mStories

University of Technology Sydney

Faculty of Engineering & Information Technology

Bachelor of Science (Honours) in Information Technology

Honours Thesis 2011

mStories:

Understanding the new literacies of mobile devices through a creative participatory research project

Jessica Frawley

November, 2011

This Honours Thesis has been submitted as a requirement of the C09019 Bachelor of Science (Honours) in Information Technology
Statement of originality

I certify that this work has not already been submitted for any degree and is not being submitted as part of any other degree. I also certify that this project has been written by me, and that any assistance, and all sources used have been acknowledged within this project.

Jessica Frawley
Abstract

Traditional discussions on literacy have focused on the reading and writing of alphabet and character-based texts. However, innovations in information and communication technologies (ICT) have emphasised new forms of literacy that include still and moving image, and new modes of document reception and production. These ‘new’ literacies have become a significant area of research, however to date these understandings have been built without reference to the adult user, the informal learner and the mobile device. Though mobile devices enable increasingly multimodal behaviours little is known about how a device’s mobility affects these literacy practices. As Smartphone ownership increases and the semiotic landscape becomes increasingly multimodal there is a need for understandings of multiliteracies research to be applied and extended to the multimodal meaning-making afforded by mobile devices. In August 2011 mStories, a creative participatory action research project, was established by the researcher. Working with nine participants from Australia and the UK, mStories facilitates the creation and sharing of user generated stories created with mobile devices; in addition to changing user practice through action, this project contributes to understandings of multimodal mobile literacies through survey and interview research, and analysis of the mStories products. Grounded in the participant’s experiences and semiotic products, this thesis develops an understanding of literacy from the underrepresented adult user and the mobile technology that they use. From data derived from this participatory project, this thesis characterises mobile practice as one that is situated, locative, and experiential in nature; This project finds that mobile devices are catalytic to meaning-making within a wider ICT ecology.
Acknowledgements

As participatory action research, the mStories project would not have been possible without the people who creatively participated and supported me throughout the project. In the true spirit of participatory research I would like to acknowledge and thank the following people and groups for their contributions and support throughout the mStories project:

- My supervisor Laurel Dyson, for her invaluable advice, academic rigor and passionate interest in mobile technology and human practice;
- Jonathan Tyler, from the UTS School of Business, for allowing me to work part-time this year so that I could focus on the honours thesis;
- Andrew Litchfield, from the UTS FEIT School of Software, for his insights into the role of mobile technology as a means of changing literacy;
- Academic staff members of the Faculty of Engineering and IT, whose tuition, guidance and support this year has assisted me in thinking about the different approaches to research, both at a methodological and subject level;
- My family and friends, both in the UK and Australia, and my husband Andrew for keeping me on track.

Lastly I would like to thank the nine participants whose creativity, enthusiasm and stories flow through and inform each part of this thesis. This work is dedicated to those nine persons without whom this research and creative project would not be possible.
Table of Contents

1. Introduction ........................................................................................................... 1

2. Literature review ..................................................................................................... 3
   2.1 New definitions of literacy ................................................................................. 3
   2.2 Theories of new multimodal literacies ............................................................... 4
       2.2.1 Linguistic frameworks .............................................................................. 5
           2.2.1.1 Systemic Functional Linguistics .................................................... 5
           2.2.1.2 Visual grammar .............................................................................. 7
           2.2.1.3 Intersemiotics ............................................................................... 10
   2.3 The practice of new literacies ............................................................................ 15
       2.3.1 Skill-based practice .................................................................................... 15
       2.3.2 Sociocultural practice .............................................................................. 16
       2.3.3 Children’s practice .................................................................................... 16
   2.4 Multimodal literacy acquisition ......................................................................... 19
       2.4.1 Formal learning environments ................................................................... 19
           2.4.1.1 Education sectors .......................................................................... 19
           2.4.1.2 Technologies ................................................................................. 20
       2.4.2 Informal learning environments ................................................................. 21
   2.5 Multimodality in mobile technologies ............................................................... 22
       2.5.1 Design and usability factors ...................................................................... 22
       2.5.2 New literacies in mLearning .................................................................... 22
   2.6 Focus .................................................................................................................. 23

3. Research design and methodology ........................................................................... 25
   3.1 The mStories project design ............................................................................. 28
   3.2 Stage 1: Preliminary Participant survey ............................................................. 32
   3.3 Stage 2: Participant mStories ............................................................................ 33
   3.4 Stage 3: Intersemiotic analysis of one mStory ................................................. 34
   3.5 Stage 4: Participant interview ......................................................................... 35
3.6 Stage 5: Post-project survey .................................................................36
3.7 Summary ..............................................................................................36

4. Findings ..................................................................................................37

4.1 mStories overview ...............................................................................37

4.2 Intersemiotic analysis ..........................................................................42
  4.2.1 Intersemiotic analysis of The Voice ..................................................43
  4.2.2 Ideational – what is it about? .............................................................45
  4.2.3 Interpersonal – how does it enact the social? ....................................46
  4.2.4 Compositional – how is the text constructed as a semiotic product? ....50
  4.2.5 Summary ..........................................................................................52

4.3 Participant interview ............................................................................53
  4.3.1 Participant experience .......................................................................54
  4.3.2 Participant experience of the semiotic ...............................................58
  4.3.3 Summary ..........................................................................................61

4.4 Surveys ..................................................................................................62
  4.4.1 Preliminary participant survey ...........................................................62
  4.4.2 Post project survey ...........................................................................69
    4.4.2.1 Participant choice of modes and technology use .........................69
    4.4.2.2 Participant mStory process .........................................................73
  4.4.3 Summary ..........................................................................................76

4.5 Summary of findings ............................................................................77

5. Discussion ..............................................................................................80

5.1 How do mobile devices enable or constrain adults in making meaning? ....86
5.2 How can we best describe the process of adult’s mobile multimodal meaning
    making? ........................................................................................................80
5.3 How do these understanding relate to existing understandings of multimodal
    literacy? .........................................................................................................90

6. Conclusions and future work .................................................................93

6.1 Conclusions ..........................................................................................93
6.2 Future work ..........................................................................................94

7. References .............................................................................................96
APPENDIX A: Participant demographic data ..................................................
APPENDIX B: Preliminary survey ......................................................................
APPENDIX C: Intersemiotic analysis .................................................................
APPENDIX D: Interview questions and transcript ..............................................
APPENDIX E: Post project survey .......................................................................
APPENDIX F: Project dissemination ....................................................................
List of Figures

Figure 1 Relationships between linguistic, visual and intersemiotic ................................. 7
Figure 2. Visual-verbal intersemiotic relations on the page ............................................. 10
Figure 3. Research design and methodology .................................................................. 27
Figure 4. Participant driven project design in two stages ............................................... 28
Figure 5. mStories website .............................................................................................. 31
Figure 6. mStories blogging platform ........................................................................... 34
Figure 7. Modes used within participant mStories ....................................................... 38
Figure 8. mStories creation and sharing platform .......................................................... 41
Figure 9. The Voice by Zena Shapter ........................................................................... 44
Figure 10. Example of the intersemiotic ideational tabular analysis tool ....................... 45
Figure 11. Visual representations of power relations ..................................................... 48
Figure 12 Visual representations of personal space .......................................................... 49
Figure 13. Composition of the voice on the mStories website ........................................ 51
Figure 14. Participants methods of constructing compositional meaning .......................... 61
Figure 15. Categories of mobile phones ........................................................................ 64
Figure 16. Participant mobile device ownership ............................................................. 65
Figure 17. Participant mobile phone use ......................................................................... 66
Figure 18. Participant mobile phone use with Category A Mobile Devices ..................... 66
Figure 19. Participant mobile phone use with Category B mobile devices ..................... 67
Figure 20. Participant mobile phone use with Category C mobile devices ..................... 67
Figure 21. Features used in mStory production .............................................................. 70
Figure 22. Non-mobile phone content ........................................................................... 70
Figure 23. Participant motivations for using different modes ......................................... 72
Figure 24. Motivations behind participant’s ideational meaning-making .......................... 73
Figure 26. Participant mStory process ......................................................................... 89
List of Tables

Table 1. Visual meaning-making components ................................................................. 8
Table 2. Intersemiotic Complementarity: Ideational Metafunction ................................. 12
Table 3 Intersemiotic Complementarity: Interpersonal Metafunction ............................... 13
Table 4. Intersemiotic Complementarity: Compositional Metafunction ......................... 14
Table 5. Comparative table of preliminary and final project designs .............................. 30
1. Introduction

Traditional discussions on literacy have focused on the reading and writing of alphabet and character-based texts. However, innovations in information and communication technologies (ICT) have emphasised new forms of literacy that include still and moving image, and new modes of document reception and production (Clark & Mayer 2003; Pailliotet & Mosenthal 2000; Reinking et al. 1998). Where producing, printing and transmitting behaviours were once limited to the domain of the expert or specialist, new technologies have enabled individuals to make such authoring behaviours part of daily life. As a result much of our encoded language is multimodal (Kress 2000; Kress & van Leeuwen 2006). Discussions on literacy have expanded beyond the traditional concept of printed text to encompass digital multimedia artefacts; this nexus between technology and literacy has emerged as an important area for research (Mills 2010a).

Recent developments in mobile networked devices, such as the emergence of multimedia Smartphones, tablets and e-book readers, have led to changes in the way people use mobile devices. Mobile devices, such as smartphones, now enable everyone to produce and communicate text, image, audio, video and multimedia culture and meanings (Dyson, Litchfield & Raban 2010). Though people use their mobile devices to engage in new meaning-making practices, new literacies research to date has been focused largely on desktop technologies and formal educational environments. Recent research has begun to explore adult engagement with new literacies, and the informal learning of ‘design’ as a literacy practice (Sheridan & Roswell 2010), however little is known about how a device’s mobility affects literacy practice. As smartphone ownership continues to increase (Llamas & Stofega 2010) and the semiotic landscape becomes increasingly visual and multimodal (Kress 2003) there is a need for understandings of multiliteracies research to be applied and extended to the multimodal meaning-making afforded by mobile devices.

In August 2011 mStories, a creative participatory action research project, was established by the researcher. Working with nine participants from Australia and the UK, mStories facilitates the creation and sharing of user generated stories created with mobile devices. In addition to supporting new creative practices, this project contributes to understandings of
new multimodal and multimedia literacies.¹ Participants created their stories using multiple modes; and the project stories were showcased collectively on the mStories website.

Grounded in the participant’s experiences and semiotic products, this thesis develops an understanding of literacy from the underrepresented adult user and the mobile technology that they use. From data derived from this participatory project, this thesis characterises mobile practice as one that is situated, locative, and experiential in nature; mobile enabled literacies are characteristically visual, multimodal, and situated in their practice. mStories demonstrates that users engage in making decisions about complementarity, flow, and visual design. This project finds that mobile devices are catalytic to meaning-making within a wider ICT ecology. This research is based on the assumption that language is a social semiotic, that image and other non-lexical elements are components of this meaning-making system.

This research report is structured chronologically, in a way that showcases each stage of the research and the findings that emerge throughout. Section 2 provides a literature review that covers the current work of new-literacy researchers, in particular their focus on understanding new literacy as a phenomenon with both a linguistic system and a human process. Section 3 provides a methodology that details the research design of the project within five stages and Section 4 presents the findings from these stages. Section 5 discusses the implications of these findings on new-literacy research and user centred understandings of mobile technology practice and learning. Section 6 summarises the work and suggests ways of extending this research to explore new directions. Section 7 provides a list of references and the four appendices contain additional supporting material that is referred to throughout the document.

¹ www.mstories.com.au
2. Literature review

This literature review provides an overview of the field of new literacy research and the dominant frameworks and theoretical approaches that are used to understand new meaning-making practices. Though mobile technology has been peripheral to the field of New Literacies research, mobile technology use is increasingly multimodal; whilst not approaching these practices from a literacy vantage point, the field of mLearning has explored the user practice and experiences of using multimodal mobile technologies. As such this review explores both the explicit and implicit discussions around both new-literacy and mobile practice.

2.1 New definitions of literacy

Technological, cultural and social changes within the communication landscape have led to changes in the use and conceptions of literacy, and what it means to be literate. Literacy has traditionally been associated with the reading and writing of print-based texts. More recently dominance in meaning-making has shifted from word-based written texts, to new modes of meaning making (Kress 2000). Wider societal shifts from a ‘logocentric’ to an ‘ocularcentric’ culture (Spencer 2011) are reflected in conceptions of literacy that have come to encompass visual image, music, and gesture (Kress 2000; Kress 2003; Kress & van Leeuwen 2006). Through new technologies people are able to become producers of multimedia texts. The technologies that enable people to engage in new modes of meaning making are recognised, and reflect a distinctly digital aspect of new literacy research (Mills 2010a). In addition to the supremacy of written communication being challenged by new modes and methods of meaning making, new definitions of literacy have sought to reconfigure and revitalise old models: traditional reading and writing are redefined as essentially multimodal activities (Jewitt 2005; Kress 2003). As the scope of literacy research expands, literacy becomes a multifarious concept. Within this changing communication landscape ‘it is no longer possible to think about literacy in isolation from a vast array of social, technological and economic factors’ (Kress 2003, p. 1).

As the concept of literacy broadens, new terminology emerges to articulate and distinguish new literacy practices from traditional reading-writing behaviours. Whilst there is no consensus within traditional definitions of reading and writing (Stubbs 1980) research into
printed text-based literacy has been more willing to adopt the singular term ‘literacy’, even if its usage has spawned multiple interpretations (Barton 2007). In contrast, recent literacy research is characterised by a plurality of terms and definitions. Discussions have shifted from the singular ‘literacy’ to the plural ‘multiliteracies’ (Cope & Kalantzis 2000). Such a shift in nomenclature reflects the diversification and multiple approaches that are within the literacy studies field.

A survey of new literacy terminology offers insight into current conceptions of literacy in new literacy research. Terms such as ‘visual literacy’ (Kress & van Leeuwen 2006), ‘multimodal literacy’ (Jewitt 2005; Kress 2000), and ‘digital visual literacy’ (Spalter & van Dam 2008) indicate that new literacy research accounts for both the mode and a skill or meaning-making behaviour. Knobel and Lankshear (2007) define a new literacy as one that adopts both a new technological use, and a new ethos of use. Such attempts to redefine new literacy through new terminology indicates that there may be a need within new literacy research to simultaneously distinguish itself as both similar and different to the traditional literacy discourse from which it emerges. Gunther Kress acknowledges that it is difficult to know what is, or is not, included within the shifting boundaries of ‘literacy’ (Bearne 2005). Both the plurality of definitions and the uncertainty amongst literacy-researchers, indicate that literacy is still an increasingly complicated concept to define.

### 2.2 Theories of new multimodal literacies

*Ideally a theory of literacy should be based on a theory of language in which what people do with literacy is closely linked to an explanation of what is ‘made of’ and how this mode of representation actually works; or, conversely, to explain what is or what is not really possible with this medium, and in this mode* (Kress 1997, p. 112).

In his seminal work *Before Writing: Rethinking the Paths to Literacy* Gunther Kress (1997) reappraises literacy by exploring children’s meaning-making behaviour in artefacts such as drawings, cutting out, writings etc. Kress (1997) develops a set of principles for understanding children’s paths to literacy through observing such meaning-making behaviours, and linking this understanding to a linguistic model of literacy. As all approaches to understanding new literacy practices are founded on assumptions of *how* multimodal texts
2.2.1 Linguistic frameworks

As social, technological and economic factors combine to alter the communicative landscape, new theoretical schemas emerge to make sense of what is described as a revolutionary shift from page to screen, and text to image (Kress 2003; Snyder 1998). Approaches to multimodal analysis stem heavily from Hallidayan Systemic Functional Linguistics (SFL) (see Halliday 1978, 1985). SFL assumes that there is an interconnectedness between the linguistic and the social, and posits that language is only one of many semiotic systems: the latter include art, visuals, sculpture music (etc.), all of which combine to define context and culture (Halliday & Hasan 1989). SFL’s conception of language as one of many semiotic systems is perceived as a major reason for SFL being used as the primary foundation for new multimodal frameworks (Unsworth 2008). This section will provide an overview of Systemic Functional Linguistics and how this has influenced several of the most dominant theoretical frameworks that have emerged to reframe visual and multimodal texts as artefacts that fit into a system of language.

2.2.2 Systemic Functional Linguistics

Though a complete description of SFL is not possible within the scope of this report, its repeated sightings within other multimodal frameworks necessitates that a brief summary is provided. Central to this functional, social-semiotic viewpoint is the assumption that all meaning-making performs three, overarching functions. Halliday (1985, p. 53) identifies three semantic components that operate in all human meaning-making simultaneously and he defines these components as:

1) **The Ideational metafunction**
   The representation of experience: our experience of the world that lies about us, and also inside us, the world of our imagination. It is meaning in the sense of ‘content’.

2) **The Interpersonal metafunction**
   The resource for ‘meaning as a form of action’: the speaker or writer doing something to the listener or reader by means of language.
3) The Textual metafunction

The resource for maintaining ‘relevance to the context’: both the preceding (and following) text and context of situation.

As these three metafunctions have been adapted to account for non-linguistic meaning-making, new parallel terminology has been coined. Though representation, orientation and organisation have been suggested as equivalent terms for non-linguistic modes (Lemke 1989, 1992), each multimodal theory tends to adopt its own translation. The result is that though these strata can be found throughout multimodal frameworks, they are often obscured by differences in terminology. Thus, approaches that contain visual analysis typically replace the word ‘textual’ with the word ‘compositional’ (Kress & van Leeuwen 2006; O'Toole 1994; Royce 2007). The ideational and interpersonal metafunctions have received more varied renaming. This is worth bearing in mind as the Hallidayan concept of meaning asserts itself as the basis for much of the analytic frameworks within the literature.

