaggerate the analysis without necessarily revealing new patterns of semiotic choice between texts 1-3 and the film review. Whether *g2g* is counted and categorised separately as an initialism and a logogram (refer to Table 6.2) does not add to its analytical function as a feature of orthographic usage prevalent in texts 1-3.

The six classificatory categories are:

- 1) Orthographic features as semantic units
- 2) Lexical variation
- 3) Layout and design features
- 4) Hyperlinks
- 5) Corrections
- 6) Errors

Brief descriptions of these are given below.

6.2.2.1 Orthographic features

In his linguistic analysis of ‘textspeak’, Crystal (2008) distinguishes several classes of orthographic combinations: these are applied in this study. To this has been added the use of conventional punctuation in novel or amplified ways. For example, many learners make exaggerated use of exclamation and question marks in their electronic texts. Considering how these are implicated in style and register shift necessitates they be flagged as a marked usage.

The table below gives a summary of the orthographic categories used in the analysis. The reader is referred to Appendices 6-17 for the context of each example.

Description	Explanation	Example
1. Novel punctuation	Conventional punctuation that has been appropriated for novel purposes; includes capitalisation which is interpreted as the face-to-face equivalent of shouting. Often functions to convey affect such as excitement.	<u>L19 MXIT text:</u> HIGH SCHOOL MUSICAL 3 !!!!!
2. Logograms	These reflect an awareness of the phonological properties of words or actions.	<u>L31: MXIT</u> <i>u</i> (you) <i>g2g</i> (got to go) <i>4 us 2</i> (for us too)

Description	Explanation	Example
		<u>L32: EMAIL</u> <i>mwahz</i> (kisses)
3. Pictograms	These rely on the visual impact of an orthographic collective for meaning. Objects and ideas are visually represented.	<u>L41: MXIT</u> :-x (angry) <u>L22: MXIT</u> :-) (happy) <u>L57: MXIT</u> <i>\$p!R!t</i> (L57's MXIT name)
4. Initialisms	Abbreviations where all but initial letters are omitted.	<u>L 55: MXIT</u> <i>lmao</i> (laughing my ass off) <u>L32: MXIT</u> <i>jc</i> (just chilling)
5. Acronyms	Abbreviations that are sounded out as words. Some initialisms are becoming expressed as acronyms in colloquial usage.	<u>L22: MXIT</u> <i>rofl</i> (rolling on the floor laughing) <u>L27: MXIT</u> <i>OMG</i> (oh em gee) <u>L39: MXIT</u> <i>LOL</i> (laugh out loud)
6. Omissions: 6.1) Contractions 6.2) Clippings Sometimes these are combined. (See second example from L56).	6.1) Words from which the middle letters are omitted. 6.2) Words from which the end letters have been omitted.	<u>6.1) L19: MXIT</u> <i>cn</i> (can) <i>knw</i> (know) <u>6.2) L56: MXIT</u> <i>kno</i> (know) <i>wtup</i> (what's up)
8. Shortenings	Whole initial or ending morphological combinations are omitted from words.	<u>L19: MXIT</u> <i>bye</i> (goodbye) <i>fav</i> (favourite)
9. Unorthodox usages	These are uniquely characterised by a combination of several of the above running together.	<u>L32: MXIT</u> <i>lol lmfao lmsao</i> (laugh out loud laughing my fucking ass off laughing my sexy ass off)

Description	Explanation	Example
		<u>L38: MXIT</u> <i>wuu2</i> (what you up to)

Table 6.2 Table of orthographic features as semantic units

6.2.2.2 *Lexical variation*

This is included as a key aspect of register shift and for the sake of clarity and simplicity, conflates switches between slang and formal English, with variation along the continuum from informal to formal standard English. Code switching is also included in this category. For example, between texts 1-3, L32, Tegan, shifts her lexis (as well as her orthography) as follows: *da vrou waaiz 2 a cownsellor* (MXIT); *the wife goes and see 1 marriage counsellor* (Facebook); *so now the wife went to see a marriage counsellor* (email).

6.2.2.3 *Layout and design features*

These include the use of emoticons (as distinct from those created using a combination of standard punctuation and symbolic notation); colour; variation in font style and size; features such as bold, italics and underline and the inclusion of graphics that are not emoticons (see L27's Facebook message in Appendix 9).

6.2.2.4 *Hyperlinks*

Several learners indicated that they would have included a hyperlink to a song, a film clip or pictures in actual electronic texts. These are acknowledged as single semantically complete units. For example, in her Facebook message, Zinhle (L41) represents her hyperlink as [*YouTube clip of STOMP THE YARD*]. The nature of hyperlinks is such that they function as single units – are responded to with a single interpretive action. Therefore even though the in-text reference consists of six words, the analysis would count this as one semantic unit.

6.2.2.5 Corrections

A learner's awareness that they have made a mistake, and attempted to correct it, is interpreted as a meta-awareness of the need to vary register and style in specific contexts. This is indicated especially by corrections in the MXIT texts which are, in most cases, amendments from standard English to the style required for this genre and software platform. For example, Tegan (L32) begins to write *indian*, but crosses it out and substitutes instead a local slang term for Indian: *chaar*. There are three instances where she substitutes the logogram 2 for the word *to*. Michelle (L56) has two attempts at writing a contracted form of *watching* before she is satisfied with *wtchng*. She also substitutes the logogram 1 for the word *one*. (See Appendix 16.)

Some form of correction features in all but five of the learners' texts across the two genres. The absence of crossing out is not interpreted as a lack of awareness or as evidence of lack of error. The analytic process has no way of verifying such an assumption. The purpose of including error correction in the semiotic analysis is to try and account for as many indicators of attempts at linguistic control as possible, even though its application might be irregular, and to point to semantic completeness within the variation across text types.

6.2.2.6 Errors

This is a problematic category and there is no automatic correlation between corrections and errors. Especially in texts 1-3, distinguishing between unorthodox or playful usage and genuine errors is an inexact process. For example, in an IM, knowing whether punctuation is omitted owing to ignorance or because the writer considers it unnecessary to communicating her meaning, is difficult: minimal use of conventional punctuation could be a key feature of the genre. Not capitalising 'i' is so prevalent that to mark it as a mistake would negate it as a contrastive choice relative to its correct usage in the film review.

To keep the analysis simple, therefore, errors of punctuation are ignored in texts 1-3 but flagged as erroneous in the film reviews. Although this skews the analysis somewhat, it is asserted that overall there is sufficient evidence to suggest that latitude in the use of punctuation is an accepted practice in the genre. It is precisely in the gap

between its presence and its absence that the differentiating processes at work in text creation are hidden. Traditional linguistic analyses would obscure this repetition of difference and consign ALP to critique alone.

Similarly, determining whether a word is incorrectly or idiosyncratically spelt in a Facebook message or IM cannot be ascertained from processes of semiotic and discourse analysis alone. The analysis tends therefore to identify as mistakes only those lexical or orthographic usages which are unambiguously erroneous, and occurring predominantly in the formal film reviews. Misspellings would be counted as valid errors where they appear in the formal film review and are repeated in the informal texts, that is where the learner demonstrates no awareness between the texts that an error has been made. Jane S, (L10) for example, misspells ‘definitely’ as *definetly* in both her film review and her Facebook message (Appendix 6). Conversely, where a learner has correctly spelled a word in all but the MXIT texts, this would be regarded as idiosyncratic usage and not error. For example, Tegan (L32) writes *neighbours* in her film review, but *naybours* in the MXIT text; this would be categorised as a type of logogram. Another two examples occur in Nosipho’s (L38) texts: first, she refers to the *enternet* in her MXIT and Facebook texts, but correctly writes *internet* in her formal film review. It would be difficult to classify *enternet* as a mistake rather than as a permissible ‘slippage’ of the genre. Second, she writes *veiwurz* in her MXIT text, but *veiwors* in her email and film review. Although she corrects the logogram of the MXIT text, this usage would be classified as an error owing to the incorrect vowel sequencing in all three words.

Determining errors relies heavily on the co-text within the overall context of the genre and text types. Michelle (L56) does not know how to inflect the word *ghost* to indicate the plural. Across all three of her texts, there are six usages of this word, all of which are in the singular when they should be plural. Co-text and cross-genre analysis are important to classifying semiotic elements.

L41, Zinhle, provides further examples. She writes in her email that the performers *made me glue to the screen*. This verb tense inflection error seems clear. However, she correctly inflects it in her film review: *will keep you glued to the screen*. Her email usage might therefore be an example of a ludic use of a noun functioning as a

verb, rather than an inflection error; classifying it as a mistake would not be valid. Clearly she can correctly inflect for tense aspect when required to.

In her film review, Michelle (L31) omits the apostrophe and so her contraction *theres* is incorrect. She also does not use the hyphen to create a compound noun; hence, *school life* would be flagged as an error. The omission of a full stop in the first line is incorrect as is the comma splice error in line 3. These are clearly discernible and are therefore categorised as mistakes. On the other hand, she accurately corrects one of her incorrect usages of *there* (line 3) which is not classified as an error. The first instance of this occurring remains uncorrected and is therefore counted as wrong (line 2).

Also considered as erroneous are usages in texts 1-3 that reflect a learner's lack of mastery in the particular style required. For example, L39, Sindiswe, is unsure of how to use punctuation in her MXIT text to create emoticons. These would then be classified as errors.

Errors in syntax have not been included as this would over-complicate the analysis and obscure the emphasis on the manipulation of semiotic resources. Importantly, components of the text that can be classified according to any of the previous categories defined above are not categorised as errors.

In sum then, classifying errors is intended to allow for the emergence of tendencies, or trends, rather than to present an exact, quantitative analysis of the relationship between the various components of each type of text. The aim of the analysis is to unfold the diversity of semiotic resources learners employ to effect a shift between text types and register and to show that these point to a complicated configuration of contextual factors implicated in the SIA, and of which learners from a variety of linguistic and ethnic backgrounds are aware, and choose to manipulate – or not. Simplistically judging adolescents' literate ability based on the genre typified by texts 1-3 does not, the data suggests, accurately reflect their competence.

6.2.3 Classification: An example

Based on table 6.2, examples of processes of classification according to the parameters given in 6.2.2.1 - 6.2.2.6 are illustrated below. To preserve explanatory clarity, examples are taken from the Exemplar count of semiotic elements presented in Table 6.1. However, all twelve texts included in Appendices 6-17 were analysed using these categories.

Classification Category	Text type and learner	Semiotic element number
1. Novel punctuation	L39: MXIT	19
	L55: email	19
2. Logogram	L39: MXIT	21
3. Pictogram	L39: MXIT	33
4. Initialism/Acronym	L55: email	19
5. Contractions	L39: MXIT	7; 10; 24; 25; 28; 35
6. Clippings	-----	-----
7. Non-standard spellings.	L39: MXIT	3; 4; 6; 8; 22; 37
	L55: email	20
8. Shortenings	-----	-----
9. Unorthodox usages	-----	-----
10. Lexical variation	L39: MXIT	1; 2; 16; 17; 20; 29; 30; 31
	L55: email	5
11. Layout and design features	L39: MXIT	8 and 9 (italics and underline); 15; 23
	L27: Facebook	2; 7
12. Hyperlinks	L27: Facebook	3; 8
13. Corrections	L31: Film review	37
14. Errors	L39: MXIT	12 (error repeated in film review)
	L31: Film review	5; 6; 10; 11(P); 22; 24; 31 and 32 (P); 45; 49. Two additional punctuation (P) errors.

Table 6.3 Exemplar semiotic classification

6.2.4 Deriving patterns of semiotic variation

In the full semiotic count and analysis of all twelve learners' writing, categories 1-12 (refer to Table 6.3 above) have been grouped together for ease of reference. This group is labelled T1-3 to indicate that the prevalence of these elements is dominant in texts 1-3 (MXIT; Facebook and email). These three text types are categorised as one genre (refer to Chapter 5).

There are thus four final analytic categories:

- 1) Total semiotic count for each of the four text types;
- 2) T1-3 usage across all four text types;
- 3) Corrections;
- 4) Errors.

6.2.4.1 An exemplar analysis

All four of Pamela's (L22) texts are analysed and tabulated below as an example. The full set is included in Appendix 8. Appendix 18 presents the analyses for each learner.

	Total semiotic count	T1-3 usages	Corrections	Errors
MXIT	47	25 (53%)	0	0
Facebook	86	30 (35%)	0	0
Email	68	8 (12%)	0	1
Texts 1-3 totals	201	63 (31%)	0	1
Film review	147	0 (0%)	0	4

Table 6.4 Exemplar semiotic count and analysis

6.3 Refining the distinction

The data generated from this study is intricately rich, complex and could form the basis of many successive analyses from a multitude of epistemological and theoretical paradigms across different disciplines. The following discussion focuses on

demonstrating how the social-informational assemblage (SIA), so fundamental to contemporary modern teenagers, has shaped ALP in unexpected yet controlled ways in diverse contexts.

The key finding is that among this group of adolescent writers, register is overtly manipulated by a variation in the pattern of semiotic choices. These choices are intertwined with the technologies of literacy as a variable of the Context of Situation. The discussion below presents several themes that explicate the findings. The data is drawn from the text analyses. However, to provide a more nuanced, personalised contextual dimension to the overall discussion, extracts from interviews with L31 (Charlene) and L32 (Tegan) who are each other's interlocutors in the text samples, will occasionally be referenced. Extended contextualising excerpts are included in Appendices 21 and 22.

6.3.1 Technologies of immediacy: A variable of register

The previous chapter suggested that texts 1-3 have a common structural pattern and could be classified as a single genre. Figure 6.1 below suggests that, within this genre, the patterning of particular multisemiotic and lexico-grammatical choices sets IM (MXIT) apart as a unique register. The film review is clearly at the opposite extreme, displaying almost none of the T1-3 semiotic elements that characterise the IM register. It stands alone as a different genre with a register markedly characterised by the almost complete absence of T1-3 elements. Between these two extremes, the Facebook and email texts display some features of the IM register, but are more closely aligned to the film review.

This demonstrates a singular degree of control over register shift amongst the cohort of learners. Accounting for this requires a broad consideration of the three main features of ALP as asserted in this study: first, the social and relational processes intrinsic to text generation; second, an examination of key compositional features of the texts and third, the technologies on which texts are created. What emerges is how significantly ICTs as technologies of literacy have impacted on and co-implicated the first two aspects in overall text composition.

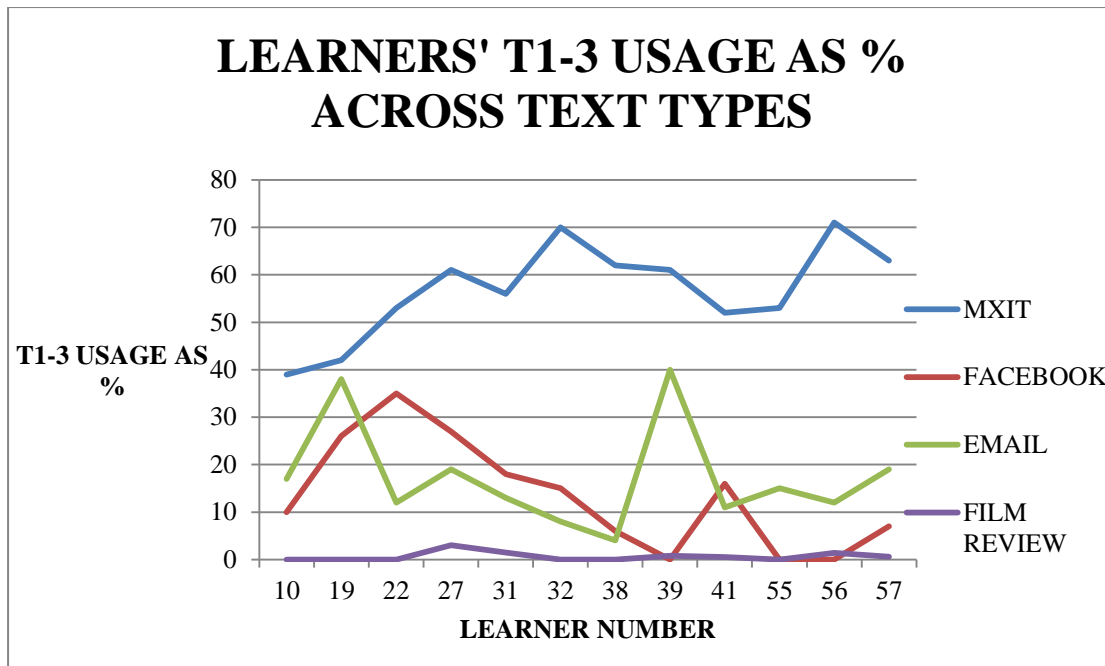


Figure 6.1 Emergent register patterning as a function of T1-3 usage

6.3.1.1 *OMG! I jst saw this gr8 mvie: Intimately sharing experience*

It was asserted in the theoretical component of this study that, according to SFL, experience is a system of social and relational processes that is sensed and grounded in space and time. Further, experience is a collective resource which makes the negotiation of meaning a ‘social inter-subjective’ process (Halliday & Matthiessen, 1999, p. 5). The MLFW sees text creation as an activity – an ‘intervention in the world’ (New London Group in Cope & Kalantzis, 2000, p. 23). The centrality of the embodied mobile phone as a digital mediator of experience brings into interaction the inner subjective worlds of teenagers as members of a group, and the immediate materiality of their experiences. Or, as Tegan says, *‘it’s what happens online ... the stories and stuff ... that’s what attracts me to it [to MXIT] (Appendix 22, Excerpt 1)*. Charlene says that mobile phones are for *communication ... how am I gonna talk to, what are you doing? I wanna know what you doing NOW (Appendix 21, Excerpt 4)*.

Through digitisation, a wide variety of experiences, affects, thoughts and desires can converge in a rapidly moving, shifting flow of information exchange that can both incorporate and culminate in actions. ICTs, by their very nature, enable the most

rapidly intense, immediate sharing of experience: a one-to-one orthographic and visual conversation in real time with an available and co-present friend.

Giving one's opinion of a film becomes, in the SIA, something more. It becomes an opportunity to share excitement and joy; to express voyeuristic sensations about celebrities; to be transgressive; to share longings and fantasies; to reinforce emotional connection; to gain the immediate attention of a conversation partner; to focus on particular interests such as music and dancing; to alleviate loneliness and relieve boredom; to arrange face-to-face meetings to re-enact the experience of watching a particular film – and to give one's opinion of the film. Charlene (L31), for example, recounts that in MXIT *you say things that you wouldn't really say when you talking to the person ... like for a boy and a girl* (Appendix 21, Excerpt 3).

Using the hyperlinked resources of the internet/WWW, it also is an opportunity to share music and images: it provides an invitation to participate in a sensory appraisal of a film. In the IM, this sense of immediate participation and sharing is intense and exerts its own semiotic and lexico-grammatical generative forces on text creation that are not necessary or possible in other text types or available in paper and pen technologies of literacy.

In other words, the embodied portability of the mobile phone and its consequent capacity to traverse spatio-temporal boundaries has exerted a transformational force on how teenagers manipulate their semiotic resources in order to sustain the intensity of the connection with their interlocutor and keep a conversation flowing. The sign systems have had to adapt to fulfil the same affective and extra-linguistic functions as eye-contact, intonation, pitch, gestures and facial expressions in face-to-face interaction. They also have to reflect appropriate linguistic conventions according to variables of Field and Tenor. It is these adaptations – as an amplified capacity of the Mode variable – which have given rise to the IM register as reflected in the data. For example, and again quoting Tegan: *you can like tell in the tone of the message ... and they add angry faces and grumpy faces and all those faces ... then there's lots of exclamation marks and stuff and then that's when you know the person's acting rude to you* (Appendix 22, Excerpt 2).

Figure 6.2 below represents the proportions of these adaptations relative to the Facebook, email and film review texts, clearly demonstrating the singular character of IM semiotic composition.

To appropriately realise Tenor as a variable in this particular Context of Situation, writing has to be quick, short, intimate, informal and interesting. It has to reinforce group belonging at various social scales such as age; gender; culture; ethnicity and language (refer to L31 and L32 interview extracts in Appendices 21 and 22) and it has to strengthen existing friendship bonds by facilitating the promise of face-to-face interaction. These imperatives give rise to the kinds of semogenic processes – the general mutability of language – such as outlined in Table 6.2 above. Words are contracted or substituted using a variety of processes; punctuation is often omitted except for exclamation marks which are liberally used to convey affect as indicated above. Emoticons help to avoid misunderstanding and share feelings. Lexical choices reflect different social identities and affinities and include jargon, slang, colloquialisms and code-mixing. Hyperlinks enable the rapid sharing of a key component of the Field of the text: an actual shortcut to the subject of the conversation.

A series of differences are repeated that paradoxically give rise to a register with its own identity. These texts are hybrid entities that simultaneously constitute the interaction, but also are ancillary to other social and affective processes. This resonates broadly with Halliday and Matthiessen's (1999, p. 25) assertion that stylistic changes that 'take place in the course of a text' are not random, but emerge as a function of 'general semogenic principles' operating in the unique milieu in which the text is generated. An observation of the analysis that could form the basis of a separate study is that all four text types appear to adhere to English rules of syntax while simultaneously manipulating standard orthography and including a variety of semiotic elements; clearly, the learners are employing strategies which are largely deliberate. Further, corrections and low incidence of errors in the film reviews display a relatively sophisticated degree of overall semiotic control.