These metafunctions have been applied in different ways throughout the schemas, but the most simple approach is to ask a text questions such as: ‘What is represented?; How is it represented in regard to the reader or viewer?; ‘How is this meaning sequenced or positioned within the wider context?’ By asking these metafunctional questions of a text, patterns between the metafunctions can be identified and used to enrich the understanding of that text (Iedema 2001). Figure 1 illustrates how visual and intersemiotic analytical frameworks can be thought to derive theoretically from each other. At each stage of adoption there is also a translation to the linguistic interpretation in order to the account for the different mode being articulated.
2.2.3 Visual grammar

A key contribution to understanding visual literacy is the concept of visual grammar. Kress and van Leeuwen (2006) synthesise theories and understandings of the visual and unite these understandings within a Hallidayan model of social semiotics (Halliday 1978). Parallels between linguistic meaning-making functions and visual meaning-making functions form the basis of the Kress and van Leeuwen (2006) visual grammar. Despite prescriptive connotations, the adoption of the term ‘grammar’ is less a prescriptive work on how to read or write visual texts and instead is a concept that provides a structure for thinking about the function of common meaning-making structures that occur regularly within visual texts. Underpinning a theory of visual grammar is a fundamental assumption that ‘as a resource for representation, images, like language will display regularities which can be made the subject of relatively formal description (Kress & van Leeuwen 2006, p. 20). The visual grammar thus provides a terminology to account for the semiotic processes of how concepts, narratives, and interactions are presented visually.

Visual grammar is primarily derived from foundations in Hallidayan Systemic Functional Linguistics, and though not widely accepted has been the predecessor for theory development that follows a standard linguistics-to-visual/multimodal approach. In a grammar of typography van Leeuwen (2005) draws parallels between linguistic understandings of phonology and the visual typeface: thus a grammar of typography models how a font or
_typeface adds meaning to the written word in the same way that accent or intonation may add meaning to the spoken word. Though this model does not articulate the practice or acquisition of visual literacy, it articulates a concept of multimodal and multimedia features as a type of language.

Kress and van Leeuwen’s (2006) seminal text *Reading images: the grammar of visual design* is oft-cited within new literacies research. To date it remains a dominant analytical model and one which is seldom challenged. The concept that visual components behave as meaning-making elements of a text is not new; designers have long understood the communicative power of the visual (Barnard 2005; van Leeuwen 2005). However, by resituating visual image and design components within a communicative framework, Kress and van Leeuwen (2006) provide a formal description of visual meaning-making structures. This description allows us to make explicit visual aspects of a text that have been previously difficult to articulate or discuss. A simplified version of the visual grammar’s structure, and how it relates to the Hallidayan metafunctions, is presented in Table 1.

*Table 1. Visual meaning-making components*

<table>
<thead>
<tr>
<th>Meta function</th>
<th>Visual meaning-making components</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Representational</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Ideational</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective</strong></td>
<td>An image with perspective</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>An image or diagram that does not have perspective</td>
</tr>
<tr>
<td><strong>Represented participants</strong></td>
<td>Those people, animals, objects that are depicted</td>
</tr>
<tr>
<td><strong>Interactive participants</strong></td>
<td>Those people who interact with the visual: the producers and the consumers.</td>
</tr>
</tbody>
</table>
### Vectors
Direction of action

### Shapes
Shapes used in graphs, diagrams, eg. Circles, squares, triangles

### Represented participants
Those people, animals, objects that are depicted

### Interactive participants
Those people who interact with the visual: the producers and the consumers.

### Gaze
The gaze of the represented participant can be a ‘Demand’ (a direct gaze) or an ‘Offer’ (no direct gaze).

### Framing
Close, Medium, Long Shot etc. indicate the level of intimacy enacted between image and interactive participants.

### Horizontal angle (Level of involvement)
The horizontal angle indicates the level of detachment or involvement enacted between what is represented and the interactive participant.

### Vertical Angle (Level of power)
The angle indicates the level of power enacted between what is represented and the interactive participant.

### Compositional
Where in the space the represented participant is, the relationship between the represented participant and that space and other represented participants within that space.

<table>
<thead>
<tr>
<th>Centred</th>
<th>Polarised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circular</td>
<td>Triptych</td>
</tr>
<tr>
<td>Margin</td>
<td>Salience</td>
</tr>
<tr>
<td>Mediator</td>
<td>Connection or Disconnection</td>
</tr>
<tr>
<td>Real &amp; Ideal</td>
<td>Given &amp;New</td>
</tr>
</tbody>
</table>

(Adapted from: Kress & van Leeuwen 2006)
2.2.4 Intersemiotic approaches

Modes such as writing and image arguably provide different affordances and are governed by different logics (Kress 2003). Yet despite differences, multiple mediums commonly co-create meaning within the parameters of a singular multimodal medium. As texts become increasingly multimodal, new research into the relationships and interconnectedness between different modes has emerged. Intersemiotic theories or approaches, as they are referred to, attempt to account for the relationships between the different modes (eg. visual image and text) and how these co-exist within the parameters of a single multimodal composition.

There are several analytical approaches that have been created to address this purpose, all of which draw on SFL and the Kress and van Leeuwen visual grammar (eg. Daly & Unsworth 2011; Royce 2007; Unsworth 2008). Figure 2 illustrates, albeit in a simplified form, how intersemiotic approaches have used both linguistic and visual semiotics to understand the relationship that exists between the two. By borrowing from linguistic and visual analysis methods, intersemiotic approaches forge a way to think about texts that encompass both.

Figure 2. Visual-verbal intersemiotic relations on the page

(Source: Royce 1998, p.27)

One of the dominant intersemiotic analytical frameworks is Royce’s Intersemiotic Complementarity Framework (1998, 2007). This framework posits that intersemiotic complementarity ‘provides a way of accounting for how different modes of meaning cohere within a text, and […] argues that it is possible to explore the internal cohesive relations between the visual and verbal resources that contribute to this coherence’ (Bowcher 2007).
To describe intersemiotic complementarity Royce (1998) proposes the following:

1) Analyse the visual elements in the text;
2) Analyse the verbal text;
3) Analyse the relationship between the visual and verbal elements for intersemiotic complementarity.

Royce (1998, 2007) argues that for a text to achieve intersemiotic complementarity, the visual and the verbal must relate to each other in ways that are typically found within each of these three metafunctions: ideational, interpersonal and compositional. Table 2, Table 3 and Table 4, details the ideational, interpersonal and compositional process for intersemiotic analysis and conditions for intersemiotic complementarity.
**Table 2 (Royce 2007, p. 68)**

*Page-Based Intersemiotic Complementarity: Ideational Metafunction*

<table>
<thead>
<tr>
<th>Metafunction</th>
<th>Visual Meanings</th>
<th>Intersemiotic Complementarity</th>
<th>Verbal Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideational</td>
<td>Variations occur according to the coding orientation. In the <strong>Naturalistic</strong> coding we can look at:</td>
<td>Various lexicos-semantic ways of relating the experiential and logical content or subject matter represented or projected in both visual and verbal modes through the intersemiotic sense relations of:</td>
<td>Lexical elements which relate to the visual meanings. These lexical items arise according to:</td>
</tr>
<tr>
<td></td>
<td><strong>Identification:</strong> who or what</td>
<td><strong>Repetition</strong> (<em>R</em>): identical experiential meaning</td>
<td><strong>Identification</strong> (Participants): who or what is involved in any activity?</td>
</tr>
<tr>
<td></td>
<td><strong>Circumstances:</strong> where, who with, by what means</td>
<td><strong>Synonymy</strong> (<em>S</em>): the same or similar experiential meaning</td>
<td><strong>Activity</strong> (Processes): what action is taking place, events, states, types of behaviour?</td>
</tr>
<tr>
<td></td>
<td><strong>Attributes:</strong> the qualities and characteristics</td>
<td><strong>Antonymy</strong> (<em>A</em>): opposite experiential meaning</td>
<td><strong>Circumstances:</strong> where, who with, and by what means are the activities being carried out?</td>
</tr>
<tr>
<td></td>
<td>In the <strong>Mathematical</strong> coding we can look at:</td>
<td><strong>Meronymy</strong> (<em>M</em>): the relation between the part and whole of something</td>
<td><strong>Attributes:</strong> What are the qualities and characteristics of the participants?</td>
</tr>
<tr>
<td></td>
<td><strong>Identification:</strong> what</td>
<td><strong>Hyponymy</strong> (<em>H</em>): the relation between a general class of something and its subclasses</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Relational Activity:</strong> what is the relation</td>
<td><strong>Collocation</strong> (<em>C</em>): an expectancy or high probability to co-occur in a field or subject area</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Circumstances:</strong> where, what with, by what means</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Attributes:</strong> qualities and characteristics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 (Royce 2007, p. 69)

**Page-Based Intersemiotic Complementarity: Interpersonal Metafunction**

<table>
<thead>
<tr>
<th>Metafunction</th>
<th>Visual Meanings</th>
<th>Intersemiotic Complementarity</th>
<th>Verbal Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpersonal</strong></td>
<td>Various ways of intersemiotically relating the reader/viewer and the text through MOOD (address via offers, commands, statements, and questions) and MODALITY (attitude re something as real or unreal, true or false, possible or impossible, necessary or unnecessary, and other attitudinal positions) through the intersemiotic relations of:</td>
<td>Elements of the clause as exchange which relates to visual meanings. These arise according to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variations occur according to the coding orientation. In the Naturalistic coding it is a continua of the use of:</td>
<td></td>
<td>The MOOD element in the clause realising speech function.</td>
</tr>
<tr>
<td></td>
<td>Address: an identical form of address</td>
<td></td>
<td>The MODALITY features of the clause which expresses attitudes.</td>
</tr>
<tr>
<td></td>
<td>Involvement &amp; Power: a similar kind of attitude</td>
<td></td>
<td>Modalization views on the possibility, probability and certainty of the proposition as well as the use of Component Adjuncts. Also the use of attitudinal Epithets in the form of subjective adjectives.</td>
</tr>
<tr>
<td></td>
<td>Social Distance: an opposite or ironic attitude.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modality Markers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In the Mathematical coding it is a continua of use of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement &amp; Power:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modality Markers:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 (Royce 2007, p. 69)

**Page-Based Intersemiotic Complementarity: Compositional Metafunction**

<table>
<thead>
<tr>
<th>Metafunction</th>
<th>Visual Meanings</th>
<th>Intersemiotic Complementarity</th>
<th>Verbal Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compositional</td>
<td>Variations in visual meanings occur according to choices made in terms of:</td>
<td>Various ways of mapping the modes to realize a coherent layout or composition by Information Valuation on the page</td>
<td>The body copy as an orthographic whole realised by various structuring principles:</td>
</tr>
<tr>
<td><em>Information value</em></td>
<td></td>
<td>Degree of framing of elements on the page</td>
<td></td>
</tr>
<tr>
<td><em>Salience</em></td>
<td></td>
<td>Inter-Visual synonymy</td>
<td>Information Value</td>
</tr>
<tr>
<td><em>Framing (weak and strong)</em></td>
<td></td>
<td>Reading path</td>
<td>Salience</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Framing (weak and strong)</td>
</tr>
</tbody>
</table>
Royce’s analytical framework of intersemiotic complementarity offers much needed guidelines as to how to understand meaning making more holistically within a singular multimodal text. This framework was developed by Royce using articles from the Finance section of *The Economist* magazine (1998). It has since been applied by Bowcher (2007) to analyse the Australian sports magazine *Rugby League Week*. Whilst the intersemiotic complementarity framework provides much needed insight into texts which contain both the visual and the verbal, this analytical approach has emerged from the study of still-image and printed text. Guidelines that stipulate separate analysis of visual and verbal components are therefore difficult to apply to mediums, such as film or video where moving image and spoken language blurs the boundaries between these features.

### 2.3 Practice based approaches

In addition to the semiotics of the new literacies, theorists and educational practitioners have also explored how people engage in these new practices. One of the challenges faced by literacy research is in understanding how people engage in a plurality of literacies. Two dominant theoretical approaches to this issue can be observed within the literature. The first emerges from the field of psycholinguistics (Leu et al. 2007) whilst the second draws on sociocultural theory and social practice (Knobel & Lankshear 2007). Though it is possible to discuss these approaches as having either psycholinguistic or sociocultural practice emphasis, there is little divide between the two approaches; most new literacy research tries to account for both the skills necessary to engage in new literacies and the new sociocultural practices that enable this. Kress’s (1997) *theory of children’s meaning making* approaches the task of describing the ‘practical theory’ [sic] of what children *do* in their meaning-making by drawing on both skills and the available materials.

#### 2.3.1 Skill-based literacy practice

Emerging out of psycholinguistics, Leu et al.’s (2007) theoretical approach focuses less on new technologies, so much as it focuses on the new skills required to utilise these technologies. From this perspective technologies are enabling tools whose continuous change emphasises individual cognitive skill development over technologies or other external variables. This approach suggests that ‘a complete understanding of new literacies may be a Sisyphean task, never fully attainable’ (Leu et al. 2007, p. 39). Approaches with a
psycholinguistic focus may emphasise skills, pedagogies, and behaviours necessary for users and learners to adapt to new ICT, and online and offline communication contexts (Leu Jr. et al. 2004).

### 2.3.2 Sociocultural literacy practices

Alternatively new literacy can instead be conceptualised by its sociocultural features. A singular instance of a literacy can be characterised and situated within a sociocultural and historic context. Within this framework a ‘new’ literacy is one that has ‘new’ ‘technical stuff’ and new ‘ethos stuff’ (Knobel & Lankshear 2007, p. 7). New technological stuff may present in two distinct ways. Firstly, a new technology may allow for existing practice to be performed in a new way; this is most readily observable, but not limited, to technologies that expand a particular practice or activity from the domain of the expert to the domain of the layperson. A second way is for new technology to enable new phenomenon².

However for a literacy practice to be considered as distinctly ‘new’ within Knobel and Lankshear’s (2007) schema, these new technologies have to be coupled with a ‘new ethos’. The ethos is expected to be ‘more fluid and less abiding than those we typically associate with established literacies’ (Knobel & Lankshear 2007, p. 9). The concept of ethos is characterised by several concepts: a shift in mindset, a fracturing of space and the capabilities that Web 2.0 has permitted (Knobel & Lankshear 2007; Lankshear & Bigum 1999). This social practice situates new literacies firmly within a sociocultural and historical context and is able to identify individual new literacy practices as they arise.

### 2.3.3 Children’s practices

As new technologies have enabled methods of multimodal production, much of the new literacies research has focused on the digital aspects of new literacy (Mills 2010a). In addition to computer-enabled forms of multimodal meaning-making, are other practices that are used to create meanings: ‘whether in describing and commenting on their own making, or the reading of the making of others, meaning is at the forefront of their [children’s] concerns’(Kress 1997, p. 87). Prior to reading and writing, children make meaning using many media. Kress identifies children’s pre-writing practices; these include things such as

---

² Blogging platforms are an example of a technology that enables a new phenomenon (a blog) which is different to other existing ways of writing and publishing.
collage, drawing, cutting-out, behaviours and gestures that are identified as meaning-making behaviours. A child’s meaning-making behaviour is shaped by what Kress refers to as ‘what is to hand’. The concept of ‘what is to hand’ refers to not only the materials that are available but the concepts that the child is aware of.

> ‘this conceptual ‘what is to hand’ is significant, because it in itself sets limits to and provides possibilities for imagination, opens up categories such as time and space, history and prehistory, and cultural differences of various kinds. It provides materials to choose from, and therefore materials for the differentiation of gender, for instance’ (Kress 1997, p. 31).

Kress (1997) approaches the task of describing the ‘practical theory’ of what children do in their meaning-making by drawing on both skills and the available materials that are available to children. In understanding children’s meaning-making Kress identifies ten areas that shape the practice of children’ meaning-making: interest, motivated signs, transformation and transformative action, multimodality, representation and communication, reading, resources for meaning making and imagination, cognition & affect. As these terms are often used in a way that is specific to Kress’s framework they are detailed briefly below:

**Interest**
Interest is described as a ‘composite of my experience; but is also a reflection of my present place, and an assessment of my present environment’ (Kress 1997, p. 90). For Kress, interest answers the question of ‘why did that person make this sign at that point?’: interest can account for both interpretation and construction of the sign.

**Motivated Signs**
Motivated signs describe a relationship between meaning and form that is motivated and conventional. Thus, a drawing of ‘motivated signs are always metaphors; formed through the process of analogy which itself is motivated by the sign-maker’s interest’(Kress 1997, p. 93).

**Transformation and transformative action**
Transformation and transformative action refers to the child’s practice of using the stuff that is around them and transforming it to give it new meanings.
Multimodality

Children are used to making signs in multiple media with multiple modes: ‘the differing materials which they employ offer differing potentials for the making of meaning (Kress 1997, p. 97).’ Often the media and modes used by a child is ‘what is to hand’.

Representation and communication

Kress (1997) argues that children now make their way into literacy in a world in which representation is sign-making and not an objective world ‘out there’ that characterised previous concepts of signs as representing things in the real world.

Reading

Kress (1997) refers to reading more generally as interpretation of the world around them. The signs formed during the reading process are made out of the interest of the reader.

Resources for making of meaning

Within this theory of children’s meaning-making practice Kress observes that the resources used for making meaning are often resources that are, for the child, ‘to hand’.

Imagination, cognition and affect

Imagination is an aspect of the processes of sign-making: a prior state to outward public act of social semiosis. Imagination is dependent on and enhanced by the ability to engage in free movement among forms of internal representation: unlike external sign-making which is constrained by the mode used, imagination has free range and is (argues Kress) of the same kind of mental activity as cognition. In addition to the imagination shaping meaning-making process, the affective state of a child (mood) will affect how the child will respond to different modes of communication. Preference for one mode over another may affect the child’s meaning-making process.

---

3 Kress’ use of the phrase “to hand” refers to easily accessible or available resources that children engage in meaning making with. Though resources are often ‘to hand’ they are usually chosen for material and shape that lends itself to the meaning that the child is trying to produce: a blanket for a ‘tent’ instead of a cardboard box for example.
2.4 Multimodal literacy acquisition

As conceptions of literacy expand and alter the ways in which multimodal artefacts are understood as communicative resources, the acquisition of these new literacies has become a field of exploration. As ‘learning can no longer be considered a purely linguistic accomplishment’ (Jewitt et al. 2001, p. 17), multimodal meaning-making and new literacies are increasingly explored within the educational context. Of course it is not only literacy researchers that engage in the educational use of new literacies. Multimedia and e-Learning have long acknowledged the importance of visual design concepts as approaches to learning (Clark & Mayer 2003; Mayer 2009). However what is new about this research is its literacy perspective. This explicit acknowledgement of new literacy practices has been primarily explored within formal educational environments; recently however new literacy research has expanded to explore more informal learning behaviours.

2.4.1 Formal learning environments

Understanding digital technologies and developing multimodal-literacy practices are perceived to be important and necessary for participation in a society that utilises both (Mills 2010b; Wolfe & Flewitt 2010). It is argued that students need to better understand multimodal texts as the ‘basic’ aspects of literacy referred to by adults do not exist in the same way that they once did (Walsh 2008). Increased recognition of the need for more systematic in-class engagement with new modes of literacy has led to new multimodal approaches within education: over the past decade several studies of multimodal classroom practice have been undertaken. The studies of multimodal literacy acquisition and practice have tended to focus on: primary and secondary education and desktop technologies.

2.4.1.1 Education sectors

Whilst research within higher-education (Spalter & van Dam 2008) exists, the majority of studies have focused on either the primary (Fails, Druin & Guha 2010; Wolfe & Flewitt 2010) or secondary (Jewitt 2005; Mills 2010b) education sectors. These studies suggest that whilst there is good reason for the adoption of multimodal practice, there are barriers to widespread adoption: parental control, socioeconomic background, practitioner attitudes
towards multimodal digital practices, especially ‘the assumption that all youth have innate digital skills’ (eg. Mills 2010b; Wolfe & Flewitt 2010). The conclusions drawn by these studies are often specific to the age of the learner: however with research into higher-education being little more than exploratory, there is little understanding of the barriers that may be unique to the adult learner and the implications that this may have on their ability to participate in the multimodal literacies perceived to be important for participation in society.

2.4.1.2 Technologies

Explicit educational focus on new literacy acquisition has primarily utilised screen-based technologies. Indeed the shift from page to screen is a significant aspect of the digital text (Snyder 1998). However, though rarely stated within the literature, new literacy research into classroom practice has typically focused on the screens of digital desktop technologies. However, emergent research into the new literacy practices enabled by mobile technologies (Fails, Druin & Guha 2010) brings attention to the apparent ‘desktop bias; by producing findings that contradict desktop-technology based studies. Wolfe and Flewitt’s (2010) study of multimodal literacy practices within early childhood found that digital multimodal practices, whilst engaging, reduce children’s physical activity and decrease their social interaction with one another. However in Fails, Druin and Guha’s (2010) study of multimodal literacies within primary school children, children were found to be more active and social. The main feature of this study was its use of the device ‘Mobile Stories’. Mobile Stories was configured to allow content splitting and space sharing between two mobile devices; students engaged in collaborative multimodal story writing and storytelling using these devices. The results of this study concluded that Mobile Stories supported collaboration and mobility (Fails, Druin & Guha 2010).

Similarly, a comparative study of online and offline reading comprehension in seven-year-olds is dependent on a clear difference between the more typically desktop divide between online and offline reading (Leu et al. 2007). Cultural perspectives have demonstrated that online and offline behaviours are not so easily separated from one another (Baym 2009). Furthermore, shifts away from desktop paradigms have led to new interaction paradigms (Rogers, Sharp & Preece 2011). Pervasive, ubiquitous and context-aware technologies blur the distinction between online and offline, and may complicate notions of new literacies based on older dichotomous models of online and offline spheres. In summary, existing new
Literacies research through a bias towards desktop technology may make claims that are refuted by further studies in pervasive and ubiquitous mobile technologies.

In summary, explicit research into educational new literacies practice has predominantly been focused on modes of meaning making that utilise desktop technologies within formal educational environments. Though much of this literature demonstrates that there is some initial research into new literacy within higher education contexts (Spalter & van Dam 2008), the adult learner has been largely overlooked.

### 2.4.2 Informal learning environments

One major change within new literacies is the move from page to screen (Kress 2003; Snyder 1998). This change in media has contributed to a shift in conceptualising authorship from one of writer to one of designer. Text on screen now has to look good (Kress 2003) and learning these skills is frequently self-taught (Sheridan & Roswell 2010). This design world of semiotic production is often shaped by designers and digital meaning makers who typically operate outside of the educational domain (Sheridan & Roswell 2010). As design is explored as its own communicative practice (Barnard 2005; van Leeuwen 2005) questions on how this is learnt arise. The result is that research of such design literacies has been conducted in informal learning environments that exist outside the traditional learning space. Designers’ informal learning practices are reconceived as informal new-literacy learning. Design outside of the educational sphere, is described as:

```
less a prescribed series of practices than it is an orientation toward engaging with the world and making it more to one’s own liking. This orientation takes many forms across multiple channels but coheres around practices that bring together the affordances of old and new media in unanticipated ways, eventually reshaping available materials to create something new that better suits current needs and opportunities (Sheridan & Roswell 2010, p. 27).
```

Interview research into the design practices of amateur, entrepreneur and academic digital media designers indicate that many design literacies are learnt informally outside of the classroom (Sheridan & Roswell 2010). The research indicates that growing numbers of people learn their digital media skills outside school, often through a process of personal exploration and play (Sheridan & Roswell 2010). In the case of amateur digital media

---

4 For example, creative agencies, print and web media etc.
makers, Sheridan and Roswell (2010) find that they are often capable of *doing, creating,* and *designing* digital media texts but lack the language or meta-awareness to describe what they are doing. Difficulties in articulating design choices and the design processes motivate the use of grammars of the visual that help people articulate design communication using a shared nomenclature (Kress & van Leeuwen 2006; van Leeuwen 2005).

### 2.5 Multimodality in mobile technologies

The technical affordances of mobile devices now enable users to participate in new practices. Mobile devices cover a wide spectrum of new technologies such as PDAs, Tablet PCS, handheld games, e-readers, cameras, MP3 players and other specific purpose-built devices such as clickers (Trinder 2005). Within the mobile computing spectrum, smartphone device ownership has been increasing rapidly since 2009 (Llamas & Stofega 2010). The International Data Corporation’s (IDC) 2010 forecast predicts that smartphones will account for a growing proportion of all mobile phones bought (Llamas & Stofega 2010). This increased ownership of smartphone or mobile computing devices has changed how people communicate in meaning-making behaviours. Mobile devices, such as smartphones, now enable everyone to produce and communicate text, image, audio, video and multimedia culture and meanings (Dyson, Litchfield & Raban 2010).

#### 2.5.1 Design and usability factors

Such multimodal practices exist despite the usability problems that are often specific to mobile devices. Mobile devices pose distinct challenges to the user and the usability designer (Weiss 2002). The mobile interface’s small size has frequently been found to make traditional modes of communication, such as writing, difficult. Solutions to such usability issues have been solved by multimodal designs or features. For example, voice recognition software has been found to improve usability of mobile devices within the field (Kondratova & Goldfarb 2006), whilst user difficulties in writing within a mobile interface has meant that the user often finds audio and image features better suited to capturing and communicating information (Coulby et al. 2011; Vavoula et al. 2009). The result is that mobile technologies are multimodal and new in their literacy use out of their own necessity.

#### 2.5.2 New Literacies in mLearning
Outside of the new literacy field of research, mobile learning (m-Learning) has explored the mobile device and the way in which it shapes communication and enables learning. M-Learning has been described as ‘the processes of coming to know conversations across multiple contexts among people and personal interactive technologies (Kukulska-Hulme 2007; Sharples, Taylor & Vavoula 2007). 5 This concept of m-Learning as a conversation is useful not only as a metaphor for changing practices but as one of the most apparent links between m-Learning practice and new literacies research.

The concept of mobile technologies enabling a learning conversation draws attention to the new ways in which m-Learning users (both teachers and students) engage in new meaning-making practices. The concept of learning conversation reflects a perceived shift in the power dynamics within educational process. New technologies and new literacies, by allowing conversations between different contexts, different people and different modes, disturb traditional formal didactic teaching models. One of the main implications of these devices to learners is that learning is no longer delimited by physical location (Kukulska-Hulme 2005). M-Learning can thus support informal learning that takes place outside of formal educational environments (Kukulska-Hulme 2005; Laurillard 2010; Pachler 2010). Mobile technologies can situate a conversation within the individual user’s place of work or practice (Coulby et al. 2011; Dyson et al. 2009; Kondratova & Goldfarb 2006).

### 2.6 Gaps in the Literature

Developments and innovations in ICT have led to marked changes within the communication landscape. As new modes of meaning making emerge, new literacies research contributes terms and paradigms to enable better articulation and understanding of this phenomenon. The literature is characterised by its ability to maintain different theories and terminologies simultaneously, whilst being underpinned by a Systemic Functional Linguistic outlook.

These theories and concepts have been explored within formal learning environments, such as schools, and studies typically focus on primary and secondary aged users. Though recent research into informal learning and adult learners has begun to address the needs of adult technology users, this has yet to move away from the ‘desktop technology bias’ that

---

5 Emphasis added
characterises the new literacy research literature: the growth and change of mobile technology has outpaced existing research.

As new research into literacy practices with mobile devices emerges, new findings challenge previous assumptions about the practice and experience of new literacies and indicate that there is a need for further research in this area. In summary, research into educational new literacies has predominantly focused on formal learning environments, children’s practice and digital desktop technologies. There is room for further exploration of adults’ meaning-making practice, in particular their use of mobile technology. Existing research within formal educational environments, has demonstrated that studies that use mobile technologies (Fails, Druin & Guha 2010) may generate different results from comparable studies that have typically explored new digital multimodal literacies through desktop technologies.

What the literature review demonstrates is that there are two significant gaps in the literature. Firstly, as much of the new literacy research has focused on the multimodal semiotic practices of children, there is little understanding of how adult users practically engage in producing multimodal meanings. Secondly, the increase in ownership and use of mobile technologies has been so rapid as to limit the research undertaken in this area. To date social semiotic theories of meaning-making have enabled us to reconceptualise what it means to be literate; they have also provided analytic tools and frameworks through which to understand the social semiotics of visual and multimodal texts. As mobile devices afford users with new ways in which to navigate through an increasingly visual semiotic landscape it is important that understandings of ‘new literacies’ include the adult user.
3 Research Methodology

Research questions
Out of these gaps within the literature three questions key research questions emerged:

1) How do mobile devices enable or constrain adults in making meaning?
2) How can we best describe the practice of the adult user’s meaning-making processes?
3) How does this practice align with existing understandings of new literacy research?

Participatory Action Research Method
It is important that the research method aligns with both the philosophical assumptions of the research and the specific needs of the research questions (Myers & Avison 2002). On this premise participatory action research was used as the chosen methodology. Participatory action research is well suited to studying practice as a social phenomenon (Kemmis & McTaggart 2000) and similarly aligns well with one of the central research assumptions in which language and other meaning making systems are conceived of as social semiotic systems. As a participatory project, mStories project was established to explore multimodal meaning-making through participant generated mobile stories (mStories). The project-based approach was able to accommodate a diversity of mobile practice and the individual needs of participants within the one project.

Data collection and analysis
Within this participatory project, the research questions were addressed through a combination of different data and analytic approaches. Figure 3 illustrates how each stage of the data collection and analysis emerges successively within the project. This emergent research design process connects the method to the research question, whilst allowing the project to accommodate the needs of participants that, typical of a participatory project, emerged ad hoc throughout. As Figure 3 illustrates, each stage of data collection and analysis links back to the research questions and the gaps in the literature from which these questions
were derived. This section will begin by providing an overview of the *mStories* participatory research project before discussing the five stages and how they contribute to answering the three research questions identified:

- Stage 1- Preliminary participant survey
- Stage 2- Participant *mStories*
- Stage 3- Intersemiotic analysis
- Stage 4- Participant interview
- Stage 5- Post project survey
Figure 3. Research design and methodology

4: Research Methodology and Design

Stage 1: Preliminary participant survey

Stage 2: Participant mStories

Stage 3: Intersemiotic Analysis
Intersemiotic analysis: of ONE mStory

Stage 4: Interview
Interview design: question design based on intersemiotic analysis of mStory
Interview analysis: analysed by thematically as a dialogue between researcher and participant

Stage 5: Post-project survey
Survey design: Design of validating survey tool to be used on all participants: survey design based on findings taken from the interview analysis
Survey analysis: Analysis of survey results using nVivo software

Findings and discussion addressing research questions
3.1 The mStories Project Design

In line with more traditional methods of participatory action research, mStories was designed to be run over a set four week period through weekly meetings, each of which was intended to be an iterative part of the participatory action research project cycle. Whilst this initial project design was methodologically sound, it failed in practice as the meeting-based design did not accommodate the needs of participants. Despite this, this first phase of the project generated the participant interest and feedback that determined the identity and methodological approaches used in the final project (Figure 4). In this way mStories is a study that does not conform exactly to a standard methodology and thus ‘calls for the researcher to bend the methodology to the peculiarities of that setting’ (Miles & Huberman 1994, p.5). As the first phase of the project provided the motivation and feedback for the final project design, this section describes both preliminary and final phase of the project design.

Figure 4. Participant driven project design in two stages

Preliminary project design:
The project was initially designed to run over a four week period, focus on participants from local Sydney writers’ networks, and be executed through a series of participatory weekly meetings that would be recorded. During this phase of the project, participants for the project were approached through the following sources:

- Sydney community writers’ groups
- Independent northern beaches writers’ groups
- Fellowship Of Australian Writers NSW Inc. (Northern Beaches Sub-branch)
As the project explored mobile multimodal practices through story production, writers groups were initially approached. The decision to focus on writers from a specific locale was based on the initial meeting-based project design. This phase of the project design generated interest from several writers, but also highlighted several problems with the meeting-based project design. Firstly, facilitating meetings proved difficult: both the meeting times and geographic focus restricted who could be a project participant. In addition some people did not want to attend meetings as they already had an idea of what they wanted to create. Secondly, during this recruitment phase several people from different locales who were not writers also expressed interest in being part of the project. These factors and participant feedback from this phase changed the methods of participation, the communication channels used and the identity of the mStories project.

Final project design:
Based on the issues identified by the participants and the researcher in the preliminary project design, group meetings were replaced with electronic means of individual to researcher participation. Instead of contributing to a group directed project, participants worked individually in producing their mStory and communicated with the researcher through electronic channels, such as:

- Phone calls
- Email
- Text message
- Videoconferencing
- Online survey tools
- The mStories website

The move from physical meeting-based participation, to electronic participation changed the project significantly. With no geographic focus, there was no need to limit the participation to one country. In addition to this, the project was also extended to non-writers through informal channels such as Facebook, email and word-of-mouth. Though writers were initially targeted as a group with an interest in creative story writing, many writers approached were hesitant about writing a story on their mobile phone: one potential member described the project as ‘experimental’. When the project was extended to non-writers, an unanticipated level of interest was generated. One non-writer participant was recruited indirectly through hearing
about the project from another participant; as a result only three out of nine participants were from writers groups. In this way the digital approach to participation not only suited the needs of the participants, but changed the dynamic and identity of the project. The main changes to emerge out of the preliminary project design are detailed in Table 5.

**Table 5 Comparative table of preliminary and final project designs**

<table>
<thead>
<tr>
<th></th>
<th>Preliminary design</th>
<th>Final project design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recruitment method</strong></td>
<td>Formal channels:</td>
<td>Informal channels:</td>
</tr>
<tr>
<td></td>
<td>- Writers groups</td>
<td>- Facebook</td>
</tr>
<tr>
<td></td>
<td>- Writers networks and associations</td>
<td>- Email</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Word of mouth</td>
</tr>
<tr>
<td><strong>Time period</strong></td>
<td>4 weeks</td>
<td>6-8 weeks</td>
</tr>
<tr>
<td></td>
<td>Determined by the group</td>
<td>Determined by the individual</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>Weekly face-to-face group meetings</td>
<td>Electronic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Email</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Videoconferencing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Skype messenger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Face-to-face meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Calls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Text messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- mStories website</td>
</tr>
<tr>
<td><strong>Target interest group</strong></td>
<td>Writers groups</td>
<td>No specialist interest group</td>
</tr>
<tr>
<td><strong>Geographic focus</strong></td>
<td>Local Sydney area</td>
<td>International</td>
</tr>
<tr>
<td><strong>Direction of mStories</strong></td>
<td>Group directed</td>
<td>Individual directed</td>
</tr>
</tbody>
</table>

**Final participant group**

The final *mStories* project team was composed, in total, of nine people.6 Participants were from Australia (n=5) and the UK (n=4), the age range spanned from 21-25 to 46-55 and included male (n=4) and female (n=5) participants.7 Though writers groups were initially targeted, the final group contained only three participants who engaged in creative writing, either professionally or in their spare time.

---

6 Preliminary surveys completed by participants who did not complete an mStory are not included in this figure.
7 Full demographic data is supplied in Appendix X of this report.
**Project brief**

Participants were briefed to create a short story using their mobile phone device. Stories could be fiction, non-fiction, and be produced using *anything* on the participants’ mobile phone device. As a guide it was suggested that participants could create an mStory that reflected something about who they are or where they are from; however participants were encouraged to explore the idea of a mobile story creatively. With the exception of one participant who created their mStory prior to registering with the project, all participants received a follow-up phone call from the researcher. All mStories were uploaded to the mStories website, and participants were allowed to decide whether to publish anonymously or under their full names (Figure 5).

*Figure 5. mStories website*
3.1 Stage 1: Preliminary Participant Survey

A semi-structured survey was administered to all participants. In addition to demographic data and contact information (used largely for administrative purposes), the preliminary survey was designed to find out:

1) **Occupations, hobbies and interests of the participants**
   By asking participants about their occupation and hobbies, the survey aimed to find out *indirectly* whether participants were already engaged in activities, potentially using other devices or methods, that might be supportive to their mStory experience.

2) **Participant motivation or interest in the project**
   As motivation is an important part of understanding practice, participants were also asked, using an open-question, what interested them in the *mStories* project.

3) **Mobile device ownership and use**
   An open question on mobile device ownership and a multiple choice question on mobile device use were used gauge the existing mobile practices of participants. These findings were used to ascertain whether participants were already engaged in activities with their device that might support or constrain their mStory experience. These two questions targeted functions used and type of device owned. As the project’s distance and digital format prevented the researcher from exploring the devices, a detailed understanding of additional (unused) functions on the device was not possible within the scope and timeframe of this project. As many participants do not know all the capabilities of their mobile device, and survey questions should be answerable by participants (Peterson 2000) further understanding of normal device use is recommended for another study.

For analysis, open questions were coded for themes in QSR nVivo software, whilst frequency tables or graphs were the main approach to summarising and understanding nominal or ordinal data derived from multiple choice questions. In addition to understanding the existing interests and practices of participants, the preliminary survey also provides data that is used comparatively with the post-survey results; in a research project that aims to understand mobile device practice, the connection between existing practice and the practices fostered
within the project is important. Each participant within the project filled out a preliminary registration survey. As this project had international participants, the survey was administered through the online tool UTS survey manager.