In sum: IM applications on mobile phones as implicated in the SIA are used as a highly specific communicative resource by teenagers. Their subjective experiences, as

a system of social and relational processes sensed and grounded in time and place become an objective semiotic resource in the SIA – a process which ‘ungrounds’ them from spatio-temporal constraints. The notion of the negotiation of meaning as a ‘social inter-subjective’ process (Halliday & Matthiessen, 1999, p. 5) becomes amplified in globally networked social media applications such as MXIT and Facebook: these enable continuously possible processes of inter-subjective meaning negotiation.

The IM texts reflect a sensitivity to the variables of Context of Situation that reveals the relationship obtaining between Tenor and Mode as an affordance of technology which exerts a unique structuring force on register. This could not have been foreseen in the development SFG and paradigms emerging from it.

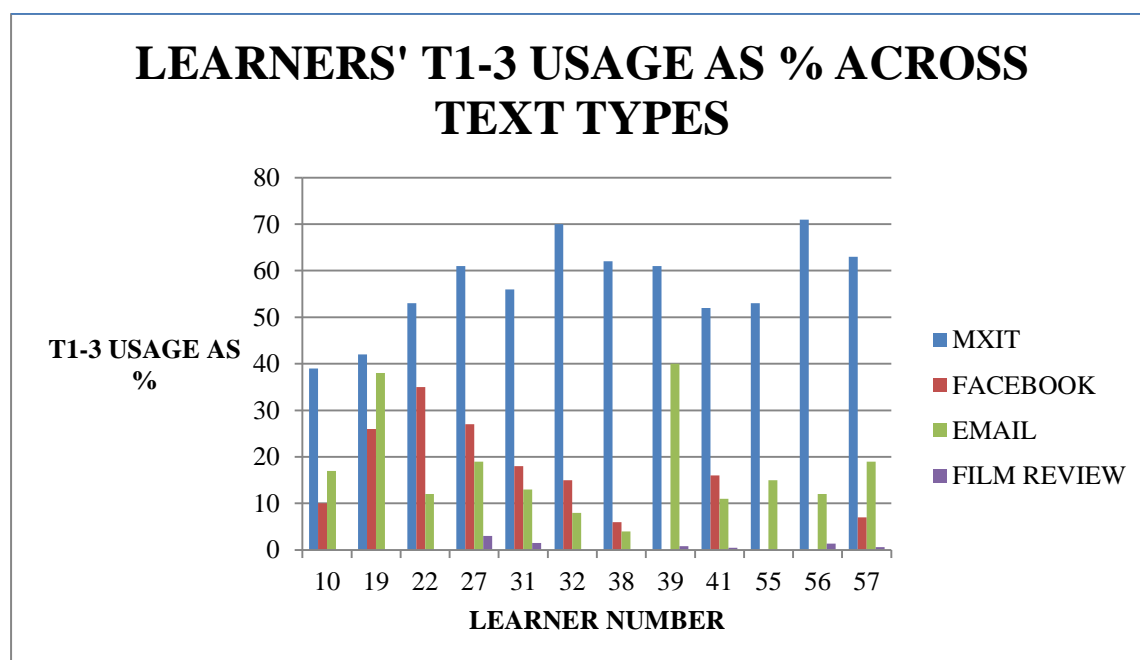


Figure 6.2 Histogram of T1-3 usage across text types

6.3.1.2 Don't let them miss out: Writing on paper for Anonymous

As indicated in Figures 6.1 and 6.2 there is a very clear disparity between the IM and the film review registers. The learners have included almost none of the semiotic elements characterising texts 1-3, and especially the MXIT text, in their film review.

Figure 6.3 emphasises this difference in composition between the two registers. Ten of the twelve learners have no T1-3 elements in their film reviews. No learners have more than 3%. Two main factors are implicated in this.

6.3.1.2.1 Diverging Tenor and Mode

Increasing the social distance by writing for an anonymous public reader automatically precludes the motivation to use IM – although technically it is possible to write a complete film review using the MXIT application. There is thus an extreme disjunction between the Tenor as implicated in Context of Situation, and Mode which is reflected in the disparity between texts 1 and texts 4. The connection between socio-affective forces and technology that shapes the IM register is wholly absent from the Context of Situation in which the film review is written.

From a pedagogic perspective, this could be construed as a creative disjuncture that signals to the learners that they need to control their semiotic, lexico-grammatical orthographic resources so that their texts align with the conventions of standard English. Figure 6.3 suggests that learners are able to do this by limiting their inclusion of T1-3 elements. The discussion on Table 6.5 (below) provides a further layer of analysis to this ability.

6.3.1.2.2 Screen versus page

Linked to diverging Tenor and Mode are the limitations of paper compared with a screen. Although both clearly are channels and media for text negotiation, the static nature of paper and pen renders the need for immediacy, speed and brevity that is required to sustain a written conversation over time and space unattainable. More significantly obvious is that texts created in MXIT, Facebook or email, are digitally networked and paper ones are not. This single and simple factor exerts a disproportionately generative and structuring effect that polarises the registers of the IM texts and the film review, and splits texts 1-3 and the review into two different genres across which learners vary the register of their writing. This emerges somewhat humorously in Tegan's (L32) exasperation with older people's inability to 'write MXIT': *then you get old people on MXIT they like talking in full lang ... and that's no, there's no use of having MXIT coz MXIT's like something's 're abbreviate*

stuff, like to shorten what you wanna say and they have to write the *WHOLE* sentence (Appendix 22, Excerpt 3).

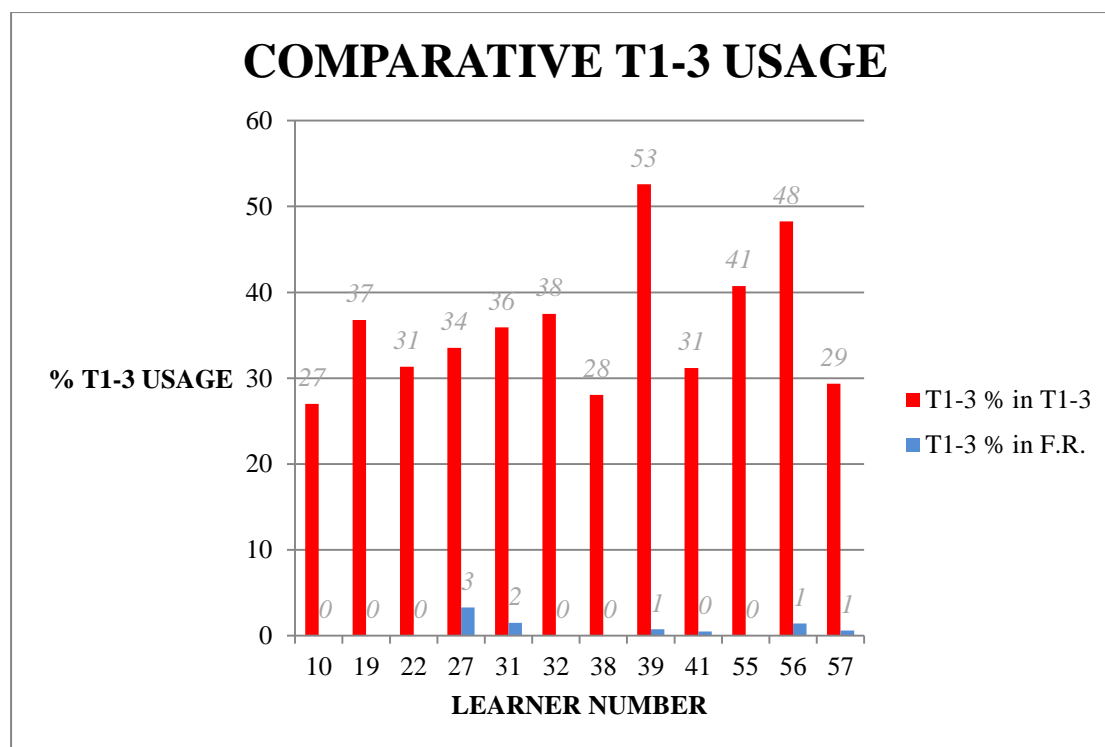


Figure 6.3 Percentage comparison of T1-3 elements across two genres

6.3.2 The SIA: A contextual variable in register shift

Texts 1-3 are situated within the social-informational assemblage (SIA). They indicate that there is a continual communicative potential energising the way text structure unfolds, and the variation in semiotic composition. The film review is excluded from the configuration in two inter-related ways: first, there is no social connection with the intended audience. Second, the text is, in its construction for the learners, a static paper and pen artefact of literacy originating in the same medium as the receiving channel. It is a product of teaching, part of what ‘school does’, rather than part of an always-in-process communicative potential. It is a complete and separate entity unrelated to the continuous, moment by moment experiences of its author. The motivation for writing emerges as an instructed appraisal/recount of a

once-off experience in contrast to IM the purpose of which is to converse. In a sense, it is a closed system, a totality, fixed in time and space and unavailable as an always accessible digital resource in the compositional plane that is the internet/WWW.

Foregrounding these differences provides an interpretive context for an exploration of the stylistic and semiotic variation across all four text types that are reflected in Table 6.5. and discussed below. Table 6.5 is presented after the discussion to obviate unnecessary formatting disruptions and preserve the cohesiveness of the table.

6.3.2.1 Such a nastified muvi becomes profoundly disturbing

6.3.2.1.1 MXIT: A chat zone for juz chillin'

As previously demonstrated, this instant messaging application has its own register. What this reveals is IM as a literacy space where adolescents can engage in spontaneous, private conversation that is not assessed in any way other than as a function of communicative efficiency. Or, in Nandi's words, *there isn't really right or wrong things on MXIT. It just depends who you talking to* (Appendix 23, Excerpt 1). It is a creative and free zone where teenagers determine the rules. The corrections that Nosipho (L38), Zinhle (L41) and L56, Michelle (see Appendix 16) make to their MXIT texts demonstrate their awareness of having to adhere to these rules. For example, Nosipho has two attempts at what ultimately is *da veiwerz*: ~~peo~~ [people] and ~~#~~ [the] which, one could infer, was intended to be *the veiwers* (sic).

The MXIT chat zone is also a space where code-mixing as a reflection of South African ethnic and linguistic diversity is given expression. Charlene (L31), Tegan (L32) and Michelle (L56) particularly demonstrate this in their use of *boz cuz; flopz in da pozi and da huis*. Michelle is an especially interesting case: if one examines across all four text types the variations of the word *live* inferentially juxtaposed with *leave*, one will see that, in her email, she writes *they decided to live Newyork*. This misspelling could suggest a phonetic rendering of *leave*, which would be consistent with pronunciations by members of her ethnic group of subtle and difficult phonological distinctions in English. Significantly, regardless of the permutations of this word in texts 1-3, in her film review she substitutes *leave* with *moves to* and correctly uses *live*. This level of linguistic awareness and lexico-grammatical control

suggests a relatively high degree of the ways in which variation in the Context of Situation, especially with regard to Tenor and Mode, are realised in the lexicogrammar. (Refer to Appendix 23 for an excerpt of Nandi's interview that articulates this from her perspective as a participant-creator of ALP.)

Overall, the features that characterise this register are an assertion of the unique attributes of being 'adolescent'; subjectivity and semiosis are intimately co-implicated in ALP as socio-affective literate activity within the SIA. It also functions as an exclusionary mechanism to keep adults out and regulate membership of a variety of groups across social networks. As Tegan says, *I have like groups ... and if you in the group that I don't like I just don't talk nice to you ... but if its someone that you like then you talk nice to them, you like 'ah sweetie' and all those funny names* (Appendix 22, Excerpt 2).

6.3.2.1.2 Facebook and email: Chat now or l8a!

What distinguishes Facebook and email from MXIT is that the texts created on these platforms are not expected to be instant communication relays, although they have that technological capability. For example, in her Facebook message, Jane (L10) says to her reader *go now once you finished watching and reading and go see it*. This suggests she does not expect an immediate response to her message. In her email, Sindiswe (L39) expects to *chat agen afta u've watchd it*. This contrasts with the ending of her MXIT message in which a similar plea is immediately given a response from her interlocutor. Zinhle (L41) asks her reader to *please email me back your response* and Nosipho ends her Facebook message with *I hope to see you soon*. These excerpts point to an acceptance that messages sent via Facebook and email have a delayed response time.

Immediacy is therefore not functioning as a variable in register shift in the same way that it does in the IM texts which could account for why these text types are closer to the register of the film review than to MXIT (see Figure 6.1). They still share some of the same orthographic features and semiotic variation, such as processes of contracting; lexical variation; emoticons and hyperlinks, but their prevalence is greatly reduced (see Figure 6.2) and most learners are able to minimise errors.

Table 6.5 provides a sample of the ability most learners have to pattern their lexical choices such that the register cline is from highly informal to appropriately formal for the film review genre. Some learners display a marked degree of proficiency: Nosipho's progression from *nastified* to *disgusting* to *profoundly disturbing* is impressive. Similarly, Tegan's *household which is warped beneath it's picture-perfect life* is significantly distinct from *this fam here has flopz in da pozi*.

Learners for whom subject English is a challenge also demonstrate this ability. Charlene is able to progress from *its boz* to *nice* to *very spectacular*. Sindiswe is able to describe her film as *one of the best movies* which, in her MXIT message was *the bomb*. Michelle, in addition to correcting several mistakes as previously discussed, changes her description of the house from *lyk a 100 yrz old* to *a house which is about 100 yrs old* to *a house which is more than 100 years old*. Justine varies her lexis from *rockin* to *beautiful* to *amazing* to *magnificent*.

The relationship between intimacy as a feature of Tenor, and immediacy and semiotic choice as aspects of Mode, seem co-implicated as shaping tendencies in the ways in which ALP are patterned as texts within the SIA.

6.3.2.1.3 School writing: "*You just don't use MXIT language when you writing English!*"

Immediately obvious as a striking feature of the film review excerpts, and all twelve complete texts as indicated in Figures 6.2, 6.3 and Appendices 6-18, is the low incidence of error and almost total exclusion of T1-3 elements. This reinforces that, far from being chaotic, deviant forms of literacy, ALP are characterised by a range of structured and patterned choices across the various competencies implicated in multisemiotic expression. These choices are sensitive to a multiplicity of variables in the Context of Situation and learners exhibit a marked degree of flexibility and awareness of how to manipulate their semiotic resources to respond to diverse variables.

Table 6.5/...

Learner Number	MXIT	Facebook	Email	Film Review
10 Jane S	was sooo gd	its so good	it was hot!	definetly a must see
19 Nancy P	my new fav mvie	Its da best movie eva 😊	its amazing my fav mvie of all tym!! 🤩	This movie is the best movie
22 Pamela U	this gr8 movie	this coolio movie	this awesome movie	This is truly a wonderful film
27 Justine T	It's rockin	it's beautiful =)	High School musical 3, was legendary	This magnificent film
31 Charlene B	joh its boz cuz 😊	It was so kwl ☺	it was so nice	theres something very spectacular about this movie
32 Tegan H	this fam here has flopz in da pozi	this fam they got lot lot probz	this family had a lot of problems 😞	we see a household which is warped beneath it's picture-perfect life.
38 Nosipho Z	so gross [...] such a nastified muvi	this disgusting movie	the most disgusting movie	There is something profoundly disturbing about a movie
39 Sindiswe N	It ws the bomb	N/A	its mynd blown & owt of ths world	This is one of the best movies
41 Zinhle N	It ws da best dance film I hv eva seen	it was amazing I learnt a lot of stomping, krumping and hip hop moves	“its out of the door”. The dance moves were gr8	This phenomenal dance film
55 Nandi M	this gr8 movie	N/A	this kiff movie	this bubbly film
56 Michelle M	It xxx abt a gal ho lvz lvz Nwyrk x with her parnts 2 go nd lve in a farm. da huis dat de ey lvd in wz lyk a 100 yrz old.	N/A	Its about this gal who lived in xxx Newyork and her perent. They decided to live Newyork and go and live in a farm in a house which is about 100 yrs old.	Its about this girl who moves to another place with her parents, thy go to live in a farm in a house which is more than 100 years old.
57 Anne M	dis chick is lyk dis holy type person	The girl [...] a priests daughter	this chick (virginal, priests daughter type)	She is a priest's daughter

Table 6.5 Comparison of multisemiotic and lexico-grammatical elements

6.4 Concluding comments

The findings so far suggest that some adolescent learners are able to structure their texts not only to achieve an overt generic goal, but also to co-opt texts to fulfil individualised social and affective functions. This is especially evident in texts generated on social media applications. The data seems to challenge the notion that these applications – such as MXIT and Facebook – automatically compromise adolescents’ literate proficiency in standard written English. Conversely, it rather suggests that they have a degree of semiotic and stylistic versatility that is uniquely responsive to how such applications enable literacy to vary in relation to sometimes complex and subtle differences in Field, Tenor and Mode. In the next chapter of data analysis, ALP and the texts that arise from these are reconceptualised as textual assemblages. An experimental Deleuzean gaze is applied to the texts and to biographical data. This exploration is an attempt to expose some of the unique energies that seem to pulsate throughout the texts, and to see their authors as participants in diverse processes which motivate literacy as multiple forms of practice.

CHAPTER 7: TEXTUAL ASSEMBLAGES

7.1 Introduction

Broadly underpinned by the logic of the sociolinguistic tradition, the previous two chapters presented analyses of the data which explicated structural and semiotic patterns emerging from the interaction between variables in the Context of Situation. This third chapter of data analysis positions the texts as assemblages arising from interactions between multiplicities which themselves emerge in a particular milieu. A re-interpretive Deleuzian gaze is applied to the data. The creative intention seeks to merge the intuitive and conceptual dimensions such that the application of concepts resonates through processes ‘in an intuition specific to them: a field, a plane, and a ground that must not be confused with them but that shelters their seeds and the personae who cultivate them’ (Deleuze & Guattari, 1994, p. 7). It positions the research study as a multiplicity in which:

Concepts are centers of vibrations, each in itself and every one in relation to all the others [which] is why they all resonate rather than cohere or correspond with each other. There is no reason why concepts should cohere’ (Deleuze & Guattari, 1994, p. 23).

Deleuze considered his philosophy an “outsider’s” art that “permit[s] it to enter into external relations ... with other disciplines” (Deleuze, 1990, p. 122 in Rajchman, 2000, p. 21). Central to this is the imperative freedom to create concepts, and to locate these on an analytic plane such that the theorist devises a set of conceptual tools ‘that unsettle[s] and disturb[s] those who would use them in order to bring new objects and events within range of thought’ (Murphy, 1998, p. 213 in Semetsky, 2006, pp. 3-4).

This conceptual freedom is not an abdication of intellectual rigour – an invitation to analytic chaos. In this study, no new concepts have been introduced into an already complex and dynamic philosophical lexicon. Deleuze’s insistence on invention and creativity has been interpreted as an invitation to apply a logic of difference (Hughes,

2009) to the evaluation of entities or multiplicities which goal is the discovery of the energetic and relational processes that generate these entities (Colebrook, 2006; DeLanda, 2002). The analysis seeks to account for the forces at work in texts as multiplicities such that ‘a static representation of the order of references gives way to a relational dynamics of the order of meanings’ (Semetsky, 2006, p. 80).

Positioning texts as Deleuzean assemblages emerging from multiplicities foregrounds the inextricability of subjectivity and semiosis from the materiality of the world as it is encountered in experience (Colebrook, 2006; DeLanda, 2006; Semetsky, 2006; Williams J., 2008). As Colebrook notes:

Deleuze insists that we should not simply accept a system of signification but should examine how such systems emerge, work and are produced (2006, p. 44).

Such examination is crucial to accounting for how ALP emerge as evidence of generative and responsive processes that continuously shift in series of motions, how it is that texts written on Facebook and MXIT constitute an adolescent’s *access to the world out there* (Anne, L57, Appendix 25, Excerpt 4). These processes become structuring trajectories, traversing the SIA in recursive non-linear iterations that co-implicate adolescent subjectivity, experience and semiosis.

Texts as assemblages are actualisations of variations in the virtual structuring tendencies intrinsic to adolescent subjectivity, experience and semiosis and inter-implicated within the milieu of the global informational age. These are conceived as qualitative multiplicities which capacities interact on the plane of immanence thereby giving rise to the diversity seen in ALP. The SIA, defined as a configuration of material, textual and embodied practices that depend on ICTs, most significantly the mobile phone, is similarly conceived. The SIA emerges as an assemblage from within the qualitative multiplicity of the internet/WWW. It is a space of possibilities and generative processes that exerts structuring tendencies on ALP in relation to subjectivity, experience and semiosis. As Justine says, connecting via the internet is *a way of [me] communicating with [my] friends and organising places to be ... you can do everything on it* (Appendix 20, Excerpts 1 and 2). These generative and

performative potentialities of the SIA emerge in the different kinds of texts incorporated into ALP.

7.2 Involutions of life: Experience; semiosis and subjectivity

The purpose of applying a Deleuzian gaze to the data is to try and account for the processes of genesis that arise as a result of the relations between entities. It is to try and interpret the data such that an original description emerges of how such texts as MXIT messages and other ALP are structured by the interaction of singularities within multiplicities and assemblages of a particular milieu. It is to see the texts as evidence of imperceptible dynamic relational processes that have reshaped how literacy is conceived and enacted; how it is, for example, that Anne (L57) sees literacy as *the ability to sort of comprehend something that you are given if it's a text or a clip of something or a video clip, just to understand ... like let's say, a voice clip or a video clip or a music clip ... to be visually literate* (Appendix 25, Excerpt 5). To accomplish this means to engage in 'thinking [that] breaks with practice and grasps the structure or form that makes a practice possible' (Colebrook, 2006, p. 106) because, for Deleuze, 'all thinking, perception, experience and action – all life – *is a process of imaging or relations*' (Colebrook, 2006, p. 136, original emphasis).