### 3.2 Stage 2: Participant mStories

Both the stories that participants created on their mobile phone and the way in which they were submitted for inclusion on the website, forms part of the data used within this project. The two types of data derived from this are:

1) **Modes used by participants:**
   The content of the mStories can be analysed for types of modes used: image, text, video, and the dominance of these modes within each story. The modes are coded for each story and presented as frequencies that can be explored in conjunction with survey data. In addition the dominant mode of mStory is used to select an example mStory for intersemiotic complementarity analysis.

2) **Participant submission process:**
   Congruent with the participatory ethos of this project, participants were able to decide how to submit their story for inclusion in the website. Participant submission processes are important as they typically determine how content is formatted and the potential that participants have of editing this content. Within the participant submission process were Participants were given the option of:
   - Submitting their story directly to the website using the website’s ‘what you see is what you get’ (WYSIWYG) blogging platform (Figure 6).
   - Collaborating with the researcher to co-format the mStory on the website
   - Submitting their content and allowing the researcher to format and order the content for them
Participants were also given the option of submitting the story in parts, as they created these and at the end in one single submission of a finished product. These aspects of the participant submission process are recognised as important components of the practice that the mStories project explored.

3.3 Stage 3: Intersemiotic analysis of one mStory

Ideally a theory of literacy should be based on a theory of language in which what people do with literacy is closely linked to an explanation of what is ‘made of’ and how this mode of representation actually works; or, conversely, to explain what is or what is not really possible with this medium, and in this mode (Kress 1997, p. 112).

In order to build an understanding of what people do with multimodal literacy from an understanding of what is made, a semiotic analysis of one mStory is conducted. There are several existing analytic frameworks for understanding visual or multimodal texts. Though these frameworks have been applied to resources such as textbooks (eg. Kress & van Leeuwen 2006; Royce 2002; Unsworth 2006), periodicals (eg. Bowcher 2007; Royce 1998), and films (Iedema 2001) that are produced by professional writers, designers and film makers, this project extends the application of these frameworks to user-generated content. The choice of analytic framework and mStory is derived from the findings made in the Stage 2 of the research design. Using the dominant mode generated within the participant mStories (in this case text and image), a suitable analytic framework is selected and applied to an mStory case-example.
The Voice, an mStory by Zena Shapter, was used as this was an mStory that, like many others, used text and image modes, and was written entirely on a mobile phone. Royce’s (2007) intersemiotic complementarity framework is used to account for not only the visual mode of meaning-making, but the interrelatedness of this visual to the verbal mode through intersemiotic complementarity. In addition to being part of a holistic understanding of users’ multimodal practice, this analysis and the findings from it are used to directly address research question three: How do adult users’ mobile multimodal practices align with existing understandings of new literacy research?

3.4 Stage 4: Participant interview

Design

The results from the intersemiotic analysis, in Stage 3 of the research design, were used to theme open-ended interview questions. An unstructured interview was selected for two reasons:

1) An interview is well-suited to exploring the ‘lived experience’ of the participant through a conversational meaning-making experience (Denzin & Lincoln 2005);
2) An unstructured format allows both participant and researcher to explore complex behaviours through open-ended questions that do not impose any a priori categorization that may limit the field of inquiry (Fontana & Frey 2002).

A series of fifteen open-ended questions were drafted and grouped under themes derived from the Stage 3 analysis. The interview was designed to connect the mStory produced with the user’s experience, and in some way to validate the results of the intersemiotic analysis with the participant’s lived experience and design intentions. The interview was structured around: the ideational, the interpersonal, the compositional, and the participant experience.

The interview was conducted informally in a local café, and was recorded and later transcribed for analysis. Both the interview questions, and the transcript are included in Appendix D of this report.
Analysis

The interview was analysed in two ways:

Stage 1: Descriptive analysis
Taking the themes that structured the interview questions, responses are analysed for themes and presented with supporting quotations.

Stage 2: Comparative analysis
The results of the intersemiotic analysis and the results of the interview are compared to see how the user’s practice and aims align with the existing theory and framework used.

3.5 Stage 5: Post-project survey

Design
Common themes within the interview analysis were used to design a survey that would both validate the interview results and indicate whether the experience of the individual interviewee in Stage 4 was common throughout the rest of the mStories participant group. The survey was semi-structured and contained a combination of multiple choice and open-ended questions.

Analysis
The post-project survey was designed as a validation tool to the findings taken from the interview. In addition to its validating function, the survey identifies whether characteristics of the mStory process experienced by the individual participant were common throughout the wider-group. In this analysis, open-ended questions are coded for themes using QSR nVivo software. Bar graphs are used to depict numeric data, such as the number of participant references to a theme, and this numeric data is then illustrated with participant responses taken from the survey. The survey questions are included within Appendix X of this report. Though the response rate for the preliminary registration survey was 100% (n=9), one participant did not complete a post-project survey, bringing the total number of responses to 8.

3.6 Summary
Situated within a participatory action research project, whose aim was to empower writers and non-writers to engage in new modes of creative practice, the mStories project shapes an understanding of new literacy practices from a participant, practice based perspective. As a project-based study, mStories is able to include several different research methods under the mStories ‘project umbrella’. The use of different research methods, several of which draw on participant generated content for data. The use of these different methods allows for different data to be triangulated so that the findings from one method are validated by findings from another method. Furthermore the design of data collection tools such as surveys and interviews is undertaken sequentially, in a way that acknowledges the participants at the centre of the mStories project.

4 Findings

The purpose of this section is to detail the findings that emerged from each stage of the mStories project. Though each stage is presented sequentially, an exception is made for data from the preliminary survey; as the preliminary survey and post-project survey are used together, the findings of this research are discussed together within this section. Whilst findings for each separate method are presented throughout, these findings are collated and summarised within the last section of this chapter.

4.1 mStories overview

The completed mStories and their inclusion within the mStories website provide data about the choice of modes employed by users and the way in which stories are situated within the wider project space. In particular how individually created stories on the producer’s phone were transformed into publically available stories on the reader/consumer’s web-browser reflects a co-production between participant and researcher that took place. This co-production has implications for the compositional aspect of mStories’ meanings. This section provides an overview of the modes found across the nine mStories, and the methods in which these were contributed to the website, and the wider social participation that the mStories project fostered.

Modes used by participants
mStories participants were told to create their story using any feature on their mobile phone. By the time the website launched on 7th October 2011, there were nine completed participant mStories. Each story focuses on a different subject and demonstrates how this subject or focus is presented using the participant’s chosen mode or modes. The participants’ mStories were analysed for types of modes use. One of the most readily identifiable characteristics of the mStories is that all mStories engaged with the visual mode. However, the specific use of the visual mode differed across the total mStories (Figure 7.). Image and text combinations were found to be the most widely used (n=4), whilst mStories composed solely of still images (in this case photographs) accounted for three of the mStories. Video mStories were submitted by two participants. These video submissions contained a combination of moving image and sound. One video submission contained moving image, still image, music and sound effects.

Figure 7. Modes used within participant mStories

<table>
<thead>
<tr>
<th>Modes</th>
<th>No. of mStories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>3</td>
</tr>
<tr>
<td>Image &amp; Text</td>
<td>4</td>
</tr>
<tr>
<td>Video</td>
<td>2</td>
</tr>
</tbody>
</table>

Participants’ submission process

Participants were given the option of uploading their content to the website themselves, sending their content to the researcher or working with the researcher to transform their mStory from an individual item on their phone to a publically available part of the wider project. The choices made by participants and the researcher in this process directly affect the layout and form that the final mStory takes; this format and layout provides compositional aspects that contribute to the meaning of the story. The participant submission process is an
important part of the mStory mobile practice. Two features can be seen within the participant submission process data:

**Time of submission**

Two participants submitted their stories to the researcher over a period of time. One participant sent an email with an image attached each morning on her way to work, whilst another participant would send text messages sporadically over a six week time period. In contrast to this most participants (n=7) decided to submit the content of their mStory in one instalment, at the end of the production process.

**Method of submission**

Though one participant wanted to upload the mStory to the website directly, the researcher uploaded all other content (n=8) to the mStories website. Participants were offered the option to co-design how their mStory would look on the webpage. The majority (n=7) handed over layout decisions to the researcher, although one participant worked closely with the researcher to design the look and layout of her particular mStory.

What this data demonstrates is that the majority of participants hand-over the compositional meaning making element of their text when the mobile text is transformed to a different medium. The extent to which this process affects the compositional meaning of the story differs according to the type of format the story comes in. With video files, the researcher’s formatting extends only to how the file is embedded into the website, and what size or aspect ratio is used to display this video. Thus, producers of video files have greater control of the compositional elements of their story, as these mainly occur *internally* within the scope of their mode (video). By contrast the ordering of images (if not turned into a video or slideshow) presents much more compositional choice for the participant or researcher. Decisions such as the size of the image, the order of the images, the placement of text next to the image are all compositional meaning-making elements that are *not* undertaken directly by the participants (n=5).
Wider participation

Though the researcher was responsible for facilitating the sharing of mStories through the development of the mStories website, participant-enabled sharing expanded the mStories readership. Writer and mStories participant Zena Shapter wrote about her mStories experience in her blog, and used social networking sites Facebook and Twitter to engage non-participants in thinking about the new forms of literature that might emerge out of mobile devices (Shapter 2011). Furthermore, as some participants submitted their mStory content in stages, the website fulfilled the textual, or compositional metafunction, by drawing these pieces of content together and allowing the participant to see their stories as a whole. The wider participation fostered by the project, and the way individual participants were able to engage in a wider social process is depicted in Figure 8.
Figure 8. mStories creation and sharing platform

1. Participant uploads story directly to website

2. Participant assists researcher in uploading and formatting the story

3. Participant emails content to researcher who formats it for the website

ACCESS
- Public
- Current Participants
- Future participants

Social media

Participant blog
Summary

The content and the participatory processes derived out of the mStories project demonstrate that all participants’ stories engage with the visual mode. Though this visual mode typically presents through still image, chiefly photographs, two participants used video to include moving image into their mStory. Although two participants took a specific interest in how their mStory was uploaded, and two participants by submitting video retained control over the compositional elements of meaning making, most participants allowed the compositional elements of the text to be authored by the researcher. All of these practices and semiotic products have led to new social practices, that not only encourage the production of mobile, multimodal stories but the reading and sharing of these stories. The mStories project also generated further participation and involvement through the website, and participants’ social networking and blogging activities.

4.2 Intersemiotic analysis

Results from the modal analysis of mStories found that text and image were the most common combinations of modes used in participant mStories. Based on this finding, the text/image story of participant Zena Shapter is selected as a case example of this trend. This stage of analysis uses the fictional mobile story The Voice by Zena Shapter (Figure 7) and applies Royce’s (2007) intersemiotic complementarity framework to it. Royce’s (2007) intersemiotic complementarity framework is chosen as it is an analytic tool that accommodates the understanding of both visual and verbal elements of a text, and the interrelatedness of both visual and lexicogrammatic components. Through coding visual meaning-making elements and verbal meaning-making elements, the framework enables the researcher to gauge whether a text has achieved intersemiotic complementarity. Intersemiotic complementarity is where two modes (image and text) complement and support each other to create a holistic text. The alternative to intersemiotic complementarity is co-presence, where visual image and text co-exist within the same space, or page, but do not relate to each other in the ways necessary for the two to act as
a singular text. As per standard SFL approaches this analysis explores the following metafunctions:

- *Ideational*- What is it about?
- *Interpersonal*- How does it enact the social?
- *Textual/compositional*- How is it put together as a semiotic construct?

### 4.2.1 Intersemiotic analysis of The Voice

Created in 2011 by Zena Shapter, *The Voice* (Figure 9.) is an mStory that focuses on ‘the voice’ that causes doubt within the minds of several characters; whilst this voice cannot be seen Shapter uses images (a visual mode) to support the written story. *The Voice* is comprised of five images taken with an iPhone 4, and six paragraphs of text written in Text, or Short Message Service (SMS). The visual analysis will refer to the images sequentially as IMAGE1: Children’s playground, IMAGE2: The street, IMAGE3: The classroom, IMAGE4: The jogger, and IMAGE5: The Home and television. In analysing the Lexicogrammatic story elements, sentence numbers and quotations are used as reference. An index of sentence numbers is included in Appendix B.
Figure 9. The Voice by Zena Shapter

The Voice
by Zena Shapter

In the playground before the kids arrive, I wonder who will believe in me today. I decide to wait under the bridge, where they will cross to reach the slippery dip and imagine a grumpy old troll underneath.

When they are laughing and distracted by their play, I’ll creep inside their minds and show them why they shouldn’t forget who gives them bad dreams at night. I might even make them stop in their tracks, mid-laugh, and look around. Is everything okay? Are we still playing a game?

On the street, when her kids have raced too far ahead, I’ll make her wonder too. Who is that stranger looking back at them, why are they so interested? When she starts running to catch up with them, it’ll be my turn to laugh.

She doesn’t know it yet, but I’m going to hang around this time, follow her when she goes to pick up her little darlings from preschool tomorrow afternoon. There’s a locked room she’s always thought about. There aren’t supposed to be hidden corners in preschools anymore. What goes on behind that door? Is there a reason her daughter’s so sore, other than careless hygiene?

First thing in the morning I do have to pop out though. I have a regular appointment in the woods. I can’t have the jogger escape the shivers I give him every time he passes through the trees. He’ll wonder where his instincts have gone, the ones that make him glance at the dewdrops glistening on leaves, as if the landing lights of an alien spacecraft are aglow beneath its descending silver underbelly. He lets me in further than most.

And then there’s you. You can’t see me right now, but I’m grinning just thinking about the next time you’re alone for the evening. You’ll be watching television and there’ll be a sound above you. Is it the roof? Is there someone, something, outside? You’ll hold your breath and strain to listen. If you pray to every god in turn, they might forgive you for picking the wrong faith. But there’ll be no quick answer. For, alone that night, you’ll know who I am.
4.2.2 Ideational: What is it about?

The ideational analysis is undertaken in five stages that correspond to the five images present: IMAGE 1, IMAGE 2, IMAGE 3, IMAGE 4 & IMAGE 5. Royce’s method of analysing intersemiotic relations between text and image uses a tabular format to cross reference the visual participants, processes, goals, circumstances and attributes of a text with the sentences in which either repetition (R), synonymy (S), antonymy (A), meronymy (M), hyponymy (H) or collocation (C) occur. The five analytic tables used to conduct this analysis are included within Appendix B of this report. A guide to reading these tables is presented in Figure 10. Findings from this analysis are summarised within the report and the five analytic tables and sentence index are featured in Appendix B.

Figure 10. Example of the intersemiotic ideational tabular analysis tool

Results of ideational analysis

What this ideational analysis tells us is that Shaptor’s story uses repetition, synonymy, antonymy, meronymy, hyponymy and collocation to provide intersemiotic connection between visual and lexicosemantic meaning-making elements. Intersemiosis is strongest
between IMAGE2, IMAGE4 and IMAGE5. These images feature represented participants whose actions connect with actions mentioned directly in the verbal text. There is a high level of complementarity between these images and the text. Though IMAGE1 and IMAGE3 complement the text through visual representation of the setting or background in which verbal processes take place. Within the mStory what is visually represented is ‘ordinary or commonplace’ such as a playground, a street, a school, a jogger and an individual watching television. However the meanings of the images are changed by text which carries meanings that are neither represented nor antonymous to those within the image. Whilst the framework indicates that the mStory ‘the voice’ does contain ideational intersemiotic complementarity, there are also aspects of the intersemiotic relationship that are not accounted for by the framework and do contribute to the story.

4.2.3 Interpersonal: how does the text enact the social?

The analysis is discussed fully within this section and a table of modal markers is featured within Appendix B.

Results of interpersonal analysis

Though visual grammar typically suggests that the framing of a shot and the angle at which the shot is taken indicate enacted proximity and power relations between the viewer and what is represented, a visual analysis has to consider contextual information that indicates how these features design the position of the viewer in relation to the text. This analysis discusses the interpersonal meanings of The Voice in its representations of: visual address, level of involvement, power relations, social distance and visual modality.

1) Visual address

In terms of visual address all five images used within Shapter’s The Voice could be interpreted as visual offers of information. This is suggested by the absence of a direct
gaze or vector connecting what is represented within the frame and the viewer and viewing plane. Such images are considered by Kress and van Leeuwen to be offers of information where nothing within the image demands a specific response from the viewer, such as the response to a question or rejection or acceptance of a command. The visual address is reinforced through the text’s use of statements and questions, the latter of which do not expect answers from the reader.

2) Level of involvement
The viewer’s level of involvement in an image is, within Kress and van Leeuwen’s (2006) analytic framework, carried by the angle between what is represented and the viewer on the horizontal plane. Within the exception of IMAGE1 that is shot directly on a full-frontal angle, all the images within the mStory are shot are taken from slight to extreme oblique angles. Within the framework the use of the oblique angle of IMAGE2 should position the viewer at a slight sideline to what is represented, and not directly involved in the scene. Whilst a lack of involvement is suggested by the image, the text contextualises this image and positions the viewer as the character within the text: thus the reader becomes the mother who looks into the distance at her children who have run too far ahead. Within IMAGE 4 and IMAGE5 the effect of the oblique angle is different, and combined with the framing of the shot and the angle positions the viewer not as the represented participant within the image but as the malevolent voice that creeps up on the characters within the story. The image’s use of oblique angles supports the unseen and hidden character of the voice that is featured within the story.

3) Power relations
The power relations enacted between viewer and image change throughout the five images from a neutral vertical angle (IMAGE1 & IMAGE2) to steep vertical angles that position the viewer as looking down upon the scene and what is represented. The interpretation of what these vertical angles mean changes depending on what is represented in the photograph; So whilst IMAGE3 positions the viewer as looking down
on the classroom, this vertical angle is less a mark of power relations than a design that positions the viewer as an adult within the children’s classroom that is represented. Had the shot been taken from a lower vantage point, with an upwards angle, the viewer would be positioned as a child instead. However, whilst the power-relations and constructed viewer identity within IMAGE1, 2 and 3 is fairly neutral IMAGE 4 and IMAGE 5 shift the power-relations enacted between viewer and what is represented in a dramatic way (Figure 11). In IMAGE4 and IMAGE5 the angle that the shot is taken from positions the viewer in an increased power position, in which they look down onto the represented participant jogger and TV watcher. In these two images the viewer is not visually identifying with the represented participant (the jogger, the TV viewer) but as the sinister voice that has grown more powerful and personal within the text.

Figure 11. Visual representations of power relations

<table>
<thead>
<tr>
<th>Neutral power relations</th>
<th>Increased power of viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level vertical angle</td>
<td>Increased downwards angle</td>
</tr>
</tbody>
</table>

4) Social distance

Within visual grammar the framing of an image suggests how close the participant is to what is represented within the image. Thus, a close-up enacts a close social proximity between the viewer and what is represented; likewise a long-shot enacts a message where the viewer is placed at a greater social distance from what is being represented. Within The Voice the five images take the viewer on a journey from a distanced, impersonal space to an intimate proximity to the represented participant (the television viewer) in
IMAGE5. The change in proximity accompanies text that begins in referring to ‘they’ and culminates in referring directly to ‘you’ the reader. Whilst unwritten in the literal meaning of the text, IMAGE4 and IMAGE5’s proximity position the viewer as the sinister voice that inhabits the story (Figure 12).

**Figure 12 Visual representations of personal space**

<table>
<thead>
<tr>
<th>Long-shot</th>
<th>Medium-shot</th>
<th>Extreme close-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Impersonal proximity</em></td>
<td><em>Personal</em></td>
<td><em>Intimate</em></td>
</tr>
</tbody>
</table>

Whilst the text does not directly identify the voice within the story as the reader’s own fear, the image’s gradual increase in proximity and intimacy through framing make this suggestion quite clear. In many ways the images provide clues to the unwritten part of the story’s last sentence: ‘for alone that night you’ll know who I am’. The answer to the question ‘who’ is suggested by the images; you are the voice. The fact that this story does not state this explicitly enables the story to retain a mystery that the oblique angles of the images convey. This visual proximity is accompanied by text that reinforces the proximity by addressing the reader directly in the ‘you’ form. The form of visual address is congruent with the verbal form of address.

5) **Visual modality**

As the viewer’s proximity and power relations changes across the different images, so too does the form of address. In IMAGE1 the viewer is an equal who can accept or reject the information offered within the image. However, as power relations and proximity
change the appropriate response from the viewer becomes one of acceptance. Like language, images have a visual modality that relates to the truth, credibility and probability of what they present to the viewer. Within The Voice the use of photography may act as a representation of reality that has a high modality in its representation of ‘truth’. The modality of photography may be described as more authentic than that of cartoon, sketch or caricature. The naturalism of the images presents a representation of reality that (with the exception of the black and white image) provides similar modality markers to those within the text that communicate a certainty of the actions: it will, they will, you will. There is only one modality marker that contravenes this and that is the use of the marker ‘might’. With this exception intersemiotic complementarity of the interpersonal is achieved through the modalities of both the visual and the lexicogrammatic elements of the text. An index of the verbal modality markers featured within The Voice is included within Appendix B.

4.2.4 Compositional

The compositional aspects of a multimodal text indicate how the layout of image and text are used to create the final semiotic product. Royce (2007) identifies information value on the page, salience and degrees of framing on the page as key visual and verbal components necessary for identifying whether there is coherence or complementarity between the different modes on the page. As this analysis focuses on the web-page, this analysis needs to be accepting of the differences between the physical pages that Royce’s framework is based on, and the online, somewhat metaphorical, ‘pages’ of a website. Different reading conventions, scrolling down instead of flipping across the page, will affect how text and image are placed and read on the page. Within Royce’s framework compositional intersemiotic complementarity is achieved through: information valuation, salience and degrees of framing. This section describes the analysis under these headings.
1) **Information valuation**

The placement of image and text works from top of the web-page to the bottom in a way that is congruent with the reading practice on most websites; new information is at the top, and the reader scrolls down for further text or information. The value of the information in the mStory includes surrounding features such as the website banner, navigation bar and menu. The story’s placement underneath this wider structure, indicates that the story is part of the project, and forms core content within a site that has a wider identity (Figure 13). The information valuation is partly determined by the individual story, and partly determined by the mStories website. In addition to the website elements the mStory has internal information valuation; the text is presented as a single column that takes the reader from top (beginning of the story) to bottom (end of the story). In this way placement on the page indicates the value of the information on it.

2) **Salience**

Salience refers to the relative sizes of the visuals compared to the verbal aspect of the text on the page. Within this mStory text dominates the page space, with image being secondary in size and status within the story. In *The Voice* the size of the images suggest
that the image is less significant to the story than the text. This reduces the intersemiotic complementarity within the text.

3) **Degrees of framing**
As photographs, each image within the text is framed off from the text that surrounds it. A semiotic reading would say that there is a linear division between the text and the images within the story. The image and text do not compete for the same space as framing cuts one off from the other.

4) **Potential reading paths**
*The Voice* text designs a specific reading path is established by text that would, given the language and the sentence layout, be read from left to right. Though the images do not always contain vectors that internally mirror this left to right direction, the placement of the images directs the reader in a similar reading path to the text: left to right and up to down. These reading paths direct the reader in how to read the images and text together: which image relates to the beginning of the story, which image relates to the end of the story and how the text, that is dominant throughout the story, guides the reader to the corresponding image.

The results of the compositional analysis demonstrate that complementarity is achieved between two modes through the design of the reading path; however the salience and degrees of framing produce a barrier between the image and text and reduce the modal interrelatedness within the text.

### 4.2.5 Summary
In summary an intersemiotic analysis of *The Voice* text, indicates that the text achieves a level of intersemiotic complementarity. This extent of intersemiosis differs through the analysis of different metafunctions. Findings from the ideational analysis demonstrate
that some images within the text have a higher level of complementarity than others, principally with IMAGE2, IMAGE4 and IMAGE5. The analysis of the interpersonal metafunction demonstrated that there was increasingly complex and sophisticated intersemiotic relations formed between the text and the image. Within the interpersonal, the image and text relations transcend straightforward communication and create complex dynamics between the meanings of the text and the meanings of the image. The lowest level of intersemiosis was found in the compositional analysis; the framing of each image separated the world of the text from the world of the image, and the comparatively small size of the images, reduced the power of the image within the story. Though the extent of image/text complementarity varies, this analysis demonstrates that existing frameworks can be applied to user-generated texts. Furthermore, this analysis demonstrates that non-designers are capable of producing semiotic products whose multimodality creates an increasingly complex semiotic through which to navigate.

4.3 Participant interview

Findings from the intersemiotic analysis provided the thematic structure of an exploratory participant interview. This participant interview explored how the semiotic product related to the participant experience, authorial intention and practice. The findings from this interview are summarised thematically, with each theme being highlighted by an example quotation from the interview transcript. Both the interview questions and the final transcript are included in Appendix B. The findings derived from this interview can be grouped into two parts:

1) Participant experience and practice

2) Participant experience of the ideational, interpersonal and compositional semiotic elements
4.3.1 Participant experience

The participant’s experience of the process of creating her mStory differed significantly to her normal writing practice. Emerging out of this discussion are a set of themes that characterise the participant’s experience of the mStory process.

Participant motivation and personal interest

The participant’s decision to create a fictional mStory can be interpreted as a result of personal interest and personal motivation. When asked to describe the main focus of the mStory, the participant stated that she:

[...] focused on it from a fiction perspective, because the clue was in the title ‘mStory’, so for me a story would be a story of fiction not a non-fiction story, though you could do that if you wanted to.

The motivation behind this choice of mStory is derived from the personal interests of the participant and her interpretation of a story as something fictional, that she (as a speculative fiction writer) then defined within the genre of speculative fiction.

Situated or locative practice

Throughout the interview the participant described their process of mStory creation as one which was essentially situated, locative and often ad hoc in practice. This process was described as different to the participant’s usual planned writing practice in the way that it required her to “be a bit of a pantser” [sic]: to write ‘by the seat of your pants’. The participant describe the process as one which demanded that she ‘find an idea and write something, not really knowing where it was going to go’\(^8\). The participant described this situated practice in contrast to the way she would normally develop a story. The participant described her normal approach to writing a story as a planned activity that takes place at her computer, beginning with ideas, brainstorming, and plans for characters and voices, before the action of writing begins. In contrast to this planned

---

\(^8\) The interviewee used the term ‘pantser’ to describe the ad hoc process of ‘writing by the seat of your pants’: a non-planned approach to writing.
method of writing, the mStory process began with the participant’s situated experience of the location which is followed by action, ideas and story development. Resulting from the locative nature of the process are literacy practices that are characteristically experiential and reflective.

**Reflective and experiential**

In a reversal of the participant’s traditional method of story writing, the writing activity begins with an experience, is followed by the action of taking a photo, and reflects on this in order to generate an idea. This experiential process is described by the participant:

> So I was sat in the playground, the kids were off playing. And then all of a sudden all of the children were behind me, not in front of me, then that’s when I got my camera out and took the first picture of the playground with no kids in it. There were plenty of kids behind me and all out of view, and it looked a bit spooky, and a bit kind of quiet, I snapped the picture, then I thought “my story’s going to be a spooky story.

This situated practice-based approach to story writing is described several times throughout the interview, and reflects the practices through which the mStory is generated. Time and location are important generative elements to the mStory process and the participant identifies these locative practices as being enabling: ‘I was able to do a lot more […] being there at the right time.’ The characteristics of this situated process are identified from within the interview transcript:

**Immediate:** In several instances the participant responds quickly to an event that is taking place around her. In one example, *A guy passed them and looked at them a bit funny…and I was like “ooh I’ll get that”.* In this example though the participant was not able to get through to the camera application in time and missed the scene. Fortunately, another person came along and the participant was able to interpret that immediate action as part of her story.
Exploratory: Within descriptions of the participant’s practice is the sense of the story being explored in an *ad hoc* fashion. The participant’s describes this as a process in which you have to ‘find an idea and write something, not knowing where it was going to go.’ Photos that inspired several parts of the story were taken prior to the author knowing exactly how they would fit into the story’s structure. The idea of ‘finding’ ideas occurs several times throughout the interview transcript.

**Ad hoc:** “I was going to take a photo of a door but then I was like, hang on, what’s behind that door? That can be my theme”. Emerging from the exploratory nature of these actions is an *ad hoc* quality, in which decisions about the story are made in the moment.

**Authenticity, design and transformation**

Though this authenticity and design may appear paradoxical, the interviewee articulated that part of the intention in writing an mStory was the ‘instantaneous’ quality of the product; communicating this instantaneous quality was an important aspect of the participant’s mStory process. However, as the participant’s story developed the authenticity became subject to greater participant design input. As the mStory emerged through the situated ad hoc practices, the participant felt it was necessary to shape and transform the world around her into visual products that supported the story that became increasingly defined throughout the process.

Initially the participant’s photographs were instantaneous, and exploratory; the participant explained that she did not choose the shots and angles of the photographs deliberately for the first two images (IMAGE1 and IMAGE2). The following section of dialogue highlights the mStory as something immediate, instantaneous and, to a degree, authentic:
RESEARCHER: What effects did you use?

PARTICIPANT: I didn’t want to use too many effects because I didn’t want to distort the picture too much of what I had taken.

RESEARCHER: Why did you want to keep the images as they were?

PARTICIPANT: It wasn’t particularly important I guess because it’s a fictional story, not a non-fiction story, therefore authenticity wasn’t an issue. I just didn’t want to fiddle with it too much because I felt like one of the purposes of this project was the instantaneous nature of the creation.

Though the participant wanted to create a story that had was instantaneousness or authentic, this feeling of authenticity became more designed as the emergent story became more specific and defined:

The one in front of the TV I had to angle it because I wanted to show a bit of head, the wine glass and a bit of the TV. The jogging photo I wanted it to look spooky, spooky and uninviting and then the same as the pre-school one which had to look spooky but it’s a very cheery classroom. So yes, I did with those three photos [IMAGE3, IMAGE4, IMAGE5] deliberately pick angles to exclude things that would have conflicted with my story.

Transformation is identified as a theme as the participant transforms the existing environment with the mobile device in order to accomplish her story.

Technology use

One significant theme within the interview was the affordances and limitation of the mobile device, and how the device shaped the use. The participant used an iPhone4 and composed her mobile story with photographs taken using the phone camera, and text written using SMS. Though the author had access to email, she did not use this as ‘it would have tempted me to go back to traditional techniques’. Instead the author indicated how she wanted to experiment with something different. Despite this the author found text message frustrating to use: ‘what I didn’t like was the restrictive nature of texting because…yes it is laborious and my brain is quicker than my thumb’. In addition, there
were several other usability challenges: namely that content had to be manually copied word for word into MS Word and uploaded to the mStories website.

Whilst there were limitations to the device, many of the constraints shaped how the story was formed. Comparing her mStories practice with her standard writing practice, Zena Shapter described the comparative limitations of the device:

> On the computer at home I would have a research document, drafts, I would find photos on the internet that would inspire me, and I would put it all in a folder and then have multiple things open at the same time. You can’t do that on a phone, so I had to produce something completely different.

Though the participant repeatedly referred to the mStory process as challenging, she admitted that she ‘liked the challenge’ and found that her mStory was much better than what she ‘thought [she] would be able to achieve. Whilst the limitations of the device were directly referred to within the interview, the situated practice (referred to at the beginning of this section) is one affordance that allowed the participant to ‘be there at the right time’ and engage in a practice that allowed her to ‘think on her feet more than [she thought] she could’. The participant felt that in future she would use email instead of text message as the method of writing. She also saw potential for continued use of mobile devices for note-taking within more traditional storytelling practices.

### 4.3.2 Participant’s experience of the semiotic

The story could stand alone without the pictures, but I wanted to involve the reader on two levels. This is the opportunity here to involve them in a way that you can’t do traditionally, […] you can do it via words and photos- so they complemented each other through different layers. (mStories participant, Zena Shapter, 2011).

In addition to more general practice-based questions, the interview also focused on the participant intentions and practices and how these aligned (or failed to align) with the systemic functional linguistic framework that underpins the dominant analytic frameworks (eg. Kress & van Leeuwen 2006; Royce 2007). Using findings from the
intersemiotic complementarity analysis conducted in the previous stage of the research, interview questions were themed to explore the participant’s experience of the semiotic elements of their own text through the three metafunctions of SFL approaches. The participant’s practice and experience of these are presented under the three headings below.

- Ideational - What is represented?
- Interpersonal - How does it enact the social?
- Textual or compositional - How is it composed as a text?

**Ideational**
The ideational content items identified within the intersemiotic analysis are verified by the participant as being focal points within the mStory. In each image the participant identifies the focal point as either participants or characteristics of the mStory. The participant articulated these as: ‘the playground with no kids in it’, ‘the kids ran on ahead’, a ‘picture of me in front of the TV’, ‘school’ and ‘jogging’, nouns that conferred the ideational analysis that was undertaken in the previous stage of research. Perhaps more interesting is that the ideational components of the mStory can be identified as being motivated by the participant’s personal interests and the situated experience. Thus the participant’s personal interest in fiction writing drove the participant to use words to transform the visual content into fictional items: ‘for me a story would be a story of fiction.’ Though it is not apparent from the intersemiotic analysis that the story is a fiction, the situated experience of the participant is heavily tied to the ideational content presented. Thus, the participant’s location and experiences are represented, albeit in a transformed sense, as ideational components.

**Interpersonal**
As a writer by profession, the participant was conscious of the affects that the first person voice had on the reader. The participant was able to articulate her reasons for using the first person as a means of enabling the writer to ‘get straight inside the character that is
speaking and talk to the readers’. Whilst the participant was conscious of the verbal interpersonal, the participant was not consciously aware of how much of the visual design that constructed the complex interpersonal messages of the story. During the interview process the interviewee asked the researcher: ‘you read it…what did you think’? The researcher explained her own personal reaction to the images. Through a discussion the participant explained that:

Subconsciously you’re right, the photos they kind of get closer and closer don’t they? So, outside and we’re quite a distance away, then we’re getting more intimate, and then we’re close but that [second to last image] at a sort of a leg, you know and that [last image] near someone’s head […] yes it succeeds better than I thought!

This dialogue demonstrated that the participant, though not able to articulate the visual process that underpinned her mStory was able to create visuals that worked intersemiotically to support the verbal meanings within the mStory in a way that followed her intentions. In addition the author explained how she used angles to create images that supported the story: ‘you know? Picking angles, being selective with the pictures, I can imply this sort of fiction’.

**Compositional**

The participant described having a very specific idea of how she wanted to compose the final mStory: ‘I had a very clear image in my mind of how I wanted to lay it out’. The author of *The Voice*, Zena Shapter, composed the final layout of the story herself. However whilst content was composed and collected on her iPhone4, there was no tool to enable her to structure this into a coherent whole and the compositional meanings were generated by desktop computer, not a mobile device (Figure 14).
The participant was able to articulate her design choices for forming the compositional aspect of her mStory:

I wanted the text that I wrote to be exactly opposite the photo. Why did I want that, I don’t know...I guess the little bit of authenticity or commitment to the project to do that, but also of course because each text was, the purpose of the photo was to bring something to the text that I had written, so I wanted the text to be next to the photo that it related to. But I also wanted it to be visually pleasing. I didn’t just want it to be down one side. That would look very clinical and whereas for me you have to read it and it flows all nicely and then the pictures add to it on the side.

This quote demonstrates an awareness by the author of the reading path of the text. The author’s opinion that the story could be read without the images, is reflected by a compositional design in which the images occupy less space than the text, and are read as less important or necessary to the reading. The findings from the intersemiotic analysis are confirmed by the author’s own opinion to the status of the images. The participant articulates that the image supports the text, not the other way round.

### 4.3.3 Summary

Findings from the interview demonstrate that the participant’s experience of mobile story creation differed significantly to her non-mobile story writing. The participant described the mobile story creating process as one that was more immediate, and more affected by
the situation or location that she was in. Such locative practice required the participant to ‘think on their feet’. The participant’s descriptions of their mStory practice indicate that this experience is frequently experiential and reflective in nature. Though the participant’s normal fictive writing practice does not use image, the participant was keen to explore this mode as a way of complementing her story. Experiences of this creative process, align with some of the findings taken from the intersemiotic analysis: the authorial intention and the semiotic interpretation frequently align. What does emerge through questions structured by the intersemiotic analysis is that whilst the participant was able to create ideational and interpersonal components of the story with her phone, the compositional element had to be undertaken with a computer.

### 4.4 Surveys

This section details the findings of the pre and post preliminary surveys. This section presents the separate findings of each survey, before presenting comparative data.