A Deleuzian philosophical approach to experience, subjectivity and life is used without attempting to engage in the historical debates around these fundamental ontological and epistemological issues. It accepts Deleuze's emphasis on immanent generative structural relations as one productive theoretical approach and applies it to imaginatively re-thinking ALP. Debating Deleuze's (and Guattari's) philosophy relative to alternative post-structuralist thought on experience, subjectivity and semiosis would constitute a separate study in its entirety, and is not within the scope of this project's focus on accounting for multiliteracies in ALP.

7.2.1 Experience: Mind-body encountering the world

The social-informational internet/WWW assemblage (SIA) is positioned as a Deleuzian substantive multiplicity, a real virtual along which lines and points interact as 'complex places' (Semetsky, 2006, p. 67) or singularities that further actualize the

texts of adolescent literacy. It views the SIA as an Outside, an ontological category which is ‘an overcoded virtual space that nevertheless possesses a full reality by itself’ (Semetsky, 2006, p. 67). This Outside is co-existent with the Inside in mutually recursive, continuously enfolding processes of co-implication.

Something of these interacting singularities and processes at work in zones of complexity is suggested in the following extract from Justine’s (L27) interview in which she explains the way she uses images in her texts; for her, *photos can mean a million words as well* (Appendix 20 , Excerpt 2):

I: But when would you decide to send a picture rather than write something?

J: When I’m tired maybe... and... maybe when I’m sad or I’m not really in the mood to type something out completely then I’ll send a picture.

I: And where do you get the pictures from, apart from the things that come loaded, would you go ...

J: Well... a lot of friends... we like backgrounds for our phones’ wallpapers. We send each other pictures if it’s something really nice then we can use that as an MMS as well.

I: Okay and where would those pictures come from?

J: Internet.

I: So you would get some... a picture from the internet, put it on your phone, send it?

J: Yes.

What this extract points to are the relational and expressive impetuses that implicate different kinds of semiotics, recruited from that ‘overcoded’ yet real-virtual Outside space and enfolded into the Inside-subjectivity of Justine as she adapts her mode of communication in response to her immediate affective state. For Justine, her text-as-image possesses a complete communicative reality; the resources of the internet and Facebook offer structuring possibilities to exercise her power to relate, to engage in friendship-building acts of communication even though she does not feel like writing. Additionally, the composition of her Facebook message (Appendix 9) clearly demonstrates the capacities of different components at work, interacting to give rise to a text which is an actualization of numerous co-implicated singularities: Justine’s

experience of having seen *High School Musical 3*; aspects of her subjectivity – her friendship, her emotions, her concerns, her linguistic choices and her use of multisemiotic resources within the structuring framework of Facebook. Thus experience, subjectivity and semiosis are set into interaction with each other within the SIA as experienced by an adolescent. The discrete textual artefact yields, under a Deleuzian gaze, the generative yet imperceptible forces that give rise to a textual practice that is at once both product and process as it is always part of a continuously shifting network of relational communicative relays.

A new way of thinking about the SIA in relation to adolescent literacy becomes possible from a Deleuzian perspective (Colebrook, 2006; Deleuze & Guattari, 1977; Hughes, 2009; Rajchman, 2000; Semetsky, 2006; Williams J., 2008) precisely because his ontology is ‘transcendentally empiricist’ asserting ‘being with respect to both corporeal and mental worlds and refus[ing] the idealistic subordination of being exclusively to thought’ (Semetsky, 2006, p. 67). This perspective offers a shifting, elastic conceptual space in which to try and explicate the ways in which the continually evolving SIA, particularly reflected in the link between the corporeal mobile phone/body assemblage, and adolescents’ ‘mental worlds’ erupts into new ways of making meaning. For example, time as a corporeal dimension has become implicated in text structure on mobile phone applications such as MXIT. The need for brevity is associated with keeping a conversation flowing and a recognition that one’s conversation could be part of a set of communicative exchanges taking place in relays, a meta-conversation, with ten or more interlocutors. This gives rise to processes such as semantic compaction where emoticons are used instead of words. For Justine, *its quicker* to do this because *speed is important* (Appendix 20, Excerpt 3). Anne places emoticons near the beginning of her MXIT texts because *then, then I type really really quickly afterwards*. For Nandi, the materiality of time and money are implicated in MXIT shortening. For her, it would be *dreary* and *take forever* (Appendix 23, Excerpt 1) were she to write out her IM texts in full, which on MXIT, is an inexpensive alternative to having a one-to-one telephone conversation on her mobile. From these few glimpses into some adolescents’ worlds, it is evident that different material forces, in addition to the traditional variables of Context of Situation, are shaping the semiotic landscape in which adolescents interact.

The analyses explore how the production of new types of texts tells us something about 'life's power to produce' (Colebrook, 2006, p. 29) and how technologies are part of this dynamic series of reiterative and recursive creative potencies. The embodied mobile phone and the adolescent mind are intimately complicated, in-folded together, as is reflected in the examples given above.

Deleuze's philosophy seems to be particularly useful at this point in the 21st century human's relationship with technology. His emphasis on human life and thinking not being reduced to what has been created, but rather indicative of a general power to create and to reason imaginatively is extended in his insistence that we only think productively when thought comes up against what is not itself, what is outside the inherited conceptions of 'mind, reason and humanity' (Colebrook, 2006, p. 4). The continuous evolution and newness of SIA demands a way of thinking that is focused not on attaining a static understanding of a finally evolved form, but on a creative adaptability that is able to maintain a perspective on the generative processes constantly at work in the SIA.

An account must be given of the relation between human experience and semiosis that is being expressed or made visible through the SIA rather than what it is in and of itself. It is just such connective power that infuses ALP, not the self-subsisting intricacies of the hardware and software that make it possible or the literacies that enact it. For example, Michelle (L56) had not used Facebook at all at the time of data gathering; she indicated a desire to access this application because her friends suggested that *it's a much more fun way to, you know, meet new friends than MXIT* (Appendix 24, Excerpt 2). Michelle wants the experience of making new friends, of *explor[ing] what's happening*. For Justine T (L27), Facebook is for looking at *who's new and what's new* and she relishes the experience of having friend requests because then it feels exciting (Appendix 20, Excerpt 5). Anne (L57) values Facebook and MXIT because they are her *access to the world out there* (Appendix 25, Excerpt 4). Charlene (L31) has a compelling affective motivation to use Facebook; for her, when logging on after a prolonged period of absence, *then you go back, you like find all the friend requests, you like start smiling 'cause you know 'Whoo! I'm loved! People are inviting me now'* (Appendix 21, Excerpt 2). 'Doing Facebook' as a marker of

adolescent identity also points to the generative power intertwining subjectivity, experience and literacy practices. Nandi (L55) is subjected to strong peer pressure because she does not use Facebook. Her friends had remarked that, because she did not use Facebook, she is *behind with stuff* and that she *must get with the flow* which she interpreted as meaning that she should *be more ... like NOW ... like do things, do stuff that everyone does NOW* (Appendix 23, Excerpt 2).

To connect with friends and to share experiences with them are two of the energising events that infuse ICT based ALP with their vitality and sense of literacy-in-process. Engaging with applications within the SIA is an activity, an exploration; it is learnt by doing just as traditional literacy is but with a greatly amplified sense of independent power. Teenagers such as Justine find their paths into new literacies just by pressing buttons (Appendix 20, Excerpt 4). This echoes Livingstone's assertion that the way into understanding the potential of the internet is through first experiencing it (Livingstone, 2009, p. 55). So new ways of being literate are the Deleuzian lines of flight that transversally extend and intersect the horizons of teenagers' lives; their proscribed worlds that feel suffused with perceptions of restriction and rigorous constraint appear to open out into intriguing landscapes of novel engagement with the world. For Michelle (L56) using her literate resources on MXIT is *a way teenagers nowadays use, use things to socialise, you know, 'cause most parents don't allow their children to go out to movies, um, you know, sleepovers, and things, so, it's a easier way to socialise* (Appendix 24, Excerpt 3). Further, perceptions of how ALP within the SIA augment teenage experience is humorously suggested by Tegan's (L32) imaginative contemplation of what adolescence must have been like for contemporary adults; she thinks *it must have been boring 'cause all you had to do was read books, and go out with your family a lot and then you don't have fun with your friends ... so it could have been boring*. For her, logging on to Facebook and looking at her friends' pictures, or interacting with them via MXIT is what *keeps her fun* because she does not like reading and thinks she would be bored (Appendix 22, Excerpt 1).

Although her apathy toward reading is a pedagogic concern, it is a separate debate. However, for the purposes of this present discussion, what is emphasised by this

anecdote is that literacy within the SIA is conceived as a process, an activity, a means to an end – not an end in itself as it is in subject English. It is the life-power of literacy to relate, and of thought to image, that together energise the types of literacy teenagers use (Colebrook, 2006). It is suggested that the structural and semiotic patterns of difference that emerge in the analyses presented in Chapters 5 and 6 reinforce the distinction between literacy as an end in itself, and literacy as an appropriation of a skill for the purposes of ‘doing life’ as a contemporary adolescent. Maintaining this distinction could focus pedagogic concerns around ALP; the necessity of teaching teenagers how to adapt their literacies to a wider variety of contextual variables could be foregrounded without negatively sanctioning those practices that are cherished as aspects of subjectivity and social inclusion.

Such a perspective begins to emerge in the analysis presented in Chapter 5 where the technological affordances of ICT applications easily facilitate obligatory textual moves such as the Greeting and the Farewell that are intimately bound up with conventions for politeness and group solidarity as aspects of subjective experience. A vignette of this is given in Nandi’s interview (Appendix 23, Excerpt 4) in the context of using MXIT to get help from her friends with a school project:

I: So when you ask your friends – so say you busy doing your project – and you hit a snag, is, is that when a cellphone would come in handy?

N: Yes.

I: What would you typically do?

N: I’d go on MXIT.

I: Okay. And say what?

N: And, well, greet them first, and/

I: How would you greet them?

N: I’d say ‘Hi’ or ‘Hey’ or... ‘Eh’ or...ja.

Additionally, as shown in Chapter 6, these texts, in particular the MXIT messages, have a unique semiotic character – or register – that is directly contingent on the

immediacy of experience and subjectivity in the material environment converging in semiotic realisations. Processes of compaction in these texts are an example of expressive actualisations linking human experience and semiosis.

7.2.1.1 Deleuze and technology

Deleuze's work on technology is done within the context of his examinations of cinema as technology (Deleuze, 1989; 1986). However, it is in the overall stance of the history of the human as essentially machinic (Colebrook, 2006), a desiring machine (Deleuze & Guattari, 1977) that provides a theoretical impetus for the cautious extrapolation of this line of thinking to SIA technology:

Deleuze installs technology at the heart of philosophy and life. Human life *does* have a power or potential to think, but we can only understand its power, not when life unfolds from itself, but when this power encounters other powers. Only when the human brain confronts what is not itself can it be pushed to the maximum ... only when the human encounters the inhuman will we know what the human [body] can do (Colebrook, 2006, p. 4, original emphasis).

Technology, then, is not only a materialised external extension of our human consciousness which either liberates or enslaves our lives (Colebrook, 2006). Our humanity is wedded to technology in all its forms and devices in a diversity of potentially generative assemblages, for example, in the ways adolescents engage with, or relate to, their mobile phones.

Crucially, a Deleuzian view problematises the perception of a dichotomous relationship between human mind and consciousness, and the machines it creates and uses. For Deleuze, they are joined in a creative dance of perceptions – or images – relations of intensity that move back and forth in a differentiating potential of evolving forms, giving rise to 'new connections and intersections' (Colebrook, 2006, p. 7). We have what we have created because 'life [itself] is perception, or a virtual power *to relate* and *to image*' (Colebrook, 2006, p. 5). The technologies we have are particular unfoldings – or actualizations – of life's generative power to relate and to image rather than merely external products that we use to represent or mediate the

world. It is suggested that this ‘life’, these relations of intensity surging between and around the events running through adolescent relationships, experience and subjectivity are seen in the ways in which teenagers are applying their literacies, in the broad sense in which they understand what it means to be literate, and in the texts they create.

If relation-as-image *is* that which externally connects the terms, ‘mind’ and ‘world’, then trying to conceptualise SIA from a traditional perspective of human mind and its technological extensions (Colebrook, 2006) is doomed to a re-circulation of existing thinking. But a conception of life-as-thought-image being a power to relate could open the way to thinking the ‘unthought’, to new ways of understanding how it is that social media via SIA has proliferated and globally entrenched itself in human affairs. It is its very pervasiveness, particularly in the lives of adolescents, that demands a rigorous rethinking because:

Technology is evidence both of life’s radical expressive power and of the tendency to fall into rigid systems (Colebrook, 2006, p. 12).

Whether or not SIA for adolescents is radically expressive and generative, or an entrapment into ‘rigid systems’ that regiment or circumscribes direct experience and therefore limits their perceptions and affect, and hence their conceptual and literate development (Semetsky, 2006), must be interrogated from pedagogic and social perspectives. Conversely, digitisation could also be a way of expanding and intensifying experience, narrowing the illusory gap between ‘mind’ and ‘world’, and multiplying the power to relate and to image and therefore, to think.

This tension is apparent in the ways teenagers value taking photographs – imaging – and using them in texts to friends – relating – and features strongly in the data. The discussion below elaborates this point further.

7.2.1.2 Windows of perception: Opening or closing the world

The paradoxical character of technology is foregrounded in a concern with thought as immanent to life itself. Technology has made it possible to repeat sameness so that what is immanent to life and to thought can be a repetition of the same. Real

development, however, occurs only in the emergence of something new opened out by the repetition of that which is not the same, the repetition of difference and the potential to create divergent connections. It is possible that the way adolescents are using SIA traps them in a glass-house of unrealised potential, a world of many windows which remain closed. Although:

Life, by definition strives to further itself ... having [a] desire [to] for flow and connection ... this creative force of life also bears a contrary tendency of non-exertion, conservation or reduction of expenditure (Colebrook, 2006, p. 23).

Therefore, in attempting to think anew about how SIA impact adolescent literacy, the crucial question is whether or not they mask a repetition of the same or enable the opening out of new conceptual and social worlds through literate practices. In looking at the ways adolescents are using multimodal literacies on SIA platforms, what one is exploring is a consideration of the potentials of the SIA that have generated the kinds of texts teenagers are producing. A key question is whether ‘inhuman powers’ (Colebrook, 2006, p. 28) have produced lines of connection that appear to be creatively divergent; or, if the SIA is only a novel ‘organised, managed, synthesised whole[s] which allow[s] us to act efficiently’ (Colebrook, 2006, p. 28) thereby welding shut and darkening the windows of flight into new experiential and perceptual worlds through genuinely productive literacies.

The data points to the crucial role pedagogy plays in ensuring that teenagers do not remain trapped in a repetition of localising forms of literacy but are empowered to develop levels of proficiency in writing that is highly context independent.

7.2.1.3 Free-floating techno-human

One of the key aspects of Deleuzean thinking relevant to this study is that technology frees us from the machine of our own body, frees us from the constraints of time and space. His claim for cinema is, it is herein suggested, even more powerfully applicable to SIA: it has ‘potential for divergent connections, a power to produce different connections’ (Colebrook, 2006, p. 15). To an extent freed from the constraints of time and travel, 21st century mobile-empowered people are able to

connect across and between many different networks, to create asymmetrically intersecting lines into realms of non-reality and other actual worlds not constrained by time and space (although arguably constrained by other more material, political, socio-economic and cultural factors). Thus, the potential for new thinking arising from encounters with the unknown could be made available as actual experiences singled out from the virtual multiplicity, which interacting with affect and percept, yields new experiences, concepts, affects and percepts (Colebrook, 2006; Hughes, 2009; Rajchman, 2000; Semetsky, 2006; Williams J., 2008).

The data seems to suggest that this kind of freedom, this power to ‘produce divergent connections’ (Colebrook, 2006, p. 15) that become new experiences is what teenagers are engaging in when they include hyperlinks in their texts. One teenager’s experience and response to a film or a song can become the experience of many others in their friendship networks without any of them having to move their bodies through space and time: they simply press a button on a palm-sized device. As Anne says to three of her friends in her Facebook text: *Just saw this total gem of a film ... click on this link to check it out* (Appendix 17). This kind of capacity for sharing experience is seen in various electronic texts in the data: those of Jane (L10); Justine (L27); Nancy (L19); Charlene (L31); Zinhle (L41) and Anne (L57).

Additionally, the potential for new thinking arising from encounters with the unknown, for new experiences that change perceptions and feelings is poignantly illustrated in Anne’s concern with the lyrics of a song by a popular female artist she admired. She uses her augmented conceptions of what it means to be literate and the resources of the SIA to address this concern. The following excerpt arose in response to the question, posed to six of the research subjects, ‘Do you ever play on a computer?’ (Appendix 25, Excerpt 6).

A: *I go on YouTube and I look at videos... and...*

I: *Can you give me some examples?*

A: *I was very interested to hear that one of my favourite ... um...um... pop artists had like Satanist ... um... associations...*

I: *Who is that?*

- A: *Rihanna.*
- I: *Rihanna? Really?*
- A: *Yes. So, I looked that up and...*
- I: *Where did you hear that?*
- A: *I heard it from a friend during English; we were just talking about these musicians and then that night I went on the internet and I found a whole bunch of articles and videos where there... there actually subliminal messages in the song; if you play the song backwards, it has...*
- I: *Could you, could you play it backwards on the computer?*
- A: *Yes. No. The... um... YouTube put it up as a backwards kind of song.*
- I: *So they had backtracked it already?*
- A: *Yes. And then when you play it there's these really really scary messages about Lucifer and... I was shocked... I was so shocked.*
- I: *And how's that changed your attitude towards Rihanna?*
- A: *Ummm... I'm very reluctant to sing her songs now 'cause I used to, I used to love Rihanna*

And although Nandi (L55) does not have permanent access to a laptop or desktop computer at home, she uses her mobile phone to access the internet, searching Google for school stuff (Appendix 23, Excerpt 3). So for learners like Anne and Nandi, the resources of the SIA offer opportunities for encounters with the unknown that have the potential to yield new kinds of learning experiences.

Conversely, adolescents not critically apprenticed into the ways of using SIA to empower creative relating, and generative thinking and literate practice through new experiences of a divergent world, could remain localised in a flat layer of superficial, unifying and totalising connecting. This would be exacerbated by territorialised and localising levels of written proficiency in English, for example, the IM register. Their power 'to relate and to image' could remain captive to the sophisticated and target-specific global economic imperatives of themetised interaction, celebrification and its end goal, consumerism. Young people could become fixed in 'an encroaching senility' (Colebrook, 2006, p. 11) that results from an anaesthetisation to meaningful experience, to the stimulation of disruptive encounters with the unknown that force

one to think (Colebrook, 2006; Hughes, 2009; Rajchman, 2000; Semetsky, 2006). They could ‘fail to live’ (Colebrook, 2006, p. 12).

Such concerns could be exemplified by the fact that, unlike Anne who uses literacy within the SIA as a channel for satisfying her curiosity and as a resource for empowering her learning beyond the classroom, other learners are caught up in the repetition of the same. Tegan (L32) for example, *plays Stardolls and stuff where like you dress up famous people* (Appendix 22, Excerpt 1). Justine (L27) spends a lot of time downloading music or playing games such as *Solitaire, SIMS and Counterstrike*. Michelle and Charlene, like Nandi, do not have access to a computer at home. Unlike Nandi, however, they do not use their mobile phones to access the internet. Michelle in particular has a limited conception of how she might use the resources of the internet to expand her world. Although she said that, had she her own computer she would use it for research, this would constitute *research on different things like celebrities ... go[ing] on their websites* (Appendix 24, Excerpt 1).

Learners like Tegan, Justine, Michelle and Charlene could be trapped in a glass-house of unrealised potential, a world of many windows which remain closed. Pedagogic intervention would play a transformational role in inducting them into powerful forms of ALP within the SIA.

7.2.2 Semiosis as a process

A Deleuzean perspective on different forms of semiosis positions them as not being the causal or construing factor for experience and affect, but rather as generative processes in a multiplicity which ‘provide[s] a set of conditions for the expression of sense’ (Semetsky, 2006, p. 34). These processes’ capacity to provide such a set of conditions in the SIA has been greatly amplified by digitisation which can render almost anything in the world available as a semiotic resource immanent to the compositional plane on which adolescents draw in processes of text creation. That these are available in portable palm-size devices further augments the potency of this capacity. Teenagers themselves are continually engaged in the process of making things in the world – including images of themselves – available as digital resources, a process of constructing a set of conditions for the expression of sense.

Michelle's response to question 1 of the semi-structured interview points to a convergent understanding of literacy as a series of processes:

I: Okay, so how does literacy help you then with those feelings?

M: Like it helps because like in literacy ... visualise things a lot

I: Visualise?

M: Yes.

I: Can you give me an example?

M: It helps you to see things in a real way instead of like ... in fake or something.

I: Okay. So when you say 'see' do you mean with pictures or with words or with sounds or what do you mean?

M: It could be anything depends like in your mind or imagination ... could be words ... ja (Appendix 24, Excerpt 1).

Crucially, different forms of semiosis can enter into relations with one another. This is clearly evident in the T1-3 style of the electronic texts where language, still and moving pictures, songs and symbols interacting together express something in addition to the experience of watching a film: excitement; desire; connection; belonging. The interaction of self-subsisting semiotic components is more than the sum of their parts.