#### 4.4.1 Preliminary participant survey

1) Participants’ occupations and hobbies

The occupations and hobbies of the group members were diverse: Although writers’ groups were initially approached, members from writers groups accounted for only a third of the final group of nine participants. In response to the open-question ‘what is your occupation’, participants responses all differed. There were nine different occupations: 1) neo-natal intensive care doctor; 2) fire-fighter 3) user experience architect and part-time student; 4) accountant; 5) researcher; 6) business consultant; 7) fundraiser; 8) writer and mum and 9) writer.

Participants’ hobbies were also diverse and a total of seventeen different types of activities were counted in nVivo analysis: 5 participants listed reading as a hobby, 4 participants referred to sporting activities, food and drink and cinema or movies as pastimes. Three people engaged in visual arts, a category that included photography and
painting. Though only 3 participants engaged in creative writing, there was considerable interest from ‘non-writers’ who accounted for 6 members of the final group.

2) Participants’ existing mobile device use
The preliminary survey was designed to find out what mobile phone devices people used, and how people used them. There are several different ways of distinguishing differences between Smartphone devices (operating system, make, model etc.), however not all of these are useful to understanding how the device shapes the user’s multimodal meaning-making experience. Of most use to understanding questions of usability is the mobile’s interface design. Such differences may indicate the affordances and constraints of the device from a user perspective. In this section, mobile phone devices are categorised by screen-size and the primary mode of input on the user interface. As illustrated in Figure 5 the three categories identified are:
   a) Larger screen with touch-screen input;
   b) Medium sized screen with QWERTY keyboard input;
   c) Smaller screen size with numeric keyboard input.
Participant response to the question ‘what make and model of phone do you have?’ were grouped into these three categories detailed in Figure 15.
The preliminary survey found that 5 *mStories* participants owned a touch-screen phone (category A: iPhone type). One participant, a business consultant, owned a Blackberry (category B: Blackberry type) 3 *mStories* participants owned a small screen mobile phone device (category C: Small-screen type). Throughout this report the three categories of phone are referred to as types: iPhone type (A), Blackberry type (B) and Small-screen type (C). Whilst not all A type phones are iPhones, this nomenclature provides a descriptive reference for discussions of the three categories. This data is illustrated in Figure 15.

<table>
<thead>
<tr>
<th>Type</th>
<th>iPhone type</th>
<th>Blackberry type</th>
<th>Small-screen type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affordances</strong></td>
<td>Designed for internet browsing, and telecommunication (eg. iPhone, HTC etc.):</td>
<td>Intended for email and telecommunication but can also perform internet browsing (eg. Blackberry):</td>
<td>Smartphone devices intended primarily for telecommunication but can also perform internet browsing</td>
</tr>
<tr>
<td></td>
<td>▪ Larger screen size</td>
<td>▪ Medium screen size</td>
<td>▪ Small screen size</td>
</tr>
<tr>
<td></td>
<td>▪ Haptic user interface</td>
<td>▪ QWERTY keyboard</td>
<td>▪ Numeric keypad</td>
</tr>
</tbody>
</table>

*Figure 15. Categories of mobile phones*
In addition to finding out the device *mStories* participants owned, the preliminary survey also sought to find out how participants *used* that device. As Figure 17 illustrates, all participants used their mobile phone for phone calls. Eight participants used their device to write text messages, email and take photos. Though three people used their phone to make videos, no participants used their phone for video calling.
Figure 17. Participant mobile phone use

Figure 18. Participant mobile phone use with Category A Mobile Devices
The mobile practices that participants engaged in differed within the three mobile-device categories. As Figures 18, 19 & 20 depict participants who owned touchscreen mobile devices engaged in a more diverse range of practices. Participants with these types of devices created videos, read eBooks, played games, recorded sounds and took notes ‘Other’. These activities were not performed by participants who owned either Category
B or C mobile devices. In addition all participants who had a touchscreen mobile phone used their device to surf the internet, check email, and use GPS and maps. Though the sample in the mStories group is not large, a comparative look at the activities between different device owners shows that within the project user practices differ within the groups, and device use is less diverse within the Category C device owner.

3) Participants’ interest and motivation in the mStories project

Interest in the mStories project was gauged through an open-question: ‘What interested you in participating in the mStories project?’ Participants responses were coded in QSR nVivo software. From this coding the following three themes emerged as dominant reasons for participating:

- **To be creative** (5 participants): eg. “A chance to be creative and conduct my own e-show”
- **It sounds interesting or fun** (4 participants): eg. “Sounds fun, interesting and a tiny bit silly”
- **It is different or new** (3 participants): eg. “Writing a short story with a mobile phone isn't something many people would consider and all the better a way to inject some stimulus into the writing world.”

**Summary**

In summary, the results from the preliminary survey demonstrated that interest in the mStories project came from participant motivation to do something creative, fun, and different. Though writers’ groups were initially approached, the majority of the participants within this project were not recruited from writers groups and did not engage in creative writing. Though 5 participants cited reading as a hobby, the group is characterised as having a breadth of interests. Furthermore, there was no dominance of one profession or sector throughout the participant sample. Participants used different makes and models of mobile phones and had different practices.
4.4.2 Post-project survey

The post-project survey was designed partly as a validation tool to the findings taken from the interview. In addition to its validating function, the survey identifies whether characteristics of the mStory process experienced by the individual participant Zena Shapter were common throughout the wider group. Bar graphs are used to depict numeric data, such as the number of participant references to a theme, and this numeric data is then illustrated with participant responses taken from the survey. The survey questions are included within Appendix X of this report. Though the response rate for the preliminary registration survey was 100% (n=9), one participant did not complete a post-project survey. As the interviewee was not asked to do a survey, the total number of responses to the post-project survey is 7. This survey explores:

1) Participants choice of modes and technology use during the mStories project
2) Participant practice
3) Likes and dislikes

4.4.2.1 Participant choice of modes and technology use

In a multiple choice question, participants were asked to state which features on their mobile phone device they used to create their mStory (Figure 21). Findings from this question found that the mobile phone camera was the most widely used feature.
Results from the modal analysis of the mStories found that all mStories engaged in the visual mode, with 8 participants using still image to create their story. The survey followed up this question by asking participant whether their story included any images, video text, sound, music or other items not created with the mobile phone device. Results show that 3 people supplemented their mStory with content not created on the mobile phone (Figure 22).

**Figure 21. Features used in mStory production**

<table>
<thead>
<tr>
<th>No. of people to use feature</th>
<th>TEXT</th>
<th>MMS</th>
<th>EMAIL</th>
<th>CAMERA</th>
<th>VIDEO</th>
<th>SOUND RECORDER</th>
<th>PHOTO EDITOR</th>
<th>VIDEO EDITOR</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of participants</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figure 22. Non-mobile phone content**

Did your mStory include any content not created with your mobile phone?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Yes No
The three participants who added additional material to their mStory added different content for different reasons. These reasons are grouped under the mode that was added:

- **Images (2 participants)**
  
  PARTICIPANT 1: “*The photos tied in directly with the text. They were linked in meaning*” the participant chose to use photos taken with a non-mobile phone camera as they were “*A better quality of photo*”.

  PARTICIPANT 2: “*I wrote a SMS length text[…] A picture wasn't necessary, but added a great deal considering the length of the text*” The participant chose to use a camera as their mobile phone device did not have a camera function.

- **Sound and music (1 participant)**
  
  One participant chose to add sound and music to their mStory. They added these features as it “*complemented the story*”. The participant did not use their device as it was not possible to align the sound and music using the software available on the mobile phone device.

**Participants choice of modes**

Participants use of different modes (mobile or created using other technology are principally motivated by the participant’s perceived needs of the story. In an open question participants were asked: ‘Why did you choose to use this or these features specifically?’ Responses were summarised within Figure 23.
Participants described their selection of different modes in the following ways:

- **Personal preference:**
  “I love photography”
  “I prefer photos, I don’t like to share videos”

- **Limitations of the device:**
  “I used text because my phone belongs to the stone-age. Email or MMS would have been preferable”

- **Ease or convenience of mode:**
  “It’s the easiest and most convenience”

- **Most suitable mode/s for participant’s intended story:**
  “I decided that the task could be accomplished more simply if I allowed the picture and sound to speak for themselves”
“I wanted to illustrate the pace of my journey to work so I needed something that was quick to use […] I didn’t want to use pictures that were framed too carefully or enhanced because that would take away from the effect of being in a rush”

These survey responses illustrate how participants within the project choose the mode for their story. If limited by the device, participants will use another device to get material in the desired mode.

4.4.2.2 Participant’s mStory process

Participants were asked to describe what their mStory was about and explain why they chose that theme or focus for their story. These descriptions confirm the participant’s ideational focus in creating the mStory. The emergent themes are summarised in Figure 24 below.

Figure 24. Motivations behind participant’s ideational meaning-making

![Bar chart showing motivations for ideational focus of mStory]

<table>
<thead>
<tr>
<th>Motivation for ideational focus of mStory</th>
<th>Instances of themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situated or context driven</td>
<td>5</td>
</tr>
<tr>
<td>Reflective</td>
<td>3</td>
</tr>
<tr>
<td>Interesting or exciting</td>
<td>4</td>
</tr>
</tbody>
</table>

Series1
Examples

- Situated or context drive:
  “I was inspired by the view out of my window…”
  “I wanted to show some of the sights that I go past every day”
  “I wanted to give the impression that they were doing the commute with me”

- Reflective:
  “I think it’s interesting to document what you’re wearing each day and reflect
back on it. Often I rushed out of the door to go to work and didn’t really
appreciate what I’m wearing and why”

- Interesting or exciting:
  “I wanted to create something fun and exciting”
  “It seemed interesting and something I have access to”

These findings not only validate the findings taken from the interview, but demonstrate
that locative or situated practice is a common motivating factor throughout the group.

Emergent mStory process

Within the interview the mStory process was repeatedly characterised by its emergent
and exploratory quality. Zena Shapter articulates this as needing to be more of a
‘pantser’: to produce or write a story ‘by the seat of your pants’. Within the post-project
survey, participants were asked to describe the process they took to create their mStory.
Participants were first asked a multiple choice question that asked them to select from
four options the one that best described their mStory experience (Figure 25); this
question was followed by an open-question in which participants described their
experience.
Survey responses to the question ‘Which of the following best reflects your mStory experience?’ demonstrated that most participants (n=5) had ‘a specific plan of what [they] wanted to do and adapted it throughout the project’. This data contrasts to findings taken from the interview where the interviewee experienced the process of writing an mStory as one that had no plan. However what can be identified within both interview and survey responses is how participants describe the mStory process as one that is shaped by action and evolves throughout the project duration. Though many participants started the mStory process with an idea or vision of what they wanted, all participants experienced this process as one that involved adaption. When asked to describe their process participants frequently used words such as ‘organic’, ‘solidified’ and ‘evolved’ to describe their experience of the mStory process:

PARTICIPANT1: I had a fairly good idea of what I wanted to create but over the few weeks I created the clip I took photos, videos of interesting things along the way and let it create itself almost organically
PARTICIPANT2: I decided to film EVERYTHING I did at work and then later sit down, and edit it together as a "day in the life" type thing. So I suppose my process was to film everything and hope a story solidified on its own.

PARTICIPANT3: 1) I had some interesting photos. 2) I used them to tell a story about my past relationships and the method was poetry 3) The story evolved, until I came up with a conclusion.

PARTICIPANT4: It was only a vague idea, like writing a diary with photos.

PARTICIPANT5: I tried not to plan the photos too much and just take pictures of whatever seemed interesting at the time.

Reflective practice
Reflective practice emerges as a strong theme across several of the post-project survey. One participant stated that their focus and motivation in creating their mStory was ‘reflect back’ on what she wore each day. When asked what she wanted to convey to the audience or reader, this participant stated that she was ‘doing this mainly for myself…a little bit of self-reflection I guess’. This theme of reflection is mentioned explicitly within several participant responses. As there was no direct question that asked participants about this, the comments occurred in different places throughout open-questions in the survey. In particular one participant’s experience with the project highlights this reflective potential that mStories and mobile meaning making have:

Generally I don’t take photos or film anything on phone or actual camera. I have always preferred remembering what I saw than taking photos. Since making my mStory however I have caught myself taking photos of things. I feel this is because capturing these things makes me aware of them. The type of thing that became my mStory is fairly common, one that I normally experience and forget. Even though I haven’t looked at my mStory since I created it, I still very clearly remember what happened, whereas I don’t remember half of the other similar instances. This is something that has also occurred with other photos since. I think capturing events has made me aware that things I find may be mundane, may, if looked at closely, actually be worth remembering.
Likes and dislikes

Participants were asked to describe what they liked and disliked about the mStory process. Likes and dislikes are coded and described below.

- **Likes**
  - Experimenting with the technology in a new way (2 participants)
  - Creative experience (2 participants)
  - Doing something new or different (1 participant)
  - Seeing the results on the webpage (1 participant)
  - Interesting (1 participant)

- **Dislikes**
  - Self-conscious using device (1 participant)

Whether it is doing something new with technology or the practice that the technology enables what people liked in the post-project survey closely aligns to the motivations listed in the preliminary survey, namely *to be creative, do something different* and *do something interesting or fun*. With the exception of one participant who didn’t like doing surveys, the only dislike recorded was the feeling of self-consciousness that one participant experienced when taking photos in public. This feeling of self-consciousness, although not a major theme and not articulated frequently, does occur more generally within both the interview and the surveys as an awareness of the situation. One participant had to edit their story to remove people’s faces and preserve anonymity, and Zena Shapter also notes that she doesn’t ‘want to snap some stranger in the park’. There is, although subtle, an awareness of some of the difficulties of locative or situated practice.

### 4.4.3 Summary

The results of both surveys indicate that owners of touchscreen mobile devices, designed for multimodal practice engage in more multimodal practice than owners of mobile devices designed primarily for text and phone calls. Though people’s daily practice is determined by the affordances of their device, the needs of the mStory process tested the
limits of the device, and participant’s designs for what their mStory should look like determined what modes they used, even if the technology for these modes was not available on their phone. Though participants were asked to create an mStory using just their mobile device, participants were driven to use other devices to create the story that they had in mind. Validating the findings of the participant interview, the post-project survey and analysis of the mStories, found that the compositional element was difficult to undertake on the mobile device.

4.5 Summary of findings

Preliminary survey
- Typical use of the mobile device differs with the type of device owned
- Motivations for participating in the project include: doing something creative, doing something different
- Participants from diverse non-writing or storywriting backgrounds showed interest in participating in a creative project

Participant mStories and website
- There are different ways of contributing mStories
- Most participants had trouble fulfilling the compositional aspect on their mobile device; compositional meanings of the mStories were enabled by the researcher

Intersemiotic analysis
- Participant story demonstrates a high level of intersemiotic complementarity between ideational, and interpersonal modes; the compositional reflected the participants intentions but was less complementary in salience and framing.

Interview
- Zena Shapter engaged in design choices
- The design processes of the participant were sometimes subconscious
- \textit{mStories} process was situated, experiential, reflective, ad hoc and instantaneous
Post-project survey

- Confirms findings in interview and suggests device use, and modal choice differ from participants standard device use.
5. Discussion

When combined, the data taken from the five stages of research can be used to form the first picture of the literacy practices that emerged from the mStories project. Similar to the images within each mStory, this picture of mobile enabled literacy practices is one that emerges from the specific angles and directions taken by the project, its methodologies and its participants. Though the snap-shot provided here is taken from a participatory project that explores a specific, some may say ‘atypical’, mobile device use, this project is able to investigate the characteristics of multimodal practices of users, their design choices, and the affordances and limitations of the technology. This section interprets the findings presented in this report and explains how these findings relate to the broader concerns of new literacies and mobile technology research. Findings from all five stages of the project are synthesised in response to the three research questions posed. The interpretation and discussion featured in this section is structured by the research questions posed by the study:

1) How do mobile devices enable or constrain adults in meaning making?
2) How can we best describe the practice of the adult user’s mobile meaning-making processes?
3) How does this mobile multimodal practice align or fit into existing concepts and understandings of new literacy research

5.1 How do mobile devices enable or constrain adults in making meaning?

The mobile devices that people own and the ways in which people use these devices is explored as existing mobile practice and the mobile practice of the mStories participants. Out of these understandings a change within participants’ practice is observed. Through the different needs and aims of the mStories project, participants engaged in new mobile device uses and practices. These practices are not to be considered in isolation but are
part of a wider ICT ecology (Brady and Dyson 2010) that includes different technologies and contexts of use.

Existing mobile practice
Results from the preliminary survey found that participants’ in the mStories project owned different mobile phone devices and used these devices to engage in a range of multimodal practices. Three types of mobile phone were device were identified within the data: A) iPhone type devices; B) Blackberry type devices and C) Small screen devices. Exploring participants practices in relation to the three categories found that there was a correlation between the type of device owned and the types of activities conducted by participants. Owners of iPhone type devices engaged in more multimodal activities (eg. watching video, recording sound etc.). In contrast owners of small-screen devices engaged in a less diverse set of practices. As only one participant owned a Blackberry mobile device, drawing wider conclusions for this style of phone is difficult. These practices can be understood as arising from the affordances and constraints of the technology, and the decisions in user choices and attitudes.

Affordances and constraints
Both the affordances and constraints of a design shape how that device is used (Norman 1988). The differences articulated by the three categories are design differences in the device. Many small-screen phones have the technical capabilities to take photos, record video, and browse the web. However, features of the human user interface do not readily afford these actions. The small screen limits the extent that the phone’s features can be made visible to users; menu structures are common in these types of devices, however a lot of the functions are hidden as a result. In addition, the numeric telephone keypad affords telephone calling and text, better than navigating a cursor around a website. In contrast the larger screen of the iPhone devices affords the viewing of visual images and websites; the multi-touch screen similarly affords zooming in and out
of websites and allowing the user’s finger to act as a cursor. The differences between participants’ existing use of their devices can be partly attributed to the affordances and constraints that the device’s design imposes on the user. Results from this part of the study indicate that iPhone mobile devices not only afford a wider range of practice, but also afford video and sound recording better than small-screen devices.

User choice

Whilst the design of the device may afford or constrain different multimodal uses, people’s attitudes and choices in buying the device also shape the mobile practices they engage with. The choice of whether to have an iPhone shapes what people do with their device. As one participant said of the project:

It was a new experience to use my phone to do [the mStory] and made me wish (with some longing) to have a smart phone that I can’t afford.

The choice in mobile device is one factor; however attitudes to device use are another aspect of this. One participant within the study had an iPhone device, but did not use this device for video until they became involved in the project. In the post-project survey this participant wrote:

I enjoyed experimenting and learning about tools that I had simply dismissed before. I had never realised why people were so adamant to have cameras on their phone, it seemed like a gimmick. Now I understand.

For this participant personal choice in using the functions on his phone during the project, as well as attitudes to the usefulness of these functions, shaped his practices with the mobile device.

mStories mobile practice

When participants formed the mStories project the three main motivations were to be creative, do something different and do something fun and interesting. The concept of ‘doing something different’ is reflected in users’ mobile practices. The mStories task of
creating a short story by mobile phone changed the ways in which participants used their mobile device. By creating an mStory participants used some of the affordances of the mobile device. To discuss the role mobile technology assumes within the specific mStory ecosystem requires some discussion of the process and the components that comprise this system and its processes. Within the mStories project participant multimodal practice can be interpreted in two ways. Firstly participants engage in both modal choice: the creation of their story in image, text, sound etc. Secondly, participants engage in a wider meaning-making process, which is identified here within the SFL tradition: the ideational, the interpersonal and the compositional.

**Modal choice**

One of the most significant findings is the dominance of the visual mode within the participant generated mStories. All mStories adopted the visual mode, with some mStories using *only images*. In addition the *majority* of participants used more than one mode to compose their story. These participant choices support the idea that there is a wider societal shift from a ‘logocentric’ to an ‘ocularcentric’ culture (Spencer 2011). In addition, this practice suggests that mobile technologies support this shift by allowing the majority of users to compose predominantly visual communicative artefacts using their mobile device. Of all the features available to participants, the camera on the mobile device was found to be the most commonly used. Verbal meanings were also created by participants, and text/image combinations were the most common combination of modes within the final set of mStories. Participants’ decision to use text or email, though sometimes motivated by the limitations of the device, was also specifically chosen by one participant who wanted to use the form of the text message as a creative challenge, to create a new poetic meter: the iambic texatmeter.

Unlike participants’ existing mobile device practice, participants reasons for using modes typically related to the needs of the story that they envisaged *and*
personal preference. When participants were unable to create a component of their story, they would go to other ICT devices. Not all of this content was generated by mobile device. Three participants used other technologies to add different modes to their story. The three participants who added additional modal material did so for different reasons: one person did not have a camera on their phone, another person wanted a higher quality of photo image, and one person was not able to add sound and music to the video with the software available to the phone. Within the study it was found that participants typically began their mStory with an idea; this idea evolved and changed throughout the mStory process. In order to actualise the design that they ‘had in mind’ participants used other technologies; this applies especially to the modes they used, as some participants felt that their device was insufficient to meet the designs that they had envisaged. Participants’ use of a mobile device was part of a wider range of technologies that fits with Brady and Dyson’s (2010, p. 73) concept of ICT ecology: this term suggests that ICT should be ‘understood as a dynamic process that cannot be studied in isolation from its surroundings, animate or inanimate’; one participant who created a complex multimodal story that used still and moving image, music and sound found that:

there was a large void in the ability to compile the mStory on my mobile phone. It seemed the software did exist but was still primitive and had major restrictions. I feel the phone's hardware had the capacity to do what I wanted but the software available wasn't yet sufficient to compile the photo and video in to a clip for my mStory satisfactorily so I was forced to use my laptop.

In contrast, one participant felt that the project could be extended by ‘possibly incorporating other mediums. In this way, it forces one to look for and discover other technological options’.

**Meaning making**

Findings taken from the project overview demonstrate that whilst the *majority* of participants were able to use their mobile device to create the ideational and
interpersonal meanings of their text; all participants were unable to create the compositional meanings of their text for the website. Again, like the participants who used digital cameras, all the categories of mobile phones used were lacking in affordance for this compositional phase, because of small screen size, lack of software, etc. Computers were available as part of the mStories project ecology and so were used.

Summary
Out of these findings it is possible to describe mStory mobile practice as one that differs from participants’ typical use. This difference highlights the potential that mobile device have for engaging and supporting new types of meaning making. This meaning making can take an increasingly creative form: Prensky (2010, p. 150) refers to such new technologies as ‘vehicles to express learning and their creativity’. Whilst this discourse has typically focused on the digital native, this study demonstrates that adult users also explore and utilise new technologies in creative ways. Furthermore, Brady and Dyson’s (2010) metaphor of the ICT ecology can be used to help understand the mobile device’s catalytic power to shape user meaning-making practice and experience when considered part of a range of available technologies which do not compete but rather support each other. Within the project, both the affordances and the constraints of the device shape the user’s practice, but quite importantly do not determine it. In this way one writer uses the limitations of the text to create a new form of poetry, but extends this practice by complementing his text with a photo taken on another device.9 In this way the mobile device has a catalytic power in shaping user practice; combining with individual choices, preferences, interests and the wider ICT systems which surround the mobile device.

9 Interestingly, one writer created the iambic textameter: a poetic meter specifically designed to fit the text message.
5.2 How can we best describe the adult user’s mobile multimodal meaning-making processes?

Throughout the study several themes have continually emerged. These themes can be used to characterise mobile multimodal practice as one that is:

- Multimodal
- Participant designed
- Situated and locative in practice
- Experiential and reflective
- Motivated

*Multimodal*

Participants’ predominantly visual stories reflect a wider societal shift from a ‘logocentric’ to an ‘ocularcentric’ culture (Spencer 2011). The semiotic landscape is increasingly visual and multimodal (Kress 2003). In understanding how the individual’s practice and lived experience contribute to these wider societal shifts, the project found that participants’ choice of mode or medium was motivated largely by the *perceived needs of the story or individual*. The ‘needs of the story’ can relate to both the participants’ own authoring needs (the user’s practical needs) or the participant’s own preference (the user’s interest needs) and those that the participant perceives are needed within the story (the user’s semiotic needs). An example of each is provided below:

- **Practical needs:** I wanted to illustrate the pace of my journey to work so I needed something that was quick to use and easily accessible. The camera works on one click so I could get an image quickly without drawing too much attention to myself...

- **Semiotic needs:** I thought about taking a series of photos and adding text, but decided that the task could be accomplished more simply if I allowed the pictures and sound to speak for themselves.

- **Interest needs:** I love photography. I thought it was a good way to register my day like a diary.
These three sets of needs can be understood as the underpinning of participants choice of modes.

**Participant designed**

The intersemiotic analysis of Zena Shapter’s story demonstrated that existing frameworks that have been developed for professionally produced texts (Kress & van Leeuwen 2006; Royce 2007) can be applied to adult user-generated texts. The results of this analysis demonstrate that users are capable of generating multimodal texts with highly complex and sophisticated intersemiosis. Findings taken from the interview found that the participant was generally able to articulate the need for complementarity, and the design process that she went through. Within the textual metafunction the participant was able to articulate the text’s role in engaging the user, but found it more difficult to discuss how the visuals contributed to this element of the text. Though the interpersonal design of the participant’s visuals showed powerful and sophisticated intersemiotic complementarity, the participant described the outcomes of these images as ‘subconsciously’ done, and more effective than she first thought. These findings align with the most recent studies into design literacies in which adult learners informally learn design skills through play and exploration but lack the language to describe or articulate the process (Sheridan & Roswell 2010).

**Situated and locative practice**

Repeatedly articulated within the interview, and validated by the participants’ post-project survey, was the theme of situated and locative practice. The findings suggest that the context of use provided creative stimulus to the participants. In contrast to other ICTs, one of the defining features of the mobile device is its mobility (Laurillard 2010; Pachler 2010): ‘mobile technology is substantially different from desktop computing in its essential connection to mobility and the contexts in which it is used’ (Kukulska-
Hulme 2010, p. 11). This situated practice, commonly understood by mLearners researchers, resonates throughout participants’ descriptions of their literacy practice. These situated experiences are categorised in the findings as ‘instantaneous’, ‘ad hoc’, and ‘locative’. Although findings from the interview demonstrated that participants might begin their creative process through a locative action, findings from the post-project survey found that participants typically started with an idea, and then come to actualise part of their ‘in mind’ design in an adapted form. One characteristic that emerges from the mobile situated practice is a design that evolves and changes through the practice and reflections of the participant.

**Experiential and reflective**

Surrounded by the changing contexts in which these mStories are composed and undertaken, participants frequently discussed the experience and how it relates to their story. Zena Shapter’s story began with experience of the playground, taking a photo of the playground, reflecting on this and reconceptualising it as a part of her story. The limitations of a survey tool prevented the researcher from accurately validating whether all participants followed a similar process. However within the survey data the theme of action and reflection emerges as dominant. Kolb’s theory of experiential learning (Kolb 1984) is one way of explaining and understanding how experience relates to reflection. Zena Shapter’s experience fits into Kolb’s (1984) experiential learning cycle. As such there is a possibility that future theory development around mobile literacy practices may want to focus specifically on the extent to which mobile literacy practices are experiential in nature. Due to the scope and time constraints of the project, this constitutes an area for future research.

**Motivated**

To date both the findings and discussion have focused on some of the external factors that shape participant’s multimodal meaning making: the affordances of the device, the location, the perceived needs of the project, etc. However, throughout mStories the
people who have participated have been driven by their own personal motivations and interests. Like the children whom Kress’s (1997) theory of meaning making is based on, the people involved in the mStories project joined with pre-existing interests and views on the world. These perspectives shape the way that they make meaning and thus reflected in what they do with their mobile device. Of the three Hallidayan metafunctions personal interests and motivations dominate the reasons for the ideational content of participant stories. The factors that shape the mStories project can be interpreted as relating to one another within the mobile context of use (Figure 26).

**Figure 26. Participant mStory process**

5.3 How does this understanding of mobile literacy practice align with existing theory?

Within new literacy research there is a plurality of definitions and conceptualisations of literacy, and what it means to be literate. The majority of these definitions have emerged out of studies conducted with non-mobile ICTs, professionally produced texts, and
children’s literacy acquisition and multimodal practice. The literature review of this report demonstrates the gap in the research in which this study is located. This section of the discussion aims to detail how the key findings of this study relate to the wider field of new literacies and mobile technology research. The question addressed in this section is what do the findings of this study mean for our existing conceptions of the new literacy, and the way we currently think about mobile technology as a form for learning and meaning making. This section discusses the implications of this study on:

- Semiotic approaches to new literacy
- Practice-based approaches new literacy

**Semiotic approaches**
The semiotic approaches of visual grammar (Kress & van Leeuwen 2006) and intersemiotic complementarity (Bowcher 2007; Royce 1998, 2007) provide a linguistic schema for understanding the products of new literacy. This study’s use of one such framework demonstrates that a semiotic approach can help to understand aspects of a mobile text. The study has built its understanding of what people do with multimodal resources and an understanding of the final semiotic product. Within the study, the three metafunctions of the ideational, interpersonal and compositional, provide a framework for understanding the participant processes within the project. Application of Royce’s (2007) intersemiotic complementarity framework demonstrated that existing semiotic frameworks could be applied to user-generated resources. The results of this analysis also show the complex forms of meaning making that non-professional producers engage with.

Whilst the intersemiotic framework allowed the researcher to build an understanding of literacy from both the multimodal language used and the practice engaged with (see Kress 1997), the analysis also exposed limitations of the semiotic approach both as a practical research method, and as a tool for insight into the semiotic product:
Research limitations
Firstly, given the diversity of mobile practice demonstrated within the project, existing frameworks are insufficient to analyse the diversity of practice encountered and insufficient to compare the intersemiotics of one type of text with another. Secondly the complex and extensive nature of the analytic framework limits the widespread use of it as an analytic tool. Future work may involve developing a rapid analytic tool or a comparative framework that assists in making sense of complementarity between different types of practice (not just text and image).

Limitations of the semiotic
Whilst the analysis provided insights into the semiotics of Shapter’s story, this framework and the corresponding interview also exposed the limitations of a purely semiotic approach to understanding multimodal texts. As theories of visual grammar emerge from social semiotics, approaches to understanding multimodal texts have frequently followed this analytical approach. Though this framework is well suited to understanding non-fiction texts such as The Economist (see Royce 1998) this framework does not account for the fictional nature of Shapter’s mStory or how deliberate differences between image and text may form part of an artistic or literary intention. Nor does a semiotic approach account for practice-based characteristics of mobile multimodal texts, such as the locative and the temporal.

Practice-based approaches new literacy
Out of the different understandings of new literacy practice, connections can be observed between the practices of adults within the mStories project and the meaning-making practices of children (Kress 1997). Connections between the conceptual ‘what is to hand’ within children’s multimodal meaning making, and the situated nature of adult user’s mobile practice are easily drawn. Like the child that uses ‘what is to hand’ to create
multimodal meanings, the adult of *mStories* is one that transforms the situation ‘at hand’, and uses this in an ad hoc fashion to construct their story and their meaning. This more holistic approach to understanding meaning making is better suited to understanding the ad hoc, situated practice that emerged throughout the *mStories* project.

Another theoretical approach derived from social practice is, in contrast, not supported by the situated concept of literacy revealed in the *mStories* project. This approach defines new literacy as one that is formed by the combination of ‘new technical stuff’ and ‘new ethos’. *mStories* understanding of a situated literacy supported by other ICT blurs the boundaries between different technical ‘stuff’.
6. Conclusions and future work

As the semiotic landscape becomes increasingly visual and multimodal, innovations in ICT afford ways for people to navigate through this landscape as both consumer and producer. The field of new literacies research has contributed significantly to the reshaping and redefining of literacy. However the discipline is still in its infancy. As a result new literacy and its definitions are still contested, mutable and unfixed. Within the changing parameters of this discipline, studies of semiotics, and the practices of the digital native and child user have dominated. To date, existing definitions and understandings have overlooked the adult user, the informal learning space and the mobile technology.

For a concept of new literacy to be inclusive, it has to step outside of the classroom and engage with these participants and the devices that they use to shape their meanings and mobile practice. The mStories project addresses this through participatory action research that includes the adult user in the process of defining new literacy. Central to the aims of participatory action research is the theme of practice, of participation to enact change; through the new practices of mStory production, participants changed the way they used their device and contributed to understandings of situated adult mobile literacies.

6.1 Conclusions

Shaped by the nine participants this project forms an initial understanding of the literacy practices enabled by mobile device. One of the most significant findings is that, though the device affords visual and multimodal meaning making, the meaning-making practices of participants are not able to be bound to a sole technology and a specific practice. Grounded in understandings of Systemic Functional Linguistics and the visual and intersemiotic derivations of this, the project found that all participants had to use another device for creating the compositional aspect of meaning in their texts. This finding is interpreted as part of the way in which participants engage in an ecological system of different ICTs. Within the mStories project the mobile device was identified as a catalytic
element of this process. Though not all meaning was created by mobile device, the mobile device enabled participants to engage in meaning making that was: multimodal, participant designed, situated and locative, experiential and reflective, and motivated by individual interests, attitudes and ideas.

This picture of new literacy is similar to the practices of children’s own meaning making in the way that adult users employ what is literally and figuratively ‘to hand’. Though adult users were not always able to articulate the design decisions behind their action, their semiotic products and practice demonstrated an element of design. Though congruent with some conceptualisations of literacy, this locative, ecological, ‘to hand’ practice disrupts ideas of literacy founded on rigid distinctions between different technologies and their use.

### 6.2 Future work

- This report presents a snapshot of the multimodal meaning making enabled by mobile devices. As articulated earlier on, the image of mobile literacy is specific to this project, this methodology and these participants. This initial study begins to include the adult mobile phone user into the understandings of new literacy. However further follow-ups with these participants is necessary to see the effects of the project on long-term participant practice.

- Though the characteristics of mobile literacy and practice have been identified, this project’s time and scope limits a full understanding of how each characteristic of mobile literacy is actualised; this forms an area for future research. In addition, further understanding of the existing device use of participants and the existing functionality of users’ phones would be desirable, and how these impact on mobile multimodal literacy.
This project’s understanding of mobile-enabled meaning making is largely descriptive. Further theory development is recommended to explore how each characteristic identified within mobile literacy relates to the participants’ processes of mobile meaning making and how these characteristics interrelate. In particular, future investigations following Kress’s (1997) theory of ‘practical’ meaning making might yield fruitful results.
7. References


Dyson, L.E., Litchfield, A., Lawrence, E., Raban, R. & Leijdekkers, P. 2009, 'Advancing the m-learning research agenda for active, experiential learning: four case


Kolb, D.A. 1984, Experiential learning: experience as the source of learning and development, Prentice Hall, New Jersey.


revels about classroom practice, National Council of Teachers of English, Urbana, IL, pp. 37-68.


Mills, K.A. 2010b, 'Shrek meets Vygotsky: rethinking adolescents' multimodal literacy practices in schools', *Journal of Adolescent & Adult Literacy*, vol. 54, no. 1, pp. 35-45.


Unsworth, L. 2008, 'Multiliteracies and metalanguage: describing image/text relations as a resource for negotiating multimodal texts', in J. Coiro, M. Knobel, C. Lankshear


Walsh, M. 2008, 'Worlds have collided and modes have merged: classroom evidence of changed literacy practices', *Literacy*, vol. 43, no. 2, pp. 101-8.


APPENDIX A: Participant demographic data
APPENDIX B: Preliminary survey
mStories registration Preview Only

Welcome to mStories

Welcome to mStories. To register for the project, please fill out this introductory survey. This information will be used to structure the technical and creative support offered in the project, whilst also forming an important part of research currently being undertaken by Jessica Frawley at the University of Technology Sydney.

This survey should take no more than 5 minutes and all personal information will be kept strictly confidential.

Thank-you for your time.