7.2.2.1 Signs and Sense

Sense emerges in signs only when two series are organised on the plane of immanence such that they resonate with each other. 'The surface [that] becomes "the locus of sense"' therefore is the plane on which meanings are created (Semetsky, 2006, p. 49). Within the constructs of this study, the SIA is this surface, the plane of meanings on which texts are actualized. On this plane, a multitude of constitutive resources are immanent.

The cause in question, though, is 'nothing outside of its effect, ... it maintains with the effect an immanent relation which turns the product, the moment that it is produced, into something productive ... Sense is

essentially produced. It is ... always caused and derived' (Deleuze, 1990, p. 95).

This immanent relation between cause and effect as a process-product is suggested in the structure and composition of IM texts as emerging from the interaction between the expressive resources of an individual and those of the SIA together with all the material dimensions implicated in this assemblage. One cannot separate the embodied technology from the generative impetuses intricately bound up in subjectivity. Similarly, one cannot deconstruct the texts and rigidify them as objects of analysis apart from the living conditions – flows of information, movement and immediate experiences in time and space – that shape them. Needing to know or to share something immediately is inextricable from the structure and semiotic composition of the text that realises those events. This is suggested by Charlene's strong reaction to the possibility of conducting a relationship apart from Facebook and MXIT *because then like communication – how am I gonna talk to ... what are you doing? I wanna know what you doing NOW!* For her, MXIT is therefore *much quicker* even than sending an SMS (Appendix 21, Excerpt 4). Immediacy, speed and processes of contraction emerge together in the texts.

Additionally, Sense as derived in a cause-effect dynamic immanent to processes of production is suggested in Anne's explanation of conventions for MXIT politeness (Appendix 25, Excerpt 1):

I: *Okay. Thank you, and now I want you to talk to me about MXIT politeness. Okay. How do people know how to do the right things on MXIT? Now you've said sometimes you're perceived as abrupt but that's when you're screening out strange people*

A: *Yes*

I: *But apart from that how do people know if there is right things to do, there are right things to do. How do you know? How do people know? Where does that knowledge come from?*

A: *I guess it's, it's it's something we do every day. We wouldn't just go up to a person and start talking to them randomly. We'd have to greet first and ask how they're doing...*

I: *So there's a MXIT greeting? Typically what is it?*

- A: *It's, "Hi!" or "Hello". But then me being random I would always say something in it like in a different language: I'd greet them in French or something (laughs)... I don't know, I'm random like that.*
- I: *What would you say in French?*
- A: *I'd say bonjour (laughs) ... or I...or I'd... I'd I'd don't know what I'd say in German but I do greet in German sometimes... just to keep it random... it's just a conversation starter like "What the hell did you just say to me?" (laughs) Ja, 'cause that, ja that keeps the conversation interesting.*
- I: *Okay.*
- A: *It can get very mundane at times if it's just like "Hi; How are you?" 'cause you start getting one word answers and I hate that with a passion.*
- I: *Mmmm...*
- A: *Yes.*
- I: *So you want people to develop things a little bit?*
- A: *I want to have a conversation, not just, ja, to be there.*

What this extract points to is a Deleuzian notion of 'Sense' as prior to the denotative meaning of signs and their relation to what they signify. It is a 'layer of sense' (Deleuze in Rajchman, 2000, p. 64; 124) that pre-exists but is necessary for thought. It is idiosyncratic and individual, not 'defined by established truths and the inter-subjective roles devised to attain them' (Rajchman, 2000, p. 64), but coming prior to cognition and re-cognition. Deleuze wants to move away from the traditional philosophical or 'dogmatic image of thought' (Rajchman, 2000, p. 65) which sees only fuzziness and nonsense outside of true-and-false statements and schematized correlation between sign and signified. He proposes a 'layer or zone of sense from which new things are given to thought' (Rajchman, 2000, p. 66). Crucially, Deleuze does not develop a notation for sense: it cannot be codified; it can only be 'got at' through continual invention of new words and ways.

[This] excess of language and this relation to the 'real' together point to the kind of paradox or paradoxical sense Deleuze thinks is required by thinking, and of which he is proposing a logic (Rajchman, 2000, p. 65).

Each individual, then, has a singularizing way of relating to the world and each other, in what we say and do, which reveals the unique ‘sense’ imbuing, inhering, underlying, emanating through, wave-like and pre-cognitive, resonating in our interactions with the world and each other. In this way, ‘virtual relations’ (Rajchman, 2000, p. 66) are created among us, between us and our environment, that are before and non-essential, non-quantifiable, ‘irreducible’, to a symbolic scheme. Our singularities then are neither ‘error nor informational noise (cf. Sondheim, 2007), but rather a prodigious impersonal reserve or virtuality of what makes of us singular beings’ (Rajchman, 2000, p. 66).

It is the purpose of this study to try and uncover, to ‘get at’ this paradoxical logic of sense that has eluded received ways of theorising ALP that have not had to factor in the contingencies of continuously evolving communications technology. In the example above, Anne ‘gets at’ this unique singularizing sense in radically new ways in processes of interaction between who she is and how she likes to communicate on MXIT. Her unique sense-singularity of personality cannot really be completely signified by static representations on the plane of consistency, but emerges as a new resonant force motivating the actualization of her texts in tandem with MXIT and her existing levels of literacy in English.

Further, hints of these virtual, structuring resonant interactions are glimpsed in the different ways each learner has co-opted the overt, instrumental and symbolic requirements of the text task (Appendix 5) in texts 1-3. What emerges, as discussed in Chapters 5 and 6, are the ways in which the structures and registers of the texts are shaped by singular tendencies that stretch and pull the texts in directions different from those specified in the task. The texts are distinguished by entirely different senses that mark each learner as a distinctive authorial presence in a way that is qualitatively more intense than in the film reviews. Their reactions to the films in relation to who they are make these reactions – these pre-signification senses – individuating actualising tendencies.

For example, Michelle’s MXIT text is interspersed with plangent tones of isolation and alienation which are contextualised by several of her responses in the interview and questionnaires. She was new to the school at the time of data gathering and had

only recently received her first mobile phone. Responses from Literate Life History Questionnaires 1 and 2 (Appendices 2 and 3) suggest that she was not happy at Strelitzia High, feeling culturally, socially and economically alienated: *To tell you the truth, I never wanted to come to Strelitzia but I had to ... I've never liked this school at all ... I'm the only one [in my family] that goes to a better school ... like a school which is very strict about education. My other family members go to school in rural areas.* In her interview, she reports asking her mother to buy her a phone because *when I got to high school, I saw all of my friends ... having phones and stuff, and having those modern phones and things, and like I asked my mom 'cause I felt so bad ... I didn't have the things they do ... I just felt left out I guess ... [not] connecting with your friends* (Appendix 24, Excerpt 1). Further, there was no computer in Michelle's home. And in response to questioning about parents' and teachers' negative and critical attitudes to mobile phones and applications such as MXIT, and her mother's attempts to prevent her from accessing modern communications technology, Michelle expressed a sense of angry injustice and a feeling that *why can't we adapt to our modern things then they, they want us, to take us back, like take me back* (Appendix 24, Excerpt 1) (cf. Hill and Tisdall, 1997, p. 36 in Livingstone, 2009, p. 8).

Her MXIT text is characterised by attention-seeking turns that force her interlocutor, *2die4*, to ask very specific questions. For example, as a complete turn, the interjection *Joh! Joh!!* together with an emoticon suggesting an enigmatic smile can only be responded to with a question: *wtup*. Michelle follows this not with a specific response, but with another, obliquely phrased question: *Hve u cn da l8st movie*. Her response to her interlocutor's question about which film this could be reinforces an exclusion-inclusion dichotomy that, in this case, marks Michelle as belonging to the group that knows the film *The Messenger*. This is reiterated in *2die4*'s *Cme on gal tl me mre abt it* and Michelle's refusal to comply. And, when she finally begins to appraise the film, she emphasises that she was alone when she watched it, a fact which is recounted in *2die4*'s rhetorically phrased amazement that Michelle managed to watch the film entirely on her own.

Neither the email text nor the film review resonates with these undertones of isolation and alienation. It is as if the sense pervading how Michelle experiences her

encounters with the world into which she has been thrust and, simultaneously, from which she is partially excluded, both by her status as a technological ‘newbie’ and her sense of difference relative to her peers and her family, drives the MXIT text.

The data suggests that, to some extent, applications such as IM and Facebook offer adolescents zones of expressive experimentation, semiotic playgrounds that can emancipate sense from rigidly enforced conventions of signification. However, they can also trap it in a limited system of affective symbols, or emoticons. For example, using a chilli image [🌶️] incorrectly to signify that one is hot owing to the weather could cause social chaos as it is usually used to signify that a person is attractive; it is a symbol that must be used with caution as is vehemently suggested by Anne (Appendix 25, Excerpt 7):

A: *No. I don't like the chilli.*

I: *Why not?*

A: *Just... I don't like, especially from a guy 'cause it just, it has sexual connotations and I don't like that.*

I: *Oh really? So if a guy sends a message with a chilli...*

A: *I find it a bit indecent and you know.*

I: *What does it... is it too sexually suggestive for you?*

A: *Uhh... I guess... I just don't really feel, I don't like that emoticon at all.*

I: *What do you think he's saying when he sends the chilli? "I am....."*

A: *Probably. No he'd send it, usually they send it when they referring to me. It's as if I'm some sort of like, object, and.....*

Unlike Anne who displays high levels of sophistication across a diversity of multiliteracies, learners like Sindiswe (L39) whose texts suggest she has not yet mastered the nuances of emoticon usage, are at risk of being misinterpreted or of unwittingly initiating communicative exchanges that result in undesirable social consequences.

Yet playing in these zones does not necessarily result in a betrayal of liberation, a different kind of literate entrapment – although without effective pedagogic

intervention it might. Reverting to Michelle as an example, her freedom to use unorthodox means of signification (and languages other than English) is evident in tension with the imperative to acquire the MXIT style.

And so, ICTs provide a huge space, a similarly ‘prodigious ... reserve or virtuality’ (Rajchman, 2000, p. 66) of expressive components that offer adolescents an easily penetrable and seemingly permeable zone of multimodal compositional resources that do not have to be strictly schematized or codified. These components exert a catalytic effect, opening out textual assemblages into asymmetrically divergent lines of connection with an unpredictable array of diverse assemblages. They exist in spaces in which there is greater tolerance for expression that is novel, inventive, playful, and, perhaps, more open to catching or revealing ‘Sense’. Language’s dominance in human communication is augmented by myriad idiosyncratic combinations of sound, still and moving pictures, symbols, and even vibrations, integrated into written texts. And sometimes, sending only a picture or a song might be more effective in revealing that Sense which is prior to denotative sign-signified schematized communication. Or, it might convey *both* the Sense of an event and a linguistic representation, being possibly a more complete means of communicating idiosyncratically between people, particularly in new spatio-temporal configurations. This is suggested in the data where learners include in their Facebook or email texts songs from the films they have watched. For example, Nancy’s (L19) (*Here’s my fav song from the mvie*) *Its called right here ryt now! I hope you like it* (Appendix 7) possesses a more immediate representational and sensory completeness that is not possible with only a description in words of how the song might sound. Given the significance many adolescents attach to music, sharing a song in this way could also function to strengthen the friendship bond between her and her addressee, Justine.

For adolescents then, the fun and power of ICTs is that it enables a reaching for, a striving toward, modes of expression that, in their diverse and complex composition, offer different and more enticing types of context-independence than writing. Whether or not this puts adolescents at risk of failing to develop as proficient writers is a contentious and important issue. The data in this study suggests, however, that, in particular pedagogic and social circumstances, it need not. This is indicated by the

low incidence of T1-3 elements (refer to Figures 6.1, 6.2 and 6.3) in the film reviews, and in the consistency of the structure of these texts. But these new kinds of texts do offer adolescents a sensory world of verbal, visual and aural communication that is compelling because it is quick and easy to use, and always available on internet-linked mobile phones. They also offer an easily retrievable semantic experience that does not necessarily require reading and writing, and which, because it is often shared, is already mediated in a multi-layered series of interpretive relays, an amplified type of communicative experience.

That multiliteracies are captivating, authentic and sensory forms of communication is often used as an unqualified justification for implementing pedagogic practices that are thought to motivate learners in different and productive ways. Educational technology is inserted into the classroom; learners and teachers are assumed then to be able to apply its potential to learning situations in the hope of improving on learner achievement. Making select and carefully considered use of the multimodal resources of the SIA in classrooms might stimulate the emergence of bridging networks of meaning – schemas – that open out ways for learners to become more proficient in mastering the demands of reading and writing context-independent academic texts. Types of experiences that the internet/WWW facilitates – such as seeing or hearing something new and unfamiliar – could offer learners a broadening of experience that would expand their mental landscapes so that new concepts are easier to grasp. For example, showing learners who have no knowledge of ballet a video clip of a dancer doing a pirouette could help them to understand how Alan Paton uses the word for effect in his poem *The Discardment*.

However, a converse and undesirable alternative might be that the sensual stimulation of screen-based multiliteracies could inhibit the development of structured, hierarchical reasoning developed in symbolic representation (Hugo, 2013); learners could merely be ‘having an experience rather than thinking’ (Greenfield, 2008, p. 180) although this view privileges and separates thinking over experience in a way that is counter to the ontological stance adopted in this study. Nonetheless, understanding the impact of sustained reliance on the non-linguistic resources of the internet on the development of the human mind is an area of current research

(Greenfield, 2008; 2003), the findings of which need to be integrated into future studies of adolescent literacies.

Turning back to a consideration of the semiotic resources of the SIA as seen in the data, they are generally available to everyone without high degrees of specialisation as in music, dance or art. They are portable; always available; private and public, controllable to a degree; subversive; transgressive; symbolically excessive and capable of rendering any thing in our world usable in a digital space. It stands as a straining toward uncovering the layer that is prior to thought, that is unique to each individual's milieu and apprehension of their environment. It offers ways to express that which for so many people is inexpressible in words. Writing context independent texts demands highly developed literate and linguistic skills. ICTs free people who struggle with these yet to express and communicate their perceptions, not only to one approved or approving interlocutor, or in a manner that is societally or culturally privileged (although there is this element in ICTs, but people still have much wider choices of online milieus in which to find a cultural and social home), but to a network of connected others. It confers on people a type of presence they might not have in the real world: an online presence which comes to them through the affirmation of their existence by others. This is suggested by the following excerpt from the interview with Charlene (L31) in which she was explaining that emoticons in a MXIT login identity tag constitute *the Presence*, [and that] *with the Presence, it's like your mood; you angry; you happy you sad*:

C: *True. But no...I'm...sometimes I'm bored on MXIT/*

I: *Oh really?*

C: *'cause there's no one to chat to.*

I: *So you log on and you look and you see and then you think...*

C: *Ag! I go off straight away.*

I: *And how do you feel? Disappointed or sad or lonely or what? Irritated/*

C: *No...not really. I wouldn't feel anything because then, but when that like certain somebody comes on that I know that I like have a lovely conversation with I'd be happy. You know you just start smiling when you see his name or her name on, then, ja.... (Appendix 21, Excerpt 5).*

Interrogating and exploring ALP beyond the traditional sociolinguistic paradigms is an attempt correctly to pose the new literacies ‘problem’, to see what has been obscured in the reactive debates around teenage literacy practices in the different literate milieus of the SIA. It is to uncover the sense that infuses and suffuses adolescent textual practice, the hidden structuring dimensions of the contemporary teenage literate territory which they traverse from the bounded freedom of their mobile phones, and of which the multisemiotic texts they create are the maps. For:

The problem in Deleuze’s semiotics is to render this sense and so make thinkable what we have not yet been able to think, to make visible what we have been unable to discern ‘clearly and distinctly’. It is a problem of expressing something in our modes of being that is the imitation or representation of nothing prior ... signs require a different sort of intelligence than decoding a language or a logic; rather they get at something that can’t be ‘codified’ – what Deleuze calls a process of ‘deterritorialisation’ or ‘lines of flight’. Thus Deleuze tries to envisage a semiotics that would be diagrammatic ... rather than symbolic ... and diagnostic of other possibilities rather than predictive or explanatory ... For this to be possible, the notion of ‘sign’ itself must be rethought in at least two ways (Rajchman, 2000, p. 67).

The two ways Deleuze rethinks signs are as follows: Firstly, the relation between the sign and the signified is not analogical and ‘it is not to be understood in terms of form and content’ (Rajchman, 2000, p. 67). Representation is no longer ‘subordinated to the relation between pure originals and their instantiations’ (Rajchman, 2000, p. 68). Secondly, there is a break between the conventional link between words and images: rather an “anonymous murmur” of discourse prior to them’ (Rajchman, 2000, p. 68).

[Deleuze] sees it as part of a larger art ... where the link between what we can say and what we can see at a given time and place is fixed by discursive regularities rather than by a fixed schema (Rajchman, 2000, p. 68).

So, in adolescent ICTs, there is possibly no ‘fixed schema’ – or rather – there is a multiplicity of schemas with enormous symbolic flexibility and freedom such that it comes close to collectively comprising ‘discursive regularities’ rather than the fixed schema of symbolic representation in writing. Also, what can be seen, said and heard at a ‘given time and place’ is greatly altered: almost anything can be seen and heard any time and in any place, although this is dependent on technological reliability. But the ‘cartography’ of the semantic territory open to adolescents today has exponentially expanded compared with face to face interaction in real time or text/image combinations of traditional print technologies. There is, online, the continual ‘anonymous murmur of discourse’ that murmurs and resonates and opens out lines of flight for young people to communicate and, possibly, to learn. The potential of this is suggested in Anne’s (Appendix 25, Excerpt 8) expression of frustration that the visual resources of the SIA are not used more frequently on classroom smartboards:

- I: *What other classes would you like to see have... or other subjects... would you like to see them have smartboards?*
- A: *Umm.... Let’s think now... well in CAT we don’t really need a smartboard ‘cause we’ve got a monitor but I think in Zulu, in Zulu, we, we use, we talk a lot about traditional clothing and stuff but we don’t know what it looks like so maybe some kind of visual thing like a picture from... even if it were just a projector or something... just to show us what this thing looks like. And... let’s see... in English, oh definitely in English, ‘cause we... we learn at the Norma Burns ‘cause there’s like no other classroom, and ja, so the teacher is very casual about... Ms B... she’s very casual about what she types... what she writes on the board; she just writes it down; we don’t take it seriously, so,*
- I: *Would you take it more seriously if it was on the smartboard?*
- A: *Yes, ‘cause, then at least I think, then at least I’d know, ‘Okay, she’s thought about this; she’s structured it in such a way so that we would be able to understand’ whereas on the board it’s just written all over the place and just casually.*
- I: *Okay. Any other subjects where you think it would help?*
- A: *Ummm...let’s see... Bio... let me think Bio. Bio if we had just visuals, like actual visuals from, from university websites like the Science Unit or something, that would be nice. I think that would be fantastic.*
- A: *Why? What would the visuals do for you that the text book/*
- I: *It’ll make the learning much easier. Instead of like diagrams where everything is drawn, just randomly, I want... when I learn about something, I want to see, I wanna*

see a cell, what it looks like in real life, whereas it's just a diagram, it isn't really ... it doesn't have colour or anything.

Not only does this vignette point to an amplified conception of literacy from the adolescent perspective, there is also a Sense of something always in process, always moving, happening, opening out, of what is possible, what might yet become. Moreover, Anne's frustration resonates with claims made more than a decade ago that 'conventional school curricula and pedagogical procedures are out of step with the cognitive and attitudinal organisation of the young' (Smith & Curtin, 1998, p. 212; Vasudevan, 2006).

So, for Deleuze, who connects 'words and things or discourse and vision' in a new aesthetic of semiotics, 'the relations between figure and discourse are obtained through varying "procedures" rather than being fixed by a scheme of representation' (Rajchman, 2000, p. 68). Adolescents today are able to convey uniquely, idiosyncratically, the sense layered beneath their immediate perception through the varying 'procedures' afforded by a variety of ICT applications, rather than being limited to the fixed scheme of representation that is writing. They are also aware that modes other than writing have possibilities to enhance their learning. Within the SIA, communicating is much more of a continuous series of processes suffused and replete with the excessive suggestiveness of new connections in a variety of dimensions: social, cognitive, affective, visual. The SIA as a huge reserve of signs is a mediating, inclusionary if indeterminate and experimental zone between subjectivity and experience, constantly intertwining each. So:

One might then think of the 'signs' in Deleuze's semiotics as [such] 'procedures' for a universe not already prescribed by codes or coded signs, or at odds with one. They are thus 'techniques' or 'instruments' of a peculiar kind, which Deleuze often calls 'experimental' (Rajchman, 2000, p. 69).

The informational age (Castells, 1996) then could be viewed as a universe at odds with the historical print-and-paper universe, the universe in which the relation between sign and signified was more static. This new universe is characterised by novel techniques and instruments that are intrinsically experimental, in which there

has been a disruption of the relation between sign and signified paradoxically achieved in the fusion of the two, and in which any thing existing in the world can become a sign and projected into – not on to – this always available semantic repository out of which hybrid texts arise and challenge with their impossibility the old order of stable linguistic schema. Schools and homes, as gatekeeping social institutions, are understandably sites of conflict in which the old and new universes collide. There is a hint of this tension in Anne's frustration (above) at the rigidity of a text-book diagram when she knows that moving, colourful pictures are available.

A possible way of understanding how the two could co-exist productively might be opened out by holding on to Deleuze's concept of assemblages, and how these new 'instruments' or 'techniques' feature in relation to people and their 'modes of being', and the 'larger, looser assemblages' (Rajchman, 2000, p. 69) in which both instruments and people figure.

So,

Deleuze imagines a kind of evolution of instruments and the 'phylums' to which they belong as involving this looser sense ...allowing for determinations through 'minor sciences' ... thus one might speak of a 'sense' or 'logic' of mechanical assemblages as distinct from the workings of actual mechanisms, and in particular, Deleuze thinks this true for the 'phylum' of the informational [assemblages]... whose sense or logic tends to replace that of the mechanical ...[and which] may offer new possibilities ... through which the sense of 'machine' or 'technology' had previously been understood (Rajchman, 2000, p. 69).

Deleuze and Castells then converge in an 'informational assemblage' in which machines particularly configured are caught up with people and their modes of beings. This assemblage is characterised by particular instruments, procedures, and techniques that have profoundly altered how people interact.

The Sense of this informational assemblage might then be theorised thus: it is a combination of an opening-out in and through an embodied, portable, materially bounded yet invisibly inter-connected and therefore open device. This Sense of

‘opening out’ runs together with a sense of ‘always being connected’, and the possibility of being able to ‘join in’ Events. There is also a Sense of possibility: something could always be made to happen via connection with other people. Another Sense is networking: the nature of the informational assemblages’ techniques and instruments is exponential, viral. Yet another Sense is knowing: there is always ‘a way to know’ in the informational assemblage. Knowing as an instrument energises text creation within the SIA as has been alluded to repeatedly in the many different examples from the data presented in Chapters 5, 6 and in this present discussion.

Privacy, subversion and transgression are also implicated in the SIA. These are reflected not only in the content of the web – for example, pornography and the incitement to social action such as protests – but also in the habits of adolescents. They subvert and transgress school, social and parental rules in the private space of their unique informational assemblage. This points to what Livingstone (2009) describes as ‘a historical transformation of intimacy’ (p. 7). These senses also shape and are shaped by the modes of being and the desires of people enfolded into the informational assemblage.

For example, the following extended extract (Appendix 21, Excerpt 8) shows Charlene (L31) ‘spying’ on her friend’s boyfriend by hiding her mobile phone number and assuming different names in a MXIT multi-mix, an online-collective conversation with multiple interlocutors:

I: And have you blocked your number from being visible?

C: Yes.

I: On your phone?

C: And it’s not my real name and all that.

I: Oh, so you have a, you have a user...do most people have a name, a nickname?

C: Yes.

I: Do you mind telling me what yours is?

C: Um... I don’t know what’s it right now.

I: Oh...so you change it?

C: *I change it all the time.*

I: *Is that a good thing?*

C: *I don't know.*

I: *How do people keep up with who you are then?*

C: *Because...like..for when you go into a Multimix, they wouldn't know who I really am.*

I: *What's a Multimix?*

C: *It's like...um...it's – on your MXIT, if I wanna invite like ten people, to all chat, people/*

I: *At once?*

C: *At once.*

I: *You can do that?*

C: *Mmm.. . (nods)*

I: *So go back to your name, on Multimix, you say it's good to have that?*

C: *Yes, because like if I just have, okay, just say 'Pretty Girl' or something like that, then they'll know who I was from the last time and then I just change mine and I don't know who I am and that's how I catch people.*

I: *You catch them doing what?*

C: *Like just say, if my friend's boyfriend on the Mix, I'll flirt with him. I'll say, 'Oh! Oh! Is it? Do you have a girlfriend?' / 'No, I don't have a girl!' and I'm like 'Oh, my word!' Okay.*

I: *So, you're about ten steps ahead of these boys they don't think to change their names?*

C: *No. They don't.*

I: *Do they use their real names, a lot of boys?*

C: *No. Like some boys will use like... fake names and all that...but I remember them 'cause I got them on my MXIT.*

I: *So...but they don't think to change...you see they're not as clever as we girls are.*

C: *Yes. I always change my name to a NICE name.*

I: *Like?*

C: *I don't know...um..*

- I: *Hot Chick?*
- C: *Something like that there...I always make (inaudible)*
- I: *So you're looking to trap them?*
- C: *Yes.*
- I: *To protect your friends?*
- C: *But then like if I tell my friends, they'll be like 'Oh, no, please! You just want him!'*
(inaudible) 'No! Okay, fine, we'll see. You will see, girl.'
- I: *And have you been proved right?*
- C: *I save the messages to show them.*

The scenario recounted here is delicate in many ways and there is much that could be interrogated and subjected to scrutiny and debate. However, the focus in this discussion remains on the ways the capacities of the components interact in this particular assemblage – Charlene and her desires, her unique singular Sense imbuing and motivating her textual practices; the network of friends and their boyfriends; the MXIT multimix facility; the school and home – give rise to texts that are the evidence of these interacting components. Charlene uses her literate abilities in a unique way within the SIA such that she has *messages to show them* as an aspect of ALP.

Another practice engaged in by Charlene is recording conversations she has with her parents to use as ‘proof’ against them should they renege on negotiations concerning permissions for social activity (Appendix 21, Excerpt 7). These audio texts together with the multimix messages exemplify facets of adolescent literacy practice that are charged with a Sense that is unique to Charlene. Her skill and resourcefulness in using the multimodal affordances available via the SIA show contemporary adolescent literacy as processes structured by Senses that are prior to signification. Accounting for these Senses requires resorting to similarly delicate, almost delinquent and conceptually adventurous analyses such that, as Rajchman notes:

The logic of sense in the informational age strains and reaches for
‘mak[ing] thinkable what we have not yet been able to think, ... mak[ing]

visible what we have been unable to discern ‘clearly and distinctly’
(Rajchman, 2000, p. 67).

For adolescents caught up in the SIA, ‘to connect’ or ‘to belong’ prior to thinking, prior to meaning-making, prior to the exchange of concepts, offers a new universe in which Sense surges to the surface in continually evolving literate practices. So, the logic of Sense here would be ‘connecting before thinking’ or ‘belonging before writing’. ICT applications open out or deterritorialise a semiotics of Sense that points to the possibility of the social dimensions implicated in making meaning, but in ways different from traditional sociolinguistic notions of ‘socially situated communication’. These social dimensions are amplified by the always-on portability and network topology of the internet and WWW. It is suggested that the analyses of Michelle and Charlene given above begins to show this Sense, this other structuring tendency reverberating through the authors prior to – but shaping – her representation of themselves encountering their worlds.

7.2.3 Subject as object in the included middle

A rethinking of the constraints of time and space in Deleuze (DeLanda, 2002) prefigures participation in the SIA which facilitates, to an extent, a manipulation of the constraints of time and place such that subjects become objects. Digital storage is directly implicated in this and has given rise to types of subjectivities that have jolted, jarred and unsettled our notions of what it means ‘to be’ in a way that, possibly, Deleuze would have celebrated (Hughes, 2009, pp. 39-180; Rajchman, 2000, pp. 80-111). It has forced us to think about how people configure their identities in a zone where differences can be real, imagined, or both, and creatively actualised as fact or fiction, or something indeterminate that has elements of both (Semetsky, 2006, pp. 1-25). Charlene (L31) experiences Facebook as such a zone; when she looks at her friends’ pictures, she is *not hoping to see anything: I’m copying their poses for my Facebook profile picture* (Appendix 21, Excerpt 6).

Being and Becoming, having a Presence or a Profile on the WWW, increasingly is problematised in relation to so-called real life. The ‘real’ identity of an interactant is elusive, questionable, suspicious, wholly uncertain and suspended in time and space.

This resonates with a Deleuzian approach to subjectivity in relation to his logic of multiplicities, to difference and repetition, to the actualization of singularities apart from definitive ‘essences’ or ‘identities’. His philosophy does not justify, explain, conceptually underpin or frame an approach to grappling with this dimension of adolescent engagement with the WWW. Rather, it exposes pathways to follow in the footsteps of teenagers for whom social networking is a compulsion. At a time when adolescents are experimenting and shaping their conception of themselves, applications such as Facebook and MXIT, and more recently, WhatsApp, Twitter and BBM, offer the possibility of relating to people ‘as an indefinite multitude’ (Rajchman, 2000, p. 82) in a zone less bounded by traditional constraints of time and space, and hence of ways of relating that are ‘subordinated to identity or identification, imaginary or symbolic’ (Rajchman, 2000, p. 82).

The key term here is ‘subordinated’. Adolescents are creating imaginary and symbolically represented identities; but, if they so choose, these can be free of the constraints and restraints of identity markers usually given in actual time and space. They are able to express a sense of themselves that escapes the rigidity of what is expected of them at home and at school.

The ability of teenagers instantly to capture images using their mobile phones plays a central role in processes of objectification of subjectivity. The concepts of representation and mediation are complexified by the ways in which an image of a person is represented; once incorporated into the SIA, a photograph or a video clip becomes available for use in myriad configurations of mediational resources. For example, teenagers can ‘steal’ their friends’ photographs – or any copyright-free images from the internet/WWW – and use them to represent themselves.

This identity play is not always positively sanctioned by peers as is suggested by the following critique given by Anne (L57). She:

Know[s] people who dress up on Facebook and they look completely different from the person you see every day at school. They look completely different. Their status updates are completely different from what you’d actually see them doing. It, it just goes the opposite of what

they're doing in everyday life. Just 'cause they are trying to project this image of popularity or something (Appendix 25, Excerpt 3).

What is suggested with this kind of experimentation is that:

The 'lines' of which our lives are composed are always more complicated and more free than the more or less rigid 'segmentations' into which society tries to sort them, and so they may be used to draw or 'diagram' other spaces, other times of living (Rajchman, 2000, p. 83).

In SIA applications such as MXIT, Facebook – any platform that creates a space for the public portrayal of a Presence using images and statuses – teenagers find a flexible, fluid space in which to express these 'more complicated and more free' lines. The ability to actualise an array of subjectivities, even sometimes engaging in gender play (Thomas, 2007), is one that is far greater and therefore irresistibly compelling in relation to the bounded specifications of their subjectivities as 'adolescents', 'learners' or 'daughters'. Teenagers seem therefore to experience a sense of ICTs augmenting rather than diminishing their worlds, in particular, their social worlds (Rajchman, 2000).

Whether such social expansion is attained at the expense of the augmentation of their intellectual worlds is an evolving issue of concern. And, although Deleuzian ontology offers a way of thinking about the appeal of ICTs, it is not suggestive of an unqualified celebration of the internet and WWW. Deleuze himself cautioned that in the informational society the danger of losing connection with the world of people and things in the 'cult of "communication"' (Rajchman, 2000, p. 140) was a very real one against which thinkers and artists had to guard.

Yet in a logic of multiplicities, the life of an adolescent in relation to the affordances of ICTs – in particular to networking with other people, with 'interceders' (Rajchman, 2000, p. 84) – is an assemblage of multiplicities that connects, diverges, reconnects, ultimately individuating into a way of using technology to actualise the singularities immanent to that life and unlike any other.

The texts that teenagers create in their connections with other people are the materiality of the resources available to them in a ‘reserve of other possibilities’ (Rajchman, 2000, p. 84). Moreover, the other selves in this ‘Outside’ are part of the compelling reserve of possibilities. In simple terms, the possibility offered by ICTs to connect with an infinite number of real people actualised in fictional or factual selves in a spatio-temporally indeterminate zone resonates strongly with Deleuze’s logic of virtual multiplicities, and with the ‘lines of flight’ that unfold continuously in processes of becoming. For example, Anne (L57) is compelled by Facebook because she *find[s] people’s thoughts and lives so interesting ... I look at what groups people have created, like, groups that are for ... people who, who do evil laughs in the middle of the night ... I do that. I joined that group* (Appendix 25, Excerpt 2). And she says she *tend[s] to get carried away ‘cause on the internet there’s lots of links and you find yourself going completely off the subject*. These links open out lines of connection to other assemblages ultimately coalescing into a personalised multiplicity of individuated fascination.

The very impersonality of many aspects of ICTs further resonates with the sense of possibility that multiple differences asymmetrically connecting in networked processes open out. There is a Foucauldian ‘anonymous murmur’ prior to the codification of language and discourse that presents itself to adolescents as a ‘condition of singularisation, a lightening up of life and its possibilities’ (Rajchman, 2000, p. 86). It is suggested that understanding the sometimes risky, cavalier compulsion of adolescent social networking and the idiosyncratic, unorthodox composition of their multisemiotic texts points to their sense of being free ‘from the determination of habit, memory, routine and the practices of recognition and identification within which [they] are caught’ (Rajchman, 2000, p. 86). The very ‘deviations’ from normal social and textual conventions that so vex and perplex parents and teachers are the differences inherent in the chance configurations afforded by the ICTs that draw adolescents to what Deleuze describes as the ‘edges’ of an individuation (in Rajchman, 2000, p. 87). Anne (L57) puts it more simply when she says that she thinks of *Facebook as public image management* (Appendix 25, Excerpt 3).

The texts created in these zones of indetermination, in their entirety, need not be ‘the imitation or representation’ of anything that is prior or orthodox. However, being constituted by symbols – signs, pictures, sounds, vibrations – they are of course representations. But their vitality, their novelty, is expressed in the processes of combination, which, in turn, are in relation to the social processes afforded by the connections of ICTs. Adolescents are able to tap into a prodigious reserve of semiotic and social resources and engage in continual processes of experimentation and expression.

The appeal of such identity-play appears to be extremely powerful, being experienced by many teenagers as an emancipatory force offering them flight from the confines of parental and pedagogic restraints. They are able to express their desires – social, sexual, voyeuristic, material – in ways that escape circumscription and proscription. They are able to have ‘multiplying and complexifying ... kinds of encounter[s]’ (Rajchman, 2000, p. 91) that implicate facets of their self-exploration otherwise forbidden. The interview data is infused with these seductive energies resonating as a shifting subtext which suggests a striving for individuation, a continual process of ‘becoming other’ (Deleuze in Rajchman, 2000, p. 97). In the textual data, the MXIT texts are similarly redolent with an impassioned vitality that must free itself from the constraints of externally imposed territorialising notions of appropriacy. For teachers and parents however, it is this apparently unbounded, connected yet indeterminate, transcendent yet immanent character of ICTs that is most challenging to their notions of how adolescents should be and communicate, of what is ‘appropriate’ in school and at home.

The following section reviews Chapters 5 and 6 in an attempt to summarise creative energies in ALP that are immanent to processes of production, yet are indiscernible when approached from within conventional literacy analytic paradigms. It strives to position the creation of knowledge as:

A process of knowing [which is] produced only through movement [in which] philosophy ... needs an intense non-philosophical understanding which takes place by means of thought itself being put into “an echo chamber, a feedback loop” (Deleuze, 1995, p. 139) that filters it and filters

it again and again in a process of subtle amplifications. Each time the differentiating process is multiplied, something different is being repeated until thought becomes a multiplicity, or a pack of connections [such that] the creation of concepts is based on a possibility to “*read, find [and] retrieve the structures* (Deleuze, 1967 in Stvale, 1998, p. 270, Deleuze’s italics) implicated in the multileveled rhizome (Semetsky, 2006, pp. 74-75).

The Concept-Data table presented in Appendix 1 is relevant to the discussion.

7.3 Structured roaming and gradients of immediacy

The analysis in Chapter 5 demonstrated the generic distinctions between texts 1-3 and the film review. These are evidence of different mechanisms operating which implicate correspondingly divergent structuring tendencies and processes. Consequently, two text types with unique identities emerge. Principally, the differences between the texts show degrees of variation in virtual structuring processes that are held in tension with each other. These are processes of territorialisation and deterritorialisation, and coding and decoding. Moreover, the extent to which the capacities of the expressive and material components of multiplicities interact with each other is significant: these exert internalising or externalising forces on text creation and influence the distinctive actualisations of the two text types.

As cohesive and communicatively successful texts, each of the four types presented in the data exhibit a degree of territorialisation in which their character as appraisals of a variety of films has been stabilised and thus they have a relatively high degree of semantic homogeneity. Examples of forces exerting a territorialising influence would be the parameters of the prescribed task and the contingency of having to replicate and ‘fix’ electronically generated texts in paper and ink technology. Writing in English in a pedagogic context would further exert homogenizing effects although, as seen in Chapter 6, these are highly unstable structuring influences in relation to other forces acting on text creation. This will be explored more fully below.

It is in the variation in the complementary synthetic expressive process of coding that differences within texts 1-3, and between these and the film review begin to emerge. Coding processes are conceived as autonomous from the material components of the multiplicity in which they operate. And the expressive resources, as information patterns, involved in these processes include semiotic and behavioural resources. So, by way of illustration: in texts 1-3, the liberated expressive resources of human multi-semiosis; binary code and HTML protocols are deployed in coding processes in a potentially infinite variety of permutations. These are mediated by diverse technologies in a way that reflects their intrinsic autonomy, at an ontological level, from those technologies; it is the interaction of their capacities as components of a multiplicity that is the basis for the synthetic process. These operate together with the behavioural expressive resources of an individual within a particular socio-cultural context.

And, although coding processes act to further stabilise the identity of an entity – as, for example, a MXIT text, or a Facebook message – they simultaneously allow for more intensified degrees of complexity by increasing the combinatorial possibilities of expressive resources within those entities. Paradoxically, they can co-operate with processes of decoding which weaken the rules governing expressive resources. In texts 1-3, the extent to which coding processes display a high degree of autonomy from the material components implicated in subjectivity, experience and technologies of literacy, is reflected in the texts. For example, Jane (L10) begins her greeting with a YouTube clip showing excerpts from the film she is reviewing. The incorporation of this semiotic element represents a multi-scaled separation of coding processes from their material carriers even while the entire process is ultimately inextricable from materiality. Clearly the YouTube clip is removed at many levels from the materiality of its origination as a film.

The availability on the internet/WWW of an unprecedented collection of semiotic resources has profoundly altered the intensity, complexity and combinatorial configurations of expressive components giving rise to different textual practices.

7.3.1 MXIT: A paradoxical outside-in hybrid

Clearly, this IM text type has a recognisable identity and is thus territorialised. However, as a consequence of the capacities of the technology, it is also the most deterritorialised of the text types. It reflects the intensity with which experiences, desires, thoughts and feelings flow and overflow between the Outside-Inside as conversations in ceaseless series of relays (Deleuze & Guattari, 1977). The immediacy of traversing space and time is reflected in the unique character of the texts.

Fundamentally, these text types originate in a spatio-temporal zone with mutable boundaries which is yet, paradoxically, intertwined with the bounded and embodied mobile phone and its software as it is moved through space-time with its adolescent owner. This is an equivocal combination of material and incorporeal capacities, and functions, that complicates how literacy practices are effected within the SIA.

Crucially within this multiplicity a variety of expressive resources as information patterns that are liberated from their material carrier are available to the adolescent for use in their literacy practices. These include: affect; attitudes; cultural norms and values; beliefs; linguistic and other semiotic resources; memes and all the binary information patterns that support ICTs. Processes of coding operate on these expressive components at different levels to allow for varying degrees of combinatorial complexity. Simultaneously, processes of decoding exert a destabilising effect on entities and allow for a weakening of the rules for combinatorial possibilities. That the IM texts, in their conversational character, are both ancillary and constitutive of textual practice, attests to the paradoxical configuration of creative processes at work in ALP.

One has a situation where the components of a multiplicity qualitatively allow for maximum combinatorial possibility to operate with minimal constraint in how combinations are formulated. And, although to an extent the MXIT texts are territorialised as evidenced by their similarity across the learner sample, compared with the other three text types they exhibit the greatest degree of deterritorialisation: subsumed under a first synthetic and homogenising process are layers of

heterogeneously interacting formations. The overlapping of structural functions in the texts is evidence of this deterritorialising energy. Similarly, as shown in Chapter 6, their highly deterritorialised character is also suggested by the distinctively IM register that allows for a high degree of specifically individuated semiotic and linguistic heterogeneity. (Refer to Figure 6.1).

The ways in which expressive and material components interact with each other within processes of territorialisation and deterritorialisation function as mechanisms – causal relations. These actualise virtual tendencies that result in assemblages with, at one level, strong relations of exteriority. MXIT as an IM application is intrinsically an externalising influence, taking the teenager away from the constraints of their immediate environment and allowing them to roam in cyberspace and connect with a myriad other nomadic subjects (Semetsky, 2006) in a configuration of relay channels. And it is also an interiorising force, bringing the Outside into the Inside. This could be intimated from the following interview excerpt (Appendix 21, Excerpt 1) with Charlene (L31). A point of clarification is required however: this excerpt is heavily framed by the interviewer; yet Charlene’s uptake of the interviewer’s phrasing of ‘friends in your pocket’ aligns with Charlene’s own sense of what her mobile phone means to her and which resonates throughout the complete interview.

I: So, what do you think it was like for us having to communicate in a different, in a way without phones – cell phones and computers?

C: Mmmm Well ... (laughs) ... um ... I don't really know.

I: Do you think we did?,

C: It's like dangerous, you have to always be alert in what you're doing; you'll ... you'll used to go out, you'll used to play, you'll used to do those things ... like ... ja.

I: So your cell phone with your friends on it, it's your friends in your pocket?

C: There we go! Yes, something like that. Only you'll not seeing each other.

Were it subjected to a thorough Deleuzean act of constructivist conceptual creativity, this brief excerpt would unfold a myriad expressive resources – social and individual; cultural; semiotic; economic and technological – operating at many levels as

replicative structuring tendencies. Its function here is simply to illustrate the extent to which expressive and material components interact in processes of coding and decoding to give rise to MXIT conversational texts.

Therefore, as a digital technology, IM joins, in an asymmetrical, self-organising network, a multitude of configurations of material and incorporeal components, different assemblages, which are then able to interact with each other giving rise to new assemblages, for example, new friend networks or new experiences in space and time. Its exteriorising energy is evident in the way it is used to draw the attention of conversation partners to a comparative lack or absence relative to that of the author, namely, watching a particular film. Desire leaps and flashes across the gap of space and time, emanating as emotion-filled expressions of semiotically contracted representation. So conversations start with *I just came on 2 tl u sumthin* (Charlene); *yesterdae I finali watchd Thee Movie!* (Sindiswe); *U will never guess wat my new fav mvie is?? 😁😁* (Nancy) and are elicited and extended with lines such as *Hawu! Cme on gal dnt tl me u dnt kno da mssnga* (Michelle).

At the level of the text, relations of exteriority are reflected in the fluidity between the stages of the genre, and the co-option of the appraisal task to social and affective purposes. References are made to the immediate material environment in which the text is being written (Zinhle, L41). Further evidence is the permeability of the linguistic boundary such that orthographic conventions are flouted; words are changed; different languages included; punctuation is metamorphosed to perform affective functions and visual elements are included in the literate space. The intensity of experience, subjectivity and affect is reflected in the intensity by compaction of the resources used to construe meaning.

Yet, MXIT and the texts generated on it also display interiorising forces which would position the application not only as an entity that allows for maximum interaction with fundamentally differing capacities, but also as a totality – a non-assemblage – that renders the components dependent on each other. It has the potential to profoundly territorialise the literate proficiency of adolescents.

Its interiorising tendencies are viewed primarily as a function of the SIA on mobile phones. Learners who find themselves without their phones experience an extreme sense of isolation and social exclusion as a result of not being able to communicate using MXIT. For example, Charlene (L31), when asked how she feels when her phone is confiscated, said *I feel like I wanna die! I want my phone with me, it's just, I don't know, like I'm lost... I have my friends, but still something's missing, like from me*. What she misses about not having access to MXIT is *communication with other people that are not in our school* (Appendix 21, Excerpt 1). Tegan (L32) defied her father's wishes and used MXIT because without her phone she *wouldn't have a social life*. Her phone was confiscated for three months; this was an alienating experience for her:

I was like lost ... 'cause, like at school everyone's with their phones and I just like sit there ... and they all on MXIT talking about what happened ... and then I'm just like there without my phone ...(Appendix 22, Excerpt 1).

At the textual level, the interiorising forces exerted on literacy are evidenced most clearly by the way in which the imperative of speed necessitates a particular style of semiotic realisation which has to be consciously acquired. The use of this style is mandatory in order to sustain engagement with one's interlocutor. Tegan describes MXIT like this:

I think it's more of like a children's thingy, like teenagers and stuff, 'cause then you get old people on MXIT they like talking in full lang ... and that's no, there's no use of having MXIT 'cause MXIT like's something's're abbreviate stuff, like to shorten what you wanna say and they have to write the whole sentence so ... it can get annoying at times 'cause then you just have to read this thing whereas you could just like quick quick and just like it's done ... then you have to be reading and reading and reading the whole time ... and there's no like conversation 'cause then you don't know what to say to someone ... you have to say something to your friend you'd have to like say a lot and you can't tell your secrets like what you say to your friends ... so then so like there's no conversation (Appendix 22, Excerpt 3).

The corrections in Nosipho's (L38) and Michelle's (L56) MXIT texts demonstrate the acquisition in process of this style. At the time of data gathering, Michelle had been using MXIT for only seven months.

The inclusion of emoticons, itself a territorialising tendency, further interiorises the texts: absence or incorrect usage of these symbols could result in social disruption through misunderstanding. Effective communication becomes contingent on knowing which emoticons to use to convey particular affects, and how to correctly construct these from conventional punctuation, or choose appropriately from the set provided as a function of the software. For example, Sindiswe (L39) has 'emoticon dyslexia': she tries to use a configuration of symbols commonly used to indicate a playful attitude. It is supposed to be constructed as :-P. She muddles this with the use of brackets to indicate a smile [:-)] and ends her MXIT message with P-) which is semantically void. Her Facebook message reinforces that she does not know how to construct these symbols of affect. In her ignorance of how to use emoticons accurately, Sindiswe shows how this semiotic resource can function as an internalising force which renders her dependent on it to both signal group belonging, and to avoid causing offence in relationships.

Moreover, the frequent prevalence of the structural stages of Greeting, Response Invitation and Farewell also point to compulsory internalising pressures operating in the generation of these text types. Again, failure to enact one of these stages appropriately could have negative social consequences.

In sum: as entities, MXIT texts as process-products in the SIA are assemblages characterised by deterritorialising forces that energise relations of exteriority, thereby enabling interaction with other assemblages. And, the texts emerge as artefacts of totalising influences in which the components interacting in their genesis are bound to MXIT as a unique genre and a particular software application on a mobile phone. In ALP as a broad construct, if an individual adolescent had no mobile phone and/or no other styles in their literate repertoire, this would exemplify the extremity of totalising forces implicated in IM text production. There would be a danger of IM writing being either endlessly perpetuated in repetitions of the same; or, of its unique affordances, as a highly context responsive process rigidifying into a totalising goal (Deleuze &

Guattari, 1977). Both these possibilities could exclude the development of proficiency in other forms of ALP, most significantly, genres of power required for participation in the global knowledge economy in which English, currently, remains the dominant *lingua franca*.

7.3.2 Facebook: Networked noticeboard and private messenger

Viewing textual assemblages as entities on a plane, and through an ontological lens that envisions them as emerging from qualitative multiplicities, refractively unfolds how Singularities and Events interact. Such a view accounts for both the material and the intangible capacities of virtual structuring tendencies that are immanent to adolescents as resources for meaning making in the internet/WWW milieu, and therefore to processes of text creation. They show how texts are ‘born’ in abstraction and materiality through the interaction of particular qualities and intensities.

And as entities on the plane of consistency, Facebook texts are structured by both processes of territorialisation and deterritorialisation in degrees of differing intensity from the MXIT texts. This is visually represented in Figure 6.1. which shows a clearly divergent register pattern from the IM texts.

As a Singularity, both in materiality and abstraction within the SIA, Facebook territorialises ALP shaping the texts in the data in two different ways: as a post on a user’s Wall or as a private message¹⁶. Zinhle’s (L41) and possibly Jane’s (L10) are examples of the first; all the other learners who wrote Facebook texts have structured them as private messages to individual friends. Thus there is an externally imposed degree of homogeneity on the texts that characterises them as separate from emails or MXIT messages, yet in two different ways. An awareness of these homogenizing tendencies is reflected particularly in the ways Justine, Tegan and Zinhle have set out their texts.

¹⁶ There are other types of text structuring configurations in Facebook but these do not form part of the data set.

The increased level of overall semiotic complexity in these assemblages is evidence of the operation of processes of coding, and which further stabilises their identity as Facebook messages. Justine's (L27) text is the most striking example of this. The homogenising affordances of the software are indicated by 'Send'; 'Cancel'; 'online'; 'Home'; 'Friends'; 'Inbox', and most particularly, her 'To' and 'From' labels. The facility of being able to 'Insert' and 'Attach' visual elements including song and film clips further points to the increased combinatorial possibilities of these texts: by clicking on the link, the reader would be redirected to a different semiotic assemblage which subsists completely independently of a particular Facebook message and is, at one level, autonomous of its originating materiality. It is here that the unique potency of binary code in digitisation as an expressive resource is at work. It is the hinge point of combinatorial possibility: things in the world become available as semiotic resources. At an ontological level, a generative, dynamic relation is established between that which is exterior to traditional literacy, and the interior world of semiotic resources available to the adolescent. Intrinsic to their nature as interacting components, digitally captured resources can enter into a complex of semiotic combinations, can co-exist with processes of decoding as a single instance of meaning as seen in Jackie's (L10) Facebook message.

Paradoxically, it is in this aspect of the text's territorialised identity that processes of deterritorialisation are triggered as the boundaries of the original message are traversed and new assemblages formed. The hyperlink – as a unique type of information pattern (cf. Chiew, 2004) in which both materiality and representation are co-implicated in its constitution as way of making meaning – acts as a singular expressive component that catalyses multi-scalar interactions with the components of other assemblages including the affects, attitudes and actions of the people engaging with the text. For example, Zinhle (L41) assumes interaction with other assemblages will occur as a result of reading her Wall post. By including hyperlinks, and writing *Enjoy reading my wall, hope u will go and watch STOMP THE YARD!!! ASAP*, the possibility for action outside of her text becomes incipiently immanent. Activating the hyperlink will deterritorialise the reader from her Wall post and set up interactions with altogether different assemblages. Further, going to watch the film as consequence of reading her post is participation in the world arising directly as a

result of a literate practice. It is in these borderlands of literacy in which the Outside and Inside surge back and forth, flowing in an enfolding creative synchronicity of meaning, a continuously immanent horizon of experience intertwined with embodied action, that adolescents play. Literacy becomes a zone where they experience an augmented sense of their ability to do and act in the world.

For Deleuze, life was a power to act: what the data suggest is that adolescents experience their literate practices in these new zones of text production as an augmented sense of potency, of their ability to make things happen. Their SIA life is their power to do and to be and to participate actualised as a kind of unbroken open whole (Colebrook, 2006) in which digitisation and connection is an in-between zone implicating the things and experiences of the world and the resources used to represent them. There is thus a double force of immanence operating: direct experience is immanent to the online world of the SIA and the resources of social media are immanent to the processes of meaning negotiation. The dynamic relation between these generates lines of being, deterritorialised lines of flight in expression, which unfold into new domains of actualisation that reconfigure assemblages. These texts are thus characterised by relations of exteriority.

Moreover, the Event of watching a film and relating that experience is evident as a deterritorialising structuring principle. The repetition of the different ways that the research subjects experienced this, even in some instances watching the same film, is displayed in diversity in two ways: first, their ability to shift their register across the four different text types; second, in their Facebook texts, their continued use of some elements of T1-3 orthography and lexico-grammar. The deterritorialised instance of the Events – to watch a film; to connect; to share; to attend; to communicate; to persuade; to recommend – become localised as individuated actualisations that shape text structure and composition.

The Event becomes a Singularity, at once an abstraction and a material entity that shapes text production. As ‘a point through which forces resonate and coalesce [...] in trajectories of generative movement’ (see Concept-Data Table in Appendix 1) it opens out lines of connection with other assemblages. Other Singularities are co-implicated in these information relay processes: experience; subjectivity; the mobile

phone and its software; semiotic resources; affect; desire; cognition: all act upon each other as virtual structuring tendencies giving rise to textual assemblages with a recognisable character.

7.3.3 Email: The eternal personal inbox

Emails are different from MXIT texts in that immediacy of responsiveness in the social interaction is not expected and therefore does not exert the same degree of force on the textual architecture. This is realised in the extent to which the semiotic composition of emails is closer to that of the Facebook texts, which also have a diminished temporal intensity. The texts are territorialised as a genre sharing the same structural stages as the IM and Facebook texts, and as distinct from the film review. Further indications of their territorialised nature subsist in the constraint of the technology: there is a weakened capacity for interaction with other assemblages – other participants – compared to a Facebook Wall, for example – or in MXIT – with multiple conversation partners simultaneously.

Processes of decoding are less operational: these texts are not conversations in the same way as the MXIT texts. Yet, they are delayed social and informational exchanges – as indicated by Anne's (L57) opening line of her email. Paradoxically, immediacy is 'stored' in the vast actual-virtual multiplicity that is the internet/WWW. Her text begins as a reply to a message from her interlocutor: *No ways! That's like a whole years allowance!* The absence of contextual information indicates that this is one component in a relay channel of communicative exchanges: it is a delayed conversational turn. Context is not required as all previous messages are presumed stored and accessible.

As a process, however, interiorising forces are at work which rigidify this text type and localise it to one person although the Event of watching a particular film is retrievable, and points to its intrinsically non-localised, continuous nature as a specific happening. This is common to all three electronic texts with the exception of the Facebook Wall post in Zinhle's message.

7.3.4 Electronic texts: Bounded freedom

The structure and the semiotic composition of texts 1-3 share a common if relatively graded interiorising force which is in paradoxical tension with the deterritorialising capacities and potentials of the assemblages' components and the roles of expressive resources. The result of this is that adolescents have a perception of amplified and augmented capacity to act in their worlds, and to some extent, this is the case. However, in relation to their literacy, these texts territorialise the adolescents to functioning in a zone of contemporaneity with their peers, and to the contextual confinement of weakened rules for the combinations of expressive components. Simply put, text is tied to context, bound up in the SIA, although those contexts are interiorised from the outside world of real encounters with the material world and able to interact with components in similar assemblages.

The film reviews, however, display a strongly deterritorialised literate character inversely proportionate to the territorialisation of their paper-and-ink technology, text structure and semiotic composition. They exhibit the maximal combinatorial possibilities of English syntax and grammar such that context is provided within the text itself rendering its meaning accessible to anyone familiar with the language and cultural practice of film reviewing. In pedagogic terms, this kind of deterritorialisation is recognised as mastery of written English.

7.4 Film reviews: Structured stasis and the freedom of constraints

As indicated by Figure 6.1, the film reviews are qualitatively different assemblages from the MXIT texts particularly, but also from the Facebook and email messages. Seven of the twelve learners have no T1-3 elements in their texts while the remaining five have 3% or less. Additionally, none of the texts had an exceptionally high incidence of error. However, what is significant is that of the five learners who do include T1-3 elements in their film reviews, four of them struggled with formal assessments in subject English which demand proficiency in highly context independent formal writing in the standard variety. These learners are Justine (L27); Charlene (L31); Sindiswe (L39) and Michelle (L56). (Refer to Figure 6.3.)

Interacting paradoxes are central to a conception of the nature of this particular literacy type. The film reviews are the most spatially territorialised of the texts: they are not part of the SIA and therefore have to relations of exteriority that would connect them to other assemblages within that. They exhibit a high degree of internal homogeneity both in terms of their generic structure and their semiotic composition. In terms of their spatio-temporal character, they are stable, not part of the free-flowing continuously generative plane of compositional resources of the internet/WWW. The Event of watching a film is a happening in the pure past, connected to the present only via the resources of language to recapitulate the completeness of the past in present expression. This is qualitatively different from the digital connection of past and present. Ontologically, it resonates with entities on the plane of consistency which is nonetheless connected via language as a resource with the plane of immanence. Processes of coding operate to stabilise the identity of this text type as a genre in which the combinatorial possibilities of language are maximised. This translates into a high degree of context independence which could be construed as a capacity for an intensified degree of complexification in the kinds of assemblages – as different audiences and media channels – with which these texts are able to interact.

Simply put, these texts are context independent owing to the ways in which the teenagers are able to control their semiotic resources. Anyone is able to negotiate the meanings of the film reviews in contrast to the MXIT texts which are almost unintelligible to the uninitiated. The implication of this for learners such as Justine, Charlene, Sindiswe and Michelle is that they could be at risk of themselves becoming territorialised as practitioners of literacy with diminished potential for engaging in a variety of differing assemblages that require context independent writing.

7.5 Concluding comments

Reconceptualising the artefacts of ALP as assemblages is an attempt to explore how differentiated texts arise from a broadened conception of their contexts of creation. Context is problematized and with it, whether or not a text is context dependent or independent is recast to highlight the dilemmas inherent in theorising ALP as multiple in the contemporary milieu of ICT based technologies of literacy.

The immanence of experience, semiosis and subjectivity to contextual processes of text negotiation has been set into interpretive interaction with the paradoxical capacities of the SIA and the unique authorial personae of the research subjects who use it. Literacies as individuated actualisations of affects, percepts, concepts intertwined with the materiality of the world are seen as evidence of layers of co-implicated forces interacting in dynamic, open relationships.

An experimental Deleuzean gaze was recursively and reiteratively applied to the qualitative data and the texts as analysed in chapters 5 and 6. In so doing, the data texts opened out further to reveal energising tendencies motivating and shaping their structure and semiotic composition, and which traditional sociolinguistic paradigms seem not to have adequately explicated. Emerging from this exploratory approach is an indication that, in certain circumstances, teenagers are able to maintain appropriate generic differentiation with relatively high degrees of orthographic, linguistic and semiotic control even where English is their second or third language. They also subvert and/or recruit generic purpose to serve individual communicative, social and affective goals uniquely determined by them and enabled by the affordances of particular ICT applications.

Some of the implications emerging from the analyses address pedagogic and social concerns around the impact ICTs have had on adolescent literacies. These are discussed in chapter 8.

CHAPTER 8: CONCLUSION

This study has broadened the notion of the ways in which adolescent literacy is situated as a repertoire of social practices. The introduction of digitisation and portability to technologies of literacy has given rise to a networked configuration of dynamic and evolving contexts of situation in which texts are negotiated. This has problematised conventional analyses of the relationship between a text's purpose, its structure and lexico-grammatical composition. The blurring of the boundary between public and private spaces via the embodied inclusion of the mobile phone has weakened the distinction between the specialist literacies of pedagogic contexts and those of teenagers' everyday lifeworlds. This is a contested and multi-layered complication. The bimodal nature of South Africa's transitioning socio-economic and educational structures in which English is perceived as a driver of progress further convolutes the situation in local contexts. These are characterised by cultural, ethnic, linguistic and economic diversity which, in some schools, is a confluence of forces that impacts on literacy practices in interesting ways. The research and analyses in this investigation have exposed some of these structuring tendencies. Emerging from this is an account of the interplay of novel generative forces between texts created in the dynamic, shifting zone of ICTs and those more static, explicitly mediated artefacts arising from pedagogic processes in subject English.

The data set comprises two components. The first is a body of qualitatively derived information that aimed to explore aspects of the development of twelve adolescent girls' literate experiences and their attitudes to these. The second is a set of 45 textual artefacts. The distinguishing feature of the instrument used to gather the artefacts is that it exposed the differences between literacies embraced by adolescents for their social and affective purposes, and a genre explicitly taught as part of subject English curriculum. That these differences emerged in a stringently bounded pedagogic context in which unequal relations of power subsisted between the researcher and the participants demonstrates the extent to which adolescents subvert and appropriate literacies to accomplish diverse goals. It also focuses attention on the ways in which technological affordances facilitate unique, creative and idiosyncratic text

composition that creates an expressive space for cultural and linguistic diversity while retaining semantic coherence.

A multi-level range of analytic processes deriving from divergent paradigms was applied to the two components of the data. To some extent, the conceptual device is an experimental, synthesised complex of shifting theoretical lenses rather than a framework. This approach arose in response to the problematic of trying to account for textual variables related to the internet/WWW that were under-theorised in extant work. The qualitative data was analysed using a grounded theory approach to derive a patterned interpretation of responses to a semi-structured interview. The texts were analysed as examples of multiliteracies using the genre approach to explicate varying patterns of compositional structure. A multimodal analysis was then applied to elucidate transitioning or stabilising relationships between multisemiotic realisations of register across four text types. Finally, a Deleuzean gaze was applied to both components of the data to explicate the fluidity and immanence of the imperceptible generative forces conceived as the virtual structuring tendencies of which the actualized texts are the evidence. Or, in the case of the film review text, the comparative stasis inherent in processes of text creation emerges as a differentiating feature.

The findings suggest that in certain pedagogic contexts, adolescents employ a range of semiotic and structural resources to control the boundaries between text types. Instant messages, Facebook posts and emails are similarly structured. They function as one genre which simultaneously achieves a valued range of social, functional and affective purposes rather than a single communicative goal. Within that, register patterns from most unorthodox and informal to least, relative to the number of idiosyncratic or colloquial usages along a cline from instant messaging to Facebook to email. The film review stands as a discrete genre and is almost devoid of the types of semiotic adaptations that characterise the electronic texts. Its communicative goal is less complex. Additionally, the electronic texts display a type of context dependence that stands in paradoxical relation to the affordances of digital mobile technology. They are characterised both by relations of exteriority and interiority. Conversely, the film reviews exhibit a degree of context independence and communicative exteriority

that stands as a worthwhile goal of English teaching in a milieu where the language is powerful as a form of cultural, social and educational capital.

8.1 Implications

The implications of a study such as this could ramify across many domains and areas of interest. The assertions in the following section will be confined to the interface between the adolescent literacy practices reflected in the data and subject English. The rationale for locating the implications of the study at this point of convergence is that it is a contested site in which ALP enacted via the SIA are perceived by adults to be inimical to mastering written standard English. The central argument proposed in the discussion is that insight into some of the dynamics of this tension can guide pedagogic practice in a way that does not devalue the multiple as a characteristic of ALP, but does not exaggerate its potentialities as a pedagogic resource.

What will be foregrounded are the shifting degrees of emancipatory and constraining influences inherent in the SIA compared with those of paper-and-ink writing. The way in which exteriorising and interiorising processes operate in text negotiation, between forces that structure texts in ways that can be both localising and context-independent is linked to this variation. Literacies are variously positioned as process-products across a dynamic and asymmetrical plane that networks the personal-private and the public-displayed. Recognising this configuration has pedagogic implications.

8.1.1 Articulating multi-dimensional degrees of freedom

Texts negotiated in the SIA are connected to the exterior world of other people in an adolescent's social network. They are also connected to the diverse array of semiotic resources available on the internet/WWW which can become new experiences, encounters with the unknown. Writing and reading are nested within social and affective goals that are under the control of their authors as a continuously available potential for multiple purposes determined by them. Teenagers use their literacies to emancipate themselves from the constraints of their spatio-temporally bounded contexts; the subjectivities imposed on them, and the norms of behaviour and expression that function to regulate them in school and at home. Relational processes

are a central feature of texts created in this zone which are reflected by the structure and semiotic composition that functions to maintain continuity and connection at differing paces depending on the particular software platform. As a consequence, the character of the writing is idiosyncratic reflecting ethnic, linguistic and cultural differences in a way that is both liberating and constraining in relation to the wider world of education and work in which standard English is the norm. Conversely, subject English texts generated as discrete instances of practice on paper-and-ink technologies are ends in themselves that are disconnected from the multiple resources of the SIA. They appear as static, bounded objects of literate behaviour apart from any social or affective goals within the network of relationships in which adolescents participate via social media. Significantly however, from a pedagogic perspective, they have the highest degree of communicative power, and linked to this in the particular context of this study, emancipatory power. They are context independent and can stand as acceptable examples of written, globally accessible standard English. The ability to negotiate the difference between texts that only a select few can understand and those accessible to anyone proficient in English is significant.

The implications of this in contexts such as Strelitzia High are complex and pedagogic responses could vary. Teachers wanting to assimilate teaching practices into the SIA need to factor in social processes driving text creation in this zone where authentic connection with a present and accepted other shapes text structure and semiotic composition in ways that are not necessarily under the control of the teacher. The strong link between subjectivities, experience and semiotic choices needs to remain a focus. Teenagers might not want pedagogic practices to encroach into their social spaces. And, students could subvert pedagogic goals for their own purposes. Crucially their linguistic resources could remain rigidified in localising context dependence.

Conversely, the relational and compositional resources of the SIA could be used as a means of scaffolding students' induction into standard English writing. There could be a median zone of creativity where the individuality of students is given some expression in initial process of exploration of new teaching foci. With thoughtful planning, authentic and relational encounters with the unknown via the SIA could be

experienced. These could open out worlds of learning and engagement that students might find stimulating and motivating in a subject where many teenagers struggle to identify with the goals of learning tasks and are bored. And ultimately guiding students to incorporate their standard English texts as resources in the SIA could be creatively used in authentic processes that more closely resemble the ways in which ICTs are used in further education and employment. Failure to do this likely disadvantages young people who want to participate in the globally networked world. Emails are an example. Their function as both personal and professional forms of communication needs to be differentiated.

As an end goal of the process of writing standard English, the imaginative yet managed incorporation of the multiple and the authentic dimensions of relational communicative networks could be a productive pedagogic strategy. It would have to be accompanied by sustained focus on intensive teaching of particular genres. The data points to the success of this as an effective method in subject English. And by recognising and valuing the dynamic structuring principles and resources immanent to text negotiation in the SIA, the energy that drives teenagers' reading and writing might be able to be harnessed without sacrificing the goal of mastering powerful forms of written English.

8.1.2 Managing the personal-private and the public-displayed

Delineating boundaries between text types emerged in the data as a skill most learners successfully manipulated. One of the factors implicated in this is that the texts were created as product-processes of the affordances of the SIA. Within this the particular applications selected differed in important ways that relate to issues of, among others, belonging, acceptance, recognition, privacy, intimacy, secrecy, sharing and affection. They reflected the convergence between software parameters and the types of conversations the girls engaged in. So texts differed principally in semiotic composition as a function of the degree of personal-private dimension.

In contrast, the film review was created from the perspective of an assessed task in subject English: a public-displayed text for an anonymous audience. This aspect of how the genre is realised had been explicitly and intensively taught during teaching.

The data showed that the learners successfully eliminated almost all the textual elements that marked their electronic texts as a different more conversational and interactive genre. This shows that in certain contexts, adolescents are receptive and able to adjust their semiotic and linguistic choices in response to the distinction between personal-private and public-display. The role of this contextual variable as a feature of text creation could be usefully foregrounded as a powerful way to heighten students' awareness of the semiotic choices they make and the potential consequences of these.

Recognising the personal-private dimension of SIA texts which frequently are inherently dynamic, creative, informal and even transgressive does not need to culminate in a negative evaluation of their place in an individual's literate repertoire. Similarly, conceiving public-display texts as confined to paper-and-ink and therefore superior is unnecessarily dichotomising. Both dimensions can be reflected in different technologies and this capacity is vital for a variety of reasons.

Texts created as part of the SIA are intrinsically public-display. Once created on the internet/WWW in any platform, they are ultimately retrievable and open for public scrutiny even if privacy controls are built into the application. Moreover, the personal information frequently recruited as part of one's profile is contentiously leveraged by corporations for advertising purposes, adding another layer to the public and display dimensions of the SIA. Adolescents need to keep this in mind as a broad cautionary framework for their activities. However, within the inbuilt privacy parameters of applications such as Facebook, public-display and personal-private dimensions are incorporated: private instant messaging conversations and individual in-box messages are options in addition to the public Wall. In the networked sprawl of the social-informational assemblage, navigating the boundaries between what is personal and what is public is a vital skill. Adapting one's writing and overall semiotic choices in response to this distinction is a crucial feature of the public image management that is implicated in participation in social networks.

Simply put, without detracting from the social, affective and semiotic freedoms of writing in the personal-private domain, teaching in subject English could emphasise

the need to adjust register and semiotic composition when texts are public-displayed. This applies to both electronic texts and those created using paper-and-ink.

8.1.3 The analytic processes

The implications of applying the sociolinguistic paradigms of SFL, genre theory and more loosely the Multiliteracies Framework are clearly functionally relevant in exposing to analysis structural and semiotic features of the data. These continue to be useful conceptual frameworks in providing an account of aspects of adolescent literacy practices.

The experimental and exploratory direction of this study arose in response to the recognition that these frameworks could not account for the imperceptible forces that appeared to be motivating and energising textual practices on mobile phones in particular. Applying a process-oriented Deleuzean gaze to the data has implications for developing a conception of adolescent literacies that might be able to keep pace with the constantly changing technologies of the internet/WWW. Seeing textual practices not as instances of literate behaviour, but as responses to structuring principles that are immediate, immanent, intensive, fluid, continuously evolving and asymmetrically connected in a material/incorporeal milieu could enable researchers to hold in tension forces that are intrinsically paradoxical. Texts conceived as actualisations of individuated context sensitive ways of living, of acting in the internet/WWW networked world, could, under Deleuzean scrutiny, open out exciting directions for theorising ALP.

8.2 Limitations

8.2.1 Contexts

Strelitzia High is one of a small minority of relatively privileged state secondary schools in South Africa. And although it is ethnically and culturally diverse, the dominance of English both in its role as a MOI and as a language of prestige detracts somewhat from the representativeness of it as a microcosm of South African society.

The texts generated in this environment are unlikely to expose the range of linguistic contours operating amongst adolescents in the rest of the country's schools.

The sample is small and being an all-girl cohort it excludes the applicability of the findings to groups that include boys. Although the term ALP has been used throughout the study, it is here acknowledged that applying this concept in a general way to all adolescents in South Africa would be invalid. At best, it points to possibilities for finding similar practices in similar contexts.

A further limitation could be that the writing samples were gathered from pupils whom I had taught for a full year. My methods of genre instruction had been sustained, intense and highly focused. This approach was somewhat unique as a teaching practice compared with the majority of the teachers in the English department. This further narrows the scope of the representativeness of the sample. Had I administered the writing exercises to several of my colleagues' classes, I might have had very different results. This is not to suggest that inherently my teaching practices were better: they emphasised different goals and strategies for writing in English.

Although literacy has always been both an internal, incorporeal skill interacting with the material external world, the advent of mobile phones has substantially amplified the intricacies implicated in this interaction. A qualitatively different contextual limitation is related to 8.2.2. below and foregrounds the difficulty of gathering data where the internet/WWW is a core dimension of the context. Recognising it as a dimension of context is necessary for several reasons: first, its affordances are materially incorporated into the physical environments traversed by the girls. Moreover, the strong attachment girls displayed toward their phones which sometimes function as an indicator of status or modernity also necessitates that they are factored in as an aspect of context. Simply put, the students and their phones were inseparable: wherever they went, their phones went, and thus became part of multiple contexts for literacy practice.

Second, the internet/WWW and its affordances are a dimension of the context of each girl's life. This is reflected in their attitudes towards social networking applications

and the pleasure they derive, even depend on, from these. Third, as a technology of literacy it becomes part of the context for the negotiation of multiliteracies. But it is a problematic context owing to its being paradoxically material and immaterial and also temporally complex. Further, on mobile phone applications such as MXIT, and on Facebook and email, privacy is an important contextual feature.

Context then is an unsettled notion in this study, comprising both the material worlds of the school, classroom and lived experiences of the girls and the incorporeal dimension of the internet/WWW on the embodied mobile phone. The instability of the boundary between inner and outer worlds is an ontological issue that could be construed as a limitation of this project: it needs further theorising.

8.2.2 Participants and processes

Disjunctures of various types function as limiting factors in this investigation. First, there is an inherent disjuncture between collecting text samples as instances of static texts which usually originate as parts in dynamic relays of networked exchanges. The particular structuring operations of MXIT, Facebook and email are fundamentally inextricable from the texts created on these platforms. Each of these contributes variant resources that shape the ultimate composition of the texts as instances of dynamically hyperlinked and continuous connectedness. Reading and writing become implicated as constantly flowing components of interlinked multimodal compositions that can be exponentially disseminated. Therefore, extracting one example of each of these types can, at best, be only a suggestive representation of the potentialities offered by electronic applications.

Second, instant messages and Facebook posts are particular forms of socially bounded literate practice that depend for their effectiveness on group belonging between consenting participants. Several facets of my role as researcher automatically excluded me from a genuinely participative interpretation of the texts. Crucially, I did not gather the texts in authentic processes of communication as an included member of the social networks to which the research subjects belonged. This is a significant limitation of the project. My status as adult teacher would have made it very difficult to negotiate acceptance into these closely guarded social spaces where teenagers make

the rules about who may and may not participate. Had I managed to negotiate this, there would nonetheless be considerable ethical implications to using data which is generated in a guarded private, subversive and even transgressive space.

Related to this is the disjuncture between private and public. Instant message conversations between two participants are usually extremely private, even intimate exchanges. Facebook messages can be private or public. Most in the data set were written as if they were addressed to specific individuals. Emails originate as private communications to select individuals or a group of people. Common to all is the element of choice and control that the author exercises over her texts. By requesting the girls write texts as if to their friends, but with the knowledge that I was the real audience, I was asking them to engage in processes that were inimical to genuine communication on different technological applications. This problematises the data with a degree of artificiality that is difficult to account for in relation to the findings.

A further disjuncture is reflected in the conflicted nature of asking the girls to whom I taught English to comply with methods of data collection that would expose attitudes and literate practices that they knew were negatively sanctioned in pedagogic contexts. In requiring that they write their electronic texts as authentically as possible, I was initiating a process that directly opposed the stated goals of my role as English teacher. A related limitation is that, in contrast, they might have had a heightened awareness of the need to please me by employing an exaggerated focus in writing the film review. It might have been particularly salient to them that they displayed their proficiency in a single genre which had been the focus of intensive teaching.

8.2.3 Technologies and time

The data for this project was collected in 2008. Smartphones had yet to impact ICTs. Other mobile devices such as tablets had not emerged as devices teenagers might use. At this time in Strelitzia High, MXIT was widely used as the IM application of choice and SMSs were still prevalent as an alternative. Other IM applications such as BBM and WhatsApp had not appeared to rival MXIT. Twitter was not the phenomenon it is

today. Facebook was a novel and peculiarly adolescent literate technology largely used for socialising.

A recent return to Strelitzia High in 2012 for a short *locum tenens* post during which I taught some girls who had been in my classes previously revealed that Blackberry smartphones have been widely adopted owing to the free instant messaging service incorporated as a function of the phone. Anecdotal evidence suggests that MXIT has been displaced by BBM as the preferred IM service. Additionally, Facebook now has more than a billion users worldwide and has grown into a formidable corporate and political platform. The impact of this on the ways in which adolescent literacy practices are leveraged to serve goals other than social networking is not addressed in this study.

Teenagers are also beginning to explore Twitter. This highly abbreviated social media service places demands on literate resources that are different from MXIT, SMS, BBM, Facebook or email. For example, one has to have a Twitter handle in order to belong to the group. One has to know how to use hashtags (#) and truncate URL addresses for inclusion into messages. In sum, the vocabulary, functionalities and semiotic conventions associated with this application are unique and would probably need to be learned in processes similar to those necessary to acquire MXIT literacy.

In sum, the pace of change in ICTs is rapid and continuous making it difficult for research and theorising to remain relevant. The exclusion from this investigation of emerging contexts for novel literate practice constitutes a limiting factor in a full account of adolescent literacy practices in this context. Collecting authentic, up-to-date data remains a significant challenge.

8.2.4 Limitations of data and analysis

A general limitation of processes of data analysis is that I no longer had direct access to the girls to cross-check my understanding of what they had written in their LLHQs: I left the school in 2010. The selection of a further six respondents for writing analysis is therefore reliant solely on my interpretation of the information as originally written as part of the first phase of data collection. The distance and time between

initial processes of data collection and analysis is perceived as a broad limitation of this project. Having sustained access to the girls during the processes of text analysis could have been useful for double-checking my translations. Conversely however, it might have detracted from the emergence of broad textual and semiotic patterns discussed in Chapters 5 and 6 resulting in an over-individualised analysis.

More specifically, an element of analysis that is missing from this study but was included in the original Masters project is the girls' translations of their MXIT texts. The original six added a layer of depth to the account of the way in which MXIT is used as a deliberately truncated style but which the girls are able to expand when required to. The time lapse between the original data gathering period and analysis for this study precluded my contacting the girls and asking them to do this. The impact of three years of further literate development would have rendered such an exercise invalid. Similarly, the exclusion from the overall data set of one-on-one interviews with the additional six respondents represents a further limitation.

8.3 Directions for future research

8.3.1 Theoretical issues

As alluded to throughout this study, the relationship between literacies as situated practices and the internet/WWW as a context for literate practice is ontologically and epistemologically convoluted. There is a nested set of dilemmas which require further theorising. The following discussion presents a few of these that arose as theoretical challenges during the course of this investigation and is not an exhaustive delineation of all the issues requiring further conceptualisation.

At the broadest level, resolving and incorporating the paradox of the internet/WWW as both a material and an incorporeal entity on and through which literacy is enacted remains a singular theoretical problem. Linked to this is its incorporation into the body via mobile phones and other portable devices. A theory of literacies as multiple practices has to account for the emergence of the mobile smartphone as possibly the dominant technology of literacy. Developing a nuanced, flexible paradigm of literacies as a networked series of interacting processes that are mobile and multiple

could yield fruitful theoretical perspectives. Further, accounting for the augmented range of resources continuously immanent to these processes could usefully expand the paradigm.

As alluded to in 8.2.1 and 8.2.2 above, contexts and participants are problematised in a globally networked, portable and always online literate milieu. Literacy conceived as culturally situated practice has to be radically rethought in ways that account for the fluidity of these terms. Globally intersecting cultures are no longer only situated: they are also networked, traversing borders of space and time. Yet, the internet/WWW does also give rise to virtual communities that are bounded in ways that would impact literacy practices and force a possible rethinking of cultures as communities of practice. People of a particular culture – in the traditional sense – may belong to a large number of distinctively different communities of practice that shape literacy in different ways. Participation in several of these simultaneously adds a further dynamic that is difficult to theorise in terms of how multiliteracies are negotiated across different contexts as zones of differently organized space and time.

Further, the plethora of ‘apps’ available, each requiring a degree of familiarity with their unique conventions in addition to some form of foundational mobile phone navigational literacy, emphasises that multiliteracies are shaped by a continuously expanding range of contextual variables. The development of a theory of multiliteracies that can account for this is a challenge for ongoing theoretical work.

Literacy as an embodied practice is a further complicating issue. Multiliteracies conceived as a range of practices is unsettled by the interface between a literate act on the internet/WWW and its potential or intended consequences as an embodied action in the material world. Immediacy as a variable of literacy is significant here. Reading a text and then clicking on it as a hyperlink instantly sets into motion chains of processes which can culminate in events. Factoring this into a comprehensive theory of literacies-as-practices is a dilemma.

A further, related layer of complexity is multimodality as an aspect of literacy. To be an effective component of literacy, multimodality does not need a particular grammar in the sense advocated by, for example, Kress and Van Leeuwen’s work on visual

design (2006). Digitisation has made it possible instantly to capture aspects of one's immediate environment – sounds, scenes, voices – and use these to constitute in its entirety a communicative act. Alternatively, these multimodal resources are incorporated into written or spoken texts, for example hyperlinks. The networked, instant availability on the WWW of all digitally captured resources adds an additional layer of complexity to theorising multiliteracies. As mentioned previously, immediacy, representation and embodiment have become unsettling contextual variables, motivating forces that shape literacies in new ways and which have to be recast in a theory of literacies as multiple.

Finally, developing a consistent, cogent language of description for a theory of multiliteracies as networked mobile and multiple processes poses a singular challenge. The field is already overcoded with overlapping terminologies which obfuscate the clear articulation of problems.

8.3.2 Practical directions

There are many ways in which the lines of enquiry presented in this study could be expanded. For ease of reference, these will be separated into two categories which are inter-related: first, general issues pertaining to the functions of literacies; second, directions for research around literacy pedagogy in the South African context.

8.3.2.1 Reconceptualising the functions of literacy

Literacy has always accomplished a variety of purposes: cognitive, affective, social and practical and theorising has evolved in response to these across many disciplines. However, the increasing complexity of the modern world together with the prevalence of ICTs has changed the range and goals of literacies in complex ways. The functions of literacy have diffused across activities of ordinary daily life. Additionally, processes of text negotiation have intensified in civic, commercial, social and leisure activities. Simply put, what people are required to use literacy to do has diversified and expanded, especially via the internet/WWW. As Livingstone (2009) notes, 'the notion of "using" the internet has become so unclear as to be wholly unhelpful as a description of an everyday activity' (p. 4). Researching this range of functions, particularly as they are intersected with the agendas and mandates of political,

corporate and civic institutions, could be an intriguing line of enquiry. Indeed, corporations have recently intensified their focus on engaging directly with consumers via social media. For example, a popular South African retail chain advertises in-store that consumers can ‘chat’ to the company via Facebook, Twitter or YouTube. What this example – as one among many multinational cases – suggests is the growing corporatisation of the power of conversation, a power that the adolescents in this study had already amplified, expanded and harnessed for their own social and affective purposes.

The commercialisation of this powerful social function of literacy needs to be interrogated. This might make a contribution to preparing adolescents in pedagogic contexts to be competent and, crucially, critical users of multiple ICT based literacies. Their meaningful participation in a steadily complexifying and internet/WWW connected globalised world places a responsibility on educational institutions to prepare their students to do this effectively. As Thomas (2008) notes, teachers ‘may well benefit [however] from knowing more about how young people, girls and marginalised groups can successfully use the internet and technology to enhance, improve and enrich their lives’ (p. 684). Thus, educational institutions must know how activities of daily life and multiliteracies are inter-implicated.

A further direction for research would be investigating the interface between literate practices as social, civic and commercial, and the demands of negotiating the internet/WWW as a vast and largely unregulated information repository. There are indications, arising from the processes of data gathering for this study, which suggest that information literacy, and the particular skills required for effective online reading and analysis, are not automatically acquired by adolescents. Given the popular contemporary focus on educational technology as a solution to pedagogic problems, the link between adolescent literacies and academic learning in an online environment ought to be explored further especially in South Africa where a very real digital divide exists (Holderness, 2006).

8.3.2.2 *The multiple as a feature of diversity*

As a group, South Africa's adolescents are differentiated according to a configuration of economic, ethnic, linguistic, cultural, and social dimensions that are reflected in the country's education system. The interface between historic geographic segregation and contemporary inequalities is widely recognised as a constituting force in this.

Therefore, broadening the research focus to include the literacies of a representative sample of the country's young people could make a valuable contribution to formulating a response to the literacy challenges facing schools. Including different types of writing samples not only in English but in the other ten official languages would likely illuminate the range of multiple forms of literacies routinely negotiated by teenagers. It might also point to areas where, in the persistent pursuit of English proficiency, teaching strategies could be improved in ways that would not pejoratively label the range of literacies used and valued by a diverse group of teenagers.

Additionally, exploring the differential access to ICTs on mobile phones could contribute to an understanding of how digital divides impact on literacies and on accomplishing a variety of different functions in diverse contexts across South Africa.

Finally, in the face of an emergent emphasis on mlearning as a possible panacea to the country's educational challenges, rigorous and thorough research needs to be undertaken to ensure that what is being conceptualised and implemented will be educational and emancipatory. The mediation of learning as a series of linearly progressive stages that moves learners from everyday knowledge to specialised consciousness involves a range of skills and practices (Hugo, 2013). Whether learning via mobile phones can substitute or supplement the role of teaching needs to be explored. Moreover, mastering literacy in English as a sought-after form of social, cultural and educational capital is a high stakes enterprise. Juxtaposed with the retention of indigenous and informal literacies, there is a danger that, if mlearning is not effective, adolescents could fail to expand their literate repertoire in ways that they can leverage for their advancement. Conversely, mlearning could be an effective means of bridging the development of literacy and learning in indigenous languages to proficiency in using English as an academic language. The complexities of

multiple literacies in mlearning as an educational solution must be thoroughly interrogated.

REFERENCES

- Alexander, N. (2012, March 1). *Taal/Language*. Retrieved October 12, 2012, from Litnet: <http://www.litnet.co.za/Article/the-centrality-of-the-language-question-in-the-social-sciences-and-humanities-in-post-apar>
- Alvermann, D. (2008). Why bother theorising adolescents' online literacies for classroom practice and research? *Journal of Adult and Adolescent Literacy*, 52(1), 9-18.
- Alvermann, D. E., & Hagood, M. C. (2000). Critical media literacy: Research, theory and practice in 'new times'. *The Journal of Educational Research*, 93(3). Taylor & Francis Ltd. Retrieved September 28, 2012, from <http://www.jstor.org/stable/27542264>
- Babbie, E., & Mouton, J. (2001). *The practice of social research*. Oxford: Oxford University Press.
- Barton, D. (1994). *Literacy*. London: Blackwell.
- Barton, D., & Hamilton, M. (2000). Literacy practices. In D. Barton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). London: Routledge.
- Bassey, M. (1999). *Case study research in educational settings*. Buckingham: Open University Press.
- Baynham, M. (1995). *Literacy practices*. London: Longman.
- boyd, d. (n.d.). *danah boyd's publications*. Retrieved October 12, 2012, from <http://www.danah.org/papers/>
- Buckingham, D. (2000). *After the death of childhood*. Cambridge: Polity Press.
- Buckingham, D. (2006). Is there a digital generation? In D. Buckingham, & R. Willet (Eds.), *Digital Generations: Children, young people and new media* (pp. 1-13). New Jersey: Lawrence Erlbaum Associates Inc.

- Butt, D., Fahey, R., Spinks, S., & Yallop, C. (1995). *Using Functional Grammar: An explorer's guide*. Sydney: Macquarie University.
- Cassidy, J., Dee Garrett, S., & Barrera IV, E. S. (2006). What's hot in adolescent literacy 1997-2006. *Journal of Adolescent and Adult Literacy*, 50(1), 30-36.
- Castells, M. (1996). *The rise of the network society*. Oxford: Blackwell.
- Chick, K. (2009). Constructing a multicultural national identity: South African classrooms as sites of struggle between competing discourses. *Journal of Multilingual and Multicultural Development*, 23(6). Retrieved January 13, 2009, from <http://www.multilingual-matters.net/jmmd/023/0462/jmmd0230462.pdf>
- Chiew, A. K. (2004). Multisemiotic mediation in hypertext. In K. L. Halloran (Ed.), *Multimodal discourse analysis* (pp. 131-159). London: Continuum.
- Chomsky, N. (1965). *Aspects of syntax*. Cambridge MA: The MIT Press.
- Chomsky, N. (1986). *Knowledge of language*. New York: Praeger.
- Chomsky, N. (2002). *Syntactic structures*. Berlin: Walter de Gruyter GmbH & Co. KG.
- Christie, F., & Martin, J. R. (Eds.). (2007). *Language, knowledge and pedagogy: functional linguistic and sociological perspectives*. London: Continuum.
- Coiro, J., & Moore, D. W. (2012). New Literacies and adolescents: An interview with Julie Coiro. *Journal of Adolescent and Adult Literacy*, 55(6), 551-553.
- Coiro, J., Knobel, M., Lankshear, C., & Leu, D. J. (Eds.). (2008). *Handbook of research on new literacies*. London: Routledge.
- Cole, M., Gay, J., Glick, J., & Sharp, D. (1971). *The cultural context of learning and thinking*. London: Methuen.
- Colebrook, C. (2006). *Deleuze: A guide for the perplexed*. London: Continuum.

- Cope, B., & Kalantzis, M. (2000). *Designs for social futures*. (B. Cope, & M. Kalantzis, Eds.) London: Routledge.
- Crystal, D. (2006). *Language and the Internet*. Cambridge: Cambridge University Press.
- Crystal, D. (2008). *txtng: the gr8 db8*. Oxford: Oxford University Press.
- DBE. (February 2012). *Education statistics in South Africa*. Pretoria: Department of Basic Education.
- DeLanda, M. (1997). *A thousand years of non-linear history*. New York: Zone Books.
- DeLanda, M. (2002). *Intensive science and virtual philosophy*. London: Continuum.
- DeLanda, M. (2006). *A new philosophy of society: Assemblage theory and social complexity*. London: Continuum.
- Deleuze, G. (1986). *Cinema 1: The Movement-Image*. (H. Tomlinson, & B. Habberjam, Trans.) Minneapolis: University of Minnesota Press.
- Deleuze, G. (1989). *Cinema 2: The Time-Image*. (H. Tomlinson, & R. Galeta, Trans.) Minneapolis: University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1977). *Anti-Oedipus: Capitalism and schizophrenia*. (R. Hurley, & H. R. Lane, Trans.) London: Penguin Books.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. (B. Massumi, Trans.) Minneapolis: University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1994). *What is philosophy?* (2nd ed.). (G. Burchell, & H. Tomlinson, Trans.) London: Verso.
- Deleuze, G., & Patton, P. (2004). *Difference and repetition*. London: Continuum.
- Deumert, A. (2005). The unbearable lightness of being bilingual: English-Afrikaans language contact in South Africa. *Language Sciences*, 27, 113-135.

- Duranti, A. (1997). *Linguistic Anthropology*. Cambridge: Cambridge University Press.
- Durrheim, K. (1999). Research design. In M. Terreblanche, & K. Durrheim (Eds.), *Research in practice*. Cape Town: University of Cape Town Press.
- Eisenstein, E. (1985). On the printing press as an agent of change. In D. R. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language and learning: The nature and consequences of reading and writing* (pp. 19-33). Cambridge: Cambridge University Press.
- Fairclough, N. (1989). *Language and power*. London: Longman.
- Fawcett, R. P., Halliday, M., Lamb, S. M., & Makkai, A. (Eds.). (1984). *The semiotics of culture and language* (Vol. 1). London: Frances Pinter Ltd.
- Foley, W. A. (1997). *Anthropological Linguistics*. Malden: Blackwell.
- Gee, J. P. (1990/1996/2007). *Social linguistics and literacies: Ideologies in discourses*. London: Taylor and Francis.
- Gee, J. P. (1992). *The social mind: Language, ideology and social practice*. New York: Bergin & Garvey.
- Gee, J. P. (1994). Orality and Literacy: from 'The Savage Mind' to 'Ways with Words'. In J. Maybin (Ed.), *Language and literacy in social practice* (pp. 168-191). Clevedon: Multilingual Matters.
- Gee, J. P. (2000a). Teenagers in new times: A new literacy studies perspective. *Journal of Adolescent and Adult Literacy*, 43(5), 412-422.
- Gee, J. P. (2000b). The New Literacy Studies: From "socially situated" to the work of the social. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 180-196). London: Routledge.
- Gee, J. P. (2003/2007). *What video games have to teach us about learning and literacy*. New York: Palgrave/Macmillan.

- Gee, J. P. (2008). Learning in semiotic domains. In M. Prinsloo, & M. Baynham (Eds.), *Literacies, global and local* (pp. 137-149). Amsterdam: John Benjamins Publishing Company.
- Gee, J. P. (2010a). *A Situated Sociocultural Approach to Literacy and Technology*. Retrieved September 21, 2012, from James Paul Gee Publications: <http://www.jamespaulgee.com/sites/default/files/pub/Approach%20to%20Literacy%20Paper.pdf>
- Gee, J. P. (2010b). *New digital media and learning as an emerging area and "worked examples" as one way forward*. Massachusetts: MIT.
- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando: Academic Press Inc.
- Goodson, I., & Sikes, P. (2001). *Life history research in educational settings*. Buckingham: Open University Press.
- Graff, H. (1994). The legacies of literacy. In J. Maybin (Ed.), *Language and literacy in social practice* (pp. 151-167). Clevedon: Multilingual Matters.
- Greenfield, S. (2003). *Tomorrow's people: How 21st century technology is changing the way we think and feel*. London: Penguin.
- Greenfield, S. (2008). *id: the quest for meaning in the 21st century*. London: Hodder and Stoughton.
- Halliday, M. (1984). Language as code and language as behaviour: A systemic-functional interpretation of the nature and ontogenesis of dialogue. In R. P. Fawcett, S. M. Lamb, M. A. Halliday, & A. Makkai (Eds.), *The semiotics of culture and language* (pp. 3-35). London: Frances Pinter.
- Halliday, M. (1994). Language as social semiotic. In *Language and literacy in social practice* (pp. 23-43). Clevedon: Multilingual Matters Ltd.
- Halliday, M. (1996). Literacy and linguistics: A functional perspective. In R. Hasan, & G. Williams (Eds.), *Literacy in society* (pp. 339-375). London: Longman.

- Halliday, M., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Halliday, M., & Matthiessen, C. M. (1999). *Construing experience through meaning: A language-based approach to cognition*. London: Continuum.
- Hasan, R. (2005). *Language, society and consciousness*. London: Equinox Publishing Ltd.
- Heath, S. B. (1983). *Ways with words*. Cambridge: Cambridge University Press.
- Holderness, B. (2006). Towards bridging digital divides in rural (South) Africa. In D. Buckingham, & R. Willet (Eds.), *Digital generations: Children, young people and new media* (pp. 251-272). New Jersey: Lawrence Erlbaum Inc.
- Hughes, J. (2009). *Deleuze's Difference and Repetition*. London: Continuum International Publishing Group.
- Hugo, W. (2013). *Cracking the code of education analysis*. Cape Town: Pearson.
- Hull, G. A., & Schultz, K. (2001). *School's out: Bridging out-of-school literacies with classroom practice*. New York: Teachers College Press.
- Hymes, D. (1994). Toward Ethnographies of communication. In *Language and literacy in social practice* (pp. 11-22). Clevedon: Multilingual Matters Ltd.
- Ippolito, J., Steele, J. L., & Samson, J. F. (Eds.). (2008). Adolescent Literacy. *Harvard Educational Review*, 78(1).
- Jackendorff, R. (1990). *Semantic structures*. Cambridge, MA: The MIT Press.
- Jacobs, V. A. (2008). Adolescent literacy: Putting the crisis in context. *Harvard Educational Review*, 78(1), 7-37.
- Janks, H. (2010). *Literacy and power*. New York: Routledge.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Jenkins, H. (2011). Retrieved August 16, 2011, from Manifesto for media education: <http://www.manifestoformediaeducation.co.uk/2011/01/henryjenkins/>

- Johnson-Eilola, J. (1998). Living on the surface: Learning in the age of global communications networks. In I. Snyder (Ed.), *Page to screen: Taking literacy into the electronic era* (pp. 185-210). London: Routledge.
- Kist, W. (2004). *New Literacies in action: Teaching and learning in multiple media*. New York: Teachers College Press.
- Kress, G. (1993). Genre as social process. In B. Cope, & M. Kalantzis (Eds.), *The powers of literacy* (pp. 22-37). London: The Falmer Press.
- Kress, G. (1998). *From page to screen: Taking literacy into the electronic era*. (I. Snyder, Ed.) London: Routledge.
- Kress, G. (1998). Visual and verbal modes of representation in electronically mediated communication: the potentials of new forms of text. In I. Snyder (Ed.), *From page to screen: Taking literacy into the electronic era* (pp. 53-79). London: Routledge.
- Kress, G. (2000). A curriculum for the future. *Cambridge Journal of Education*, 30(1), 133-145.
- Kress, G., & Street, B. (2006). Foreword. In K. Pahl, & J. Rowsell (Eds.), *Travel notes from the New Literacy studies: Instances of practice* (pp. vii-x). Clevedon: Multilingual Matters.
- Kress, G., & Van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. London: Routledge.
- Labov, W. (1969). *The logic of nonstandard English*. Washington D.C.: Georgetown University School of Language and Linguistics.
- Lankshear, C., & Knobel, M. (2011). *New literacies* (3rd ed.). Maidenhead: McGraw-Hill Open University Press.
- Leander, K. M., & McKim, K. K. (2003). Tracing the everyday 'sittings' of adolescents on the internet: A strategic adaptation of ethnography across online and offline spaces. *Education, Communication and Information*, 3(2), 211-240.

- Leander, K. M., & Rowe, D. W. (2006). Mapping literacy spaces in motion: A rhizoanalysis of a classroom literacy performance. *Reading Research Quarterly, 41*(4), 428-460.
- Leu, D. J., & Kinzer, C. K. (2005). The convergence of literacy instruction with networked technologies for information communication. In R. B. Ruddell, & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (pp. 1570-1613). Newark: International Reading Association.
- Leu, D. J., Gregory, M. J., Ian O'Byrne, W., Kiili, C., Zawilinski, L., Everett-Cacopardo, H., et al. (2011). The new literacies of online reading comprehension: Expanding the literacy and learning curriculum. *Journal of Adolescent and Adult Literacy, 55*(1), 5-14.
- Leu, D. J., Ian O'Byrne, W., Zawilinski, L., Greg McVerry, J., & Everett-Cacopardo, H. (2009). Comments on Greenhow, Robelia and Hughes: Expanding the New Literacies conversation. *Educational Researcher, 38*(4). AERA and Sage Publications. Retrieved September 28, 2012, from <http://edr.sagepub.com/content/38/4/264>
- Lewis, J. (2007). Academic literacy: Principles and learning opportunities for adolescent readers. In J. Lewis, & G. Moorman (Eds.), *Adolescent Literacy Instruction: Policies and Promising Practices* (pp. 143-166). Newark: International Reading Association.
- Ling, R. (2008). *New tech, new ties: How mobile communication is reshaping social cohesion*. Cambridge MA: The MIT Press.
- Livingstone, S. (2009). *Children and the Internet*. Cambridge: Polity Press.
- Malinowski, B. (1994). The problem of meaning in primitive languages. In J. Maybin (Ed.), *Language and literacy in social practice* (pp. 1-10). Clevedon: Multilingual Matters Ltd.
- Martin, J., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*. New York: Continuum.

- Masny, D. (2006). Learning and creative processes: A poststructural perspective on language and multiple literacies. Retrieved October 2, 2012, from http://aix1.uottawa.ca/~dmasny/english/writings/masny_2006_en.pdf
- Masny, D., & Cole, D. R. (2009). Introduction to Multiple Literacies Theory. In D. Masny, & D. R. Cole (Eds.), *Multiple Literacies Theory: A Deleuzian perspective* (pp. 1-11). Rotterdam: Sense Publishers.
- McLuhan, M. (1962). *The Gutenberg galaxy: The making of typographic man*. Toronto: Toronto University Press.
- Mesthrie, R. (Ed.). (2002). *Language in South Africa*. Cambridge: Cambridge University Press.
- Mesthrie, R. (2008). *Varieties of English 4: Africa, South and Southeast Asia*. Berlin: Mouton de Gruyter.
- Moje, E. B., Overby, M., Tysvaer, N., & Morris, K. (2008). The complex world of adolescent literacy: Myths, motivations and mysteries. *Harvard Educational Review*, 78(1), 107-154.
- Moje, E. B., Peyton Young, J., Readence, J. E., & Moore, D. W. (2000). Reinventing adolescent literacy for new times: Perennial and millennial issues. *Journal of Adolescent and Adult Literacy*, 43(5), 400-410.
- Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches*. Boston: Allyn & Bacon.
- New London Group. (2000). A pedagogy of multiliteracies. In B. Cope, & M. Kalantzis (Eds.), *Multiliteracies: Literacy, learning and the design of social futures* (pp. 9-37). London: Routledge.
- O'Halloran, K. L. (2004). In K. L. O'Halloran (Ed.), *Multimodal discourse analysis* (pp. 1-5). London: Continuum.
- O'Halloran, K. L. (2004). Visual semiosis in film. In K. L. O'Halloran (Ed.), *Multimodal discourse analysis* (pp. 109-130). London: Continuum.

- Olson, D. R. (1985). In D. R. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language and learning: The nature and consequences of reading and writing* (pp. 1-15). Cambridge, MA: Cambridge University Press.
- Pahl, K., & Rowsell, J. (2006). *Travel Notes from the New Literacy studies: Instances of practice*. Clevedon: Multilingual Matters.
- Parr, A. (Ed.). (2005). *The Deleuze Dictionary*. New York: Columbia University Press.
- Peters, M. A. (2012). Geophilosophy, education and pedagogy. In M. A. Peters, *Education, Philosophy and Politics: the selected works of Michael A Peters* (pp. 127-135). Oxford: Routledge.
- Pinker, S. (2007a). *The language instinct: How the mind creates language*. New York: Harper Perennial Modern Classics.
- Pinker, S. (2007b). *The stuff of thought: Language as a window into human nature*. New York: The Penguin Group.
- Plummer, K. (2001). *Documents of life: An invitation to critical humanism*. London: Sage.
- Radnor, H. (2001). *Researching your professional practice: Doing interpretive research*. Buckingham: Open University Press.
- Rajchman, J. (2000). *The Deleuze connections*. Cambridge MA: The MIT Press.
- Rettberg, J. W. (2008). *Blogging: Digital media and society series*. Cambridge: Polity Press.
- Rheingold, H. (1985). *Tools for thought: The people and ideas behind the next computer revolution*. New York: Simon & Shuster.
- Rheingold, H. (1991). *Virtual reality*. London: Secker & Warburg.
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. New York: Harper Perennial.

- Rheingold, H. (1994). *The virtual community: Finding connection in a computerized world*. London: Secker & Warburg.
- Rheingold, H. (2002). *Smart mobs: The next social revolution*. Cambridge MA: Basic Books.
- Roodt, M. (2011, February 1). *Research and Policy Brief: 'Model C' is the model to emulate*. Retrieved October 12, 2012, from South African Institute of Race Relations: <http://www.sairr.org.za/sairr-today-1/research-and-policy-brief-model-c-is-the-model-to-emulate-1-february-2011>
- Scribner, S., & Cole, M. (1988). Unpackaging literacy. In E. R. Kingten, B. M. Kroll, & M. Rose (Eds.), *Perspectives on literacy* (pp. 57-70). Carbon: Southern Illinois University Press.
- Semetsky, I. (2006). *Deleuze, education and becoming*. Rotterdam: Sense Publishers.
- Smith, R., & Curtin, P. (1998). Children, computers and life online: Education in a cyberworld. In I. Snyder (Ed.), *Page to screen: Taking literacy into the electronic era* (pp. 211-233). London: Routledge.
- Sondheim, A. (2007). *Internet Text*. Retrieved August 14, 2011, from http://collection.eliterature.org/1/works/sondheim__internet_text/net1.txt
- Stein, P. (2000). Rethinking resources in the ESL classroom: Rethinking resources: Multimodal pedagogies in the ESL classroom. *TESOL Quarterly*, 34(2). Retrieved September 28, 2012, from <http://www.jstor.org/stable/3587858>
- Street, B. (1984). *Literacy in theory and practice*. Cambridge, UK: Cambridge University Press.
- Street, B. (1993). Introduction: The New Literacy Studies. In B. V. Street (Ed.), *Cross cultural approaches to literacy* (pp. 1-21). New York: Cambridge University Press.
- Street, B. (2004). Futures of the ethnography of literacy? *Language and Education*, 18(4), 326-330.

- Street, B. (2005). At last: Recent applications of New Literacy Studies in educational contexts. *Research in the Teaching of English*, 39(4). National Council of Teachers of English. Retrieved September 28, 2012, from <http://www.jstor.org/stable/40171646>
- Thomas, A. (2007). *Youth online: Identity and literacy in the digital age*. New York: Peter Lang Publishing Inc.
- Thomas, A. (2008). Community, culture and citizenship in cyberspace. In J. Coiro, M. Knobel, C. Lankshear, & D. J. Leu (Eds.), *Handbook of research on New Literacies* (pp. 671-697). New York: Lawrence Erlbaum Associates.
- Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts of text and image in classroom practice*. Buckingham: Open University Press.
- Unsworth, L. (2008). Multiliteracies and metalanguage: Describing image/text relations as a resource for negotiating multimodal texts. In J. Coiro, M. Knobel, C. Lankshear, & D. J. Leu (Eds.), *Handbook of research on New Literacies* (pp. 377-405). New York: Lawrence Erlbaum Associates.
- Vasudevan, L. M. (2006). Looking for angels: Knowing adolescents by engaging with their multimodal literacy practices. *Journal of Adolescent and Adult Literacy*, 50(4), 252-256.
- Voithofer, R. (2005). Designing new media education research: The materiality of data, representation and dissemination. *Educational Researcher*, 34(9). American Educational Research Association. Retrieved September 28, 2012, from <http://www.jstor.org/stable/3699990>
- Vosloo, S. (2012, August 24). *Steve Vosloo*. Retrieved October 16, 2012, from <http://stevevosloo.com/>
- Watson, A. (2010). *An exploration of the literacy practices of six grade 9 girls in a Pietermaritzburg high school*. Unpublished Masters thesis, UKZN.

Williams, B. T. (2006). Girl power in a digital world: Considering the complexity of gender, literacy, and technology. *Journal of Adolescent and Adult Literacy*, 50(4), 300-307.

Williams, B. T. (2007). Why Johnny can never, ever read: The perpetual literacy crisis and student identity. *Journal of Adolescent and Adult Literacy*, 51(2), 178-182.

Williams, J. (2008). *Gilles Deleuze's Logic of Sense: A critical introduction and guide*. Edinburgh: Edinburgh University Press.

APPENDICES (Separate Volume)