Registration

Registration Details

1. First name:

2. Surname:

3. Gender:
   - Male
   - Female

4. Age:
   - Under 15
   - 15 - 17
   - 18 - 20
   - 21 - 25
   - 26 - 30
   - 31 - 35
   - 36 - 45
   - 46 - 55
   - 56 - 65
   - Over 65

5. Country of residence:

6. Postcode:

7. Contact phone number:

8. Contact email address:
Skills, Hobbies, Interests

9. What is your current occupation?
   eg. Student, Accountant, Freelance Journalist

10. Tell us what you enjoy doing in your spare time
    eg. hobbies, interests, activities

Your mobile phone

11. What mobile phone do you have?
    Please enter make and model

12. What do you use your mobile phone for?
    Tick all that apply
    - Phone calls
    - Video calls
    - Text (SMS)
    - Email
    - Social networking (eg. Facebook, Myspace, Twitter)
    - Surfing the internet (eg. Google, Yahoo, Wikipedia)
    - Watching online video (eg. Youtube)
    - Downloading music or video (eg. iTunes)
    - Reading eBooks
    - GPS and maps
    - Playing games
    - Taking photos
    - Making videos
    - Recording sound
    - Other:

13. Have you ever created a short story by mobile phone?
    □ Yes
    □ No

14. If YES what did you do?
mStories: Aims and Focus

15. What interested you in the mStories project?

16. Additional comments
If you have any additional comments, suggestions, or concerns please write them here.
APPENDIX C: Intersemiotic analysis
<table>
<thead>
<tr>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 In the playground before the kids arrive, I wonder who will believe in me today.</td>
</tr>
<tr>
<td>2 I decide to wait under the bridge, where they will cross to reach the slippery dip and imagine a grumpy old troll underneath.</td>
</tr>
<tr>
<td>3 When they are laughing and distracted by their play, I’ll creep inside their minds and show them why they shouldn’t forget who gives them bad dreams at night.</td>
</tr>
<tr>
<td>4 I might even make them stop in their tracks, mid-laugh, and look around.</td>
</tr>
<tr>
<td>5 Is everything okay? Are we still playing a game?</td>
</tr>
<tr>
<td>6 On the street, when her kids have raced too far ahead, I’ll make her wonder too.</td>
</tr>
<tr>
<td>7 Who is that stranger looking back at them, why are they so interested?</td>
</tr>
<tr>
<td>8 When she starts running to catch up with them, it’ll be my turn to laugh.</td>
</tr>
<tr>
<td>9 She doesn’t know it yet, but I’m going to hang around this time, follow her when she goes to pick up her little darlings from preschool tomorrow afternoon.</td>
</tr>
<tr>
<td>10 There’s a locked room she’s always thought about.</td>
</tr>
<tr>
<td>11 There aren’t supposed to be hidden corners in preschools anymore.</td>
</tr>
<tr>
<td>12 What goes on behind that door?</td>
</tr>
<tr>
<td>13 Is there a reason her daughter’s so sore, other than careless hygiene?</td>
</tr>
<tr>
<td>14 First thing in the morning I do have to pop out though. I have a regular appointment in the woods.</td>
</tr>
<tr>
<td>15 I can’t have the jogger escape the shivers I give him every time he passes through the trees.</td>
</tr>
<tr>
<td>16 He’ll wonder where his instincts have gone, the ones that make him glance at the dewdrops listening on leaves, as if the landing lights of an alien spacecraft are aglow beneath its descending silver underbelly.</td>
</tr>
<tr>
<td>17 He lets me in further than most.</td>
</tr>
<tr>
<td>18 And then there’s you.</td>
</tr>
<tr>
<td>19 You can’t see me right now, but I’m grinning just thinking about the next time you’re alone for the evening.</td>
</tr>
<tr>
<td>20 You’ll be watching television and there’ll be a sound above you.</td>
</tr>
<tr>
<td>21 Is it the roof?</td>
</tr>
<tr>
<td>22 Is there someone, something, outside?</td>
</tr>
<tr>
<td>23 You’ll hold your breath and strain to listen.</td>
</tr>
<tr>
<td>24 If you pray to every god in turn, they might forgive you for picking the wrong faith.</td>
</tr>
<tr>
<td>25 But there’ll be no quick answer.</td>
</tr>
<tr>
<td>26 For, alone that night, you’ll know who I am.</td>
</tr>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>S’s Playground</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

Lexicosemantic Intersemiotic Complementarity: **IMAGE 1 & paragraphs 1-2**

IMAGE ORIENTATION: **Naturalistic**
<table>
<thead>
<tr>
<th>Participants</th>
<th>Processes</th>
<th>Circumstances</th>
<th>Goals</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S’s Stranger</td>
<td>Children</td>
<td>Street</td>
<td>Distance (walking away from the viewer)</td>
<td>Far away</td>
</tr>
<tr>
<td>7 kids (S)</td>
<td>running (H)</td>
<td>street (R)</td>
<td>looking back (A)</td>
<td>far ahead (S)</td>
</tr>
<tr>
<td>8 stranger (S)</td>
<td>then (S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE (iii)
Page-Based Intersemiotic Complementarity: *IMAGE 3 & paragraph 4*

**IMAGE ORIENTATION:** Naturalistic

<table>
<thead>
<tr>
<th>S's Classroom</th>
<th>Processes</th>
<th>Goals</th>
<th>Circumstances</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 little darlings (C) preschool (M)</td>
<td>-</td>
<td>-</td>
<td>Daylight</td>
<td>Empty Preschool</td>
</tr>
<tr>
<td>11 locked room (M) hidden corners (A) preschools (M)</td>
<td></td>
<td></td>
<td></td>
<td>afternoon (H)</td>
</tr>
<tr>
<td>12 behind that door (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE (iv)
Page-Based Intersemiotic Complementarity: **IMAGE 4 & paragraph 5**

**IMAGE ORIENTATION:** Naturalistic

<table>
<thead>
<tr>
<th>Participants</th>
<th>Processes</th>
<th>Goals</th>
<th>Circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>S’s</em> lower leg (Runner)</td>
<td>Running</td>
<td>Forwards (Towards the viewer)</td>
<td>Morning Woods</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>First thing (C)</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>Morning (R)</td>
</tr>
<tr>
<td>17</td>
<td>jogger (M)</td>
<td>escape (C)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE (v)
Page-Based Intersemiotic Complementarity: IMAGE 5 & paragraph 6

IMAGE ORIENTATION: Naturalistic

<table>
<thead>
<tr>
<th>Participants</th>
<th>Processes</th>
<th>Goals</th>
<th>Circumstances</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S’s Person (Reactor)</td>
<td>TV (Transactor)</td>
<td>Watching Vector from Reactor to Transactor</td>
<td>To watch TV</td>
<td>Evening</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>evening</td>
<td>alone (R)</td>
</tr>
<tr>
<td>22</td>
<td>television (R)</td>
<td>watching (R)</td>
<td>watching television</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>Outside</td>
<td>Roof (H)</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>(A)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>night (S)</td>
<td>alone (R)</td>
</tr>
</tbody>
</table>
TABLE (vii)

Modality markers

1. In the playground before the kids arrive, I wonder who **will** believe in me today.
2. I decide to wait under the bridge, where they **will** cross to reach the slippery dip and imagine a grumpy old troll underneath.
3. When they are laughing and distracted by their play, **I’ll** creep inside their minds and show them why they **shouldn’t** forget who gives them bad dreams at night.
4. **I might** even make them stop in their tracks, mid-laugh, and look around.
5. Is everything okay? Are we still playing a game?
6. On the street, when her kids have raced too far ahead, **I’ll** make her wonder too.
7. Who is that stranger looking back at them, why are they so interested?
8. When she starts running to catch up with them, **it’ll** be my turn to laugh.
9. She doesn’t know it yet, but I’m going to hang around this time, follow her when she goes to pick up her little darlings from preschool tomorrow afternoon.
10. There’s a locked room she’s always thought about.
11. There aren’t supposed to be hidden corners in preschools anymore.
12. What goes on behind that door?
13. Is there a reason her daughter’s so sore, other than careless hygiene?
14. First thing in the morning I do have to pop out though. I have a regular appointment in the woods.
15. **I can’t** have the jogger escape the shivers I give him every time he passes through the trees.
16. **He’ll** wonder where his instincts have gone, the ones that make him glance at the dewdrops listening on leaves, as if the landing lights of an alien spacecraft are aglow beneath its descending silver underbelly.
17. He lets me in further than most.
18. And then there’s you.
19. **You can’t** see me right now, but I’m grinning just thinking about the next time you’re alone for the evening.
20. **You’ll** be watching television and there’ll be a sound above you.
21. Is it the roof?
22. Is there someone, something, outside?
23. **You’ll** hold your breath and strain to listen.
24. If you pray to every god in turn, they **might** forgive you for picking the wrong faith.
25. But **there’ll** be no quick answer.
26. For, alone that night, **you’ll** know who I am.
APPENDIX D: Interview questions and interview transcript
1) **Ideational (What is represented?)**
   - In your own words describe the main subject of focus of your mStory.
   - Why did you create an mStory on that particular theme or topic?
   - What place or places did you locate your story in? What made you choose these places?

2) **Interpersonal (How does it enact the social?)**
   - How did you want to involve the reader in your story?
     (eg. attitudes, perspectives, emotions)
   - How did you go about achieving this? (with visuals, with text)

3) **Textual or compositional (How is it composed as a text?)**
   - What role did the images and text play in conveying these messages?
   - What made you use these mediums as opposed to others available to you on your phone?
     (For example if you created your story using text and image, why these two mediums as opposed to sound and video?)
   - Did you use any effects? If so why? (eg. Black and white, hipstamatic lenses)
   - How did you order and organise your story so that all the parts became a whole? ie. Did you submit your story in the order you wanted it published in, did you upload your story to the website manually or did you use an application or feature on your phone to help you link it all together?

4) **User experiences and mobile devices**
   - What did you like or dislike about the mStory process?
   - Did your mStory turn out the way you initially imagined it? Ie was it better, worse, different, did it surprise you in anyway?
   - Where and how did you go about creating your story? Did you write the story in the location you were in? OR elsewhere?
   - How was writing an mStory different to how you normally write a story?
   - How was writing an mStory different to how you use Twitter, Facebook, other ways of creating mobile content with images and text?
   - Would you use a mobile again to either create a mobile story or assist you in your own story writing?
**INTERVIEW TRANSCRIPT**

<table>
<thead>
<tr>
<th>J</th>
<th>In your own words describe the main subject or focus on your m-story?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>I focused on it from a fiction perspective because the clue was in the title 'mStory', so for me a story would be a story of fiction not a non-fiction story, though you could do that if you wanted to. So it was coming up with a fictional story that I could do from the phone with pictures and an idea that would be able to carry that off, with not being able to develop the story in the usual way I would usually develop it...the same way as if I was at home with my computer.</td>
</tr>
<tr>
<td>J</td>
<td>How would you normally develop a story if you were at home with a computer?</td>
</tr>
<tr>
<td>Z</td>
<td>If I was at home with a computer, I would come up with a one or two ideas linked together and then I would brainstorm those ideas...the &quot;what if&quot; ideas...&quot;though experiments&quot;. And then that would be my kind of world, my setting...and then I would pick my characters and create a voice for that story then think about it for a long time until the voice spoke to me and then I would start writing. Then hopefully it would just come forth, this is just short stories, not long stories or novels. But I couldn't do that on the phone because that would involve lots of documents. On the computer at home I would have a research document, drafts, I would find photos on the internet that would inspire me, and I would put it all in a folder and then have multiple things open at the same time. You can't do that on a phone, so I had to produce something completely different thing.</td>
</tr>
<tr>
<td>J</td>
<td>How did you approach that? What processes did you go through?</td>
</tr>
<tr>
<td>Z:</td>
<td>Well in the story telling industry, I guess there are two types of writers- &quot;planners&quot; and &quot;pantsers&quot;. So I'm a bit of a planner...but &quot;pantsers&quot; just write…</td>
</tr>
<tr>
<td>J</td>
<td>So writing by the seat of your pants?</td>
</tr>
<tr>
<td>Z</td>
<td>Right, but for this I had to try to be a bit of a &quot;pantser&quot;, find an idea and write something and not knowing where it was going to go. So I was sat in the playground, the kids were off playing. And then all of a sudden all of the children were behind me, not in front of me, then that's when I got my camera out and took the first picture of the playground with no kids in it. There were plenty of kids behind me and all out of view, and it looked a bit spooky and a bit kind of quiet, I snapped the picture, then I thought &quot;my story's going to be a spooky story.&quot;</td>
</tr>
<tr>
<td>J</td>
<td>Did you write that with text or with email?</td>
</tr>
<tr>
<td>Z:</td>
<td>Predictive text, so that was another challenge...using a predictive text. Yes, it's very frustrating. I guess it takes a long time to write one word so then it challenges your patience. Whereas if I have the keyboard and I am touch typing then I write as quick as I think. Whereas on the phone I found myself typing and typing on the mobile when I had already thought things through and the typing wasn't keeping up. I had to keep it very simple.</td>
</tr>
<tr>
<td>J</td>
<td>Do you think the predictive text changed the words you used? Or did you already have those in your mind?</td>
</tr>
<tr>
<td>Z</td>
<td>Well if it changed the words then I would just keep pressing it until I got the word I wanted...so it wasn't so much that it came up with something I didn't want...but it was just the slow timing I guess and the small screen.</td>
</tr>
<tr>
<td>J</td>
<td>You said that you came up with the first part of the story because of where you were at the time, was that the same with the others?</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Z</td>
<td>Well then I had my idea for the first one and I wrote all of that bit first...erm that bit there...and it took up three texts and I saved them, so that was one text. And this was [points at second picture] as I was walking home, and I was thinking &quot;what else could I take a picture of&quot; and then the kids ran on ahead, and it's not very clear in the photo but I didn't want to alter it too much, but there was actually one guy...when the kids were further up...a guy passed them and looked at them kind of funny. And I was like &quot;ooh I'll get that&quot; but by the time I had gotten through to the right application they had [children] gone on further and luckily another guy walked past them and looked at them a bit funny. When I say that, it was probably because they were taking up all of the footpath. But for my purposes, I already had this story in my mind, then that looks like my story and he was in the right place at the right time. So then I had my first two pictures and my first two paragraphs and then I got home and then I think that night my husband was out and it was a bit spooky so I got out my phone again and took the picture of me in front of the TV but I didn't know quite what yet. This scene would be something at the end of the day, something else has happened in the middle. Then I thought to myself &quot;well you know...I'd though of these two occasions going down to pick up the kids from school and you always worry about your kids when they are out of pre-school, however safe it is. And then the jogging, and so then the next day I purposefully took my phone with me on my jog, even though I don't normally do that, and then I took that picture and made notes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th>Did you write all of that text in the location where the photo was?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>No not for this one [Talking about other photo]. And this one- yeah- this one was taken in the afternoon...so...yeah</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th>What made you choose the places for each of these photos?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>Well for the first two that was where I had my idea. Then that was just...I'd written those and I had the idea for that, and then I went...I purposefully went to those two places. Then I had the story that was going to be in this voice, going around different places and different people. The voice I decided, would be several things. It could be a voice of fear, a voice of imagination, a voice of inspiration, or it could be something else. I waited until I was at school as I wasn't sure which picture I was going to take. I was going to take a photo of a door but then I was like, hang on, what's behind that door? That can be my theme!...Then with the jogging one there was the light, and then with the jogging one I was thinking about jogging and being followed, but how can I get this across? I don't want to take a picture of someone following me, as I've already kind of done that and also I don't want to repeat that and year I don't want to snap some stranger in the park.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th>As we are on that image, how did you actually take that shot?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>I had many pictures of that shot. I did some over my shoulder and I did some of my feet and that was the best one, upside down. Luckily there weren't many people around</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th>You had several shots, what made you choose that one?</th>
</tr>
</thead>
</table>
| Z | So after I took the pictures, I walked down to Queenscliff and I wrote this. And then I got home and looked at all the pictures and picked the one that looked a bit eerie, like there was the lights of a space craft aglow beneath it, the light, and where you can see the forest. Whereas it's not actually very foresty there and that's just actually the Calibria behind there. The other ones [photos] looked a bit too happy, because you've got the river there and it just looks too nice, whereas I didn't want them to look nice.
<table>
<thead>
<tr>
<th>J</th>
<th><strong>How did you want to involve the reader in your story?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>I obviously, the story could stand alone without the pictures, but I wanted to involve the reader on two levels. This is the opportunity here to involve them in a way that you can't do traditionally, and then this way you can do it via words and photos to give visual stimulation. So they complemented each other through different layers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>Did you choose shots and angles deliberately?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>Not with the first two—only cause they didn't need to be, the one in front of the TV I had to angle it because I wanted to show a bit of head, the wine glass and a bit of the TV. The jogging photo I wanted it to look spooky, spooky and uninviting and then the same as the pre-school one which had to look spooky but it's a very cheery class room. So yes I did, with those three [looking at other photos] deliberately pick angles to exclude things that would have conflicted with my story.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>What effects did you use?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>I didn't want to use too many effects because I didn't want to distort the picture too much of what I had taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>Why did you want to keep those images like they were?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>It wasn't particularly important I guess because it's a fictional story, not a non-fiction story, therefore authenticity wasn't an issue. I just didn't want to fiddle with it too much because I felt like one of the purposes of this project was the instantaneous nature of the creation. So after I had taken the pictures and done my text, I more or less didn't want to do too much to it because that would involve the computer rather than phone and I wanted it to be a mobile story, not then to sit down at the computer and do stuff. It was then just uploading the pictures and copying across text. [Pause] I do touch type so that was fine. It would have been easier obviously just to send it, in hindsight I should have just done emails. I knew that if I had chosen emails that would have made it easier at the other end uploading on to the website, but it would have tempted me to go back to traditional techniques...but I wanted to experiment with something different. So with emails you do things, make notes but I just didn't want to do that. I wanted it to just be mobile and do the...</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>What did you gain out of doing that? Having those constraints?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>I gained a lot and I found that I gained the knowledge that I can think on my feet more than I think I can, but then this is a very short story, but that flash fiction is growing a lot, so you know, I might have to do a lot more flash fiction on my mobile. And yeah that's the thing that I learnt, and to make sure I know what's going to happen but I've just been exploring this more recently myself and I think it's more about security...from a writer's perspective...having plans gives you permission to write...it's security. But thinking on your feet...you've got nothing backing you up. You've got no permission to write. And I was able to embrace that challenge and year, I was happy when I produced something that I kind of liked.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>How does the finished story compare to what you imagined?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>Much better than I thought I would be able to achieve. I thought it would just be an autobiographical thing, maybe with a twist that would make it in to a fiction. Umm, but I was able to do a lot more once I found the idea thanks to the kids school, being there at the right time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th><strong>What made you use the mediums of text and photo, rather than other things on your phone? Like video or sound, or anything else that was available to you?</strong></th>
</tr>
</thead>
</table>
| Z | Ok the reasons I didn't use video...I guess because it would have been real. Whereas I wanted to write fiction. So I would have been very restricted, what I had created would have been narrower than what I ended up doing. I know that's not a grammatical
Ahh...mmm...it would have been more restricted to do that if I wanted to have a video. I wanted to pretend it was something different that it wasn't what I ended up doing with the images. You know? Picking angles, being selective with the pictures, I can imply this sort of fiction. Whereas video, it would have been very hard to tweak the understanding of watching it.

**J** OK- so what I understand from that is that with the text and image combination, you can control in a way how those images are perceived by the reader?

**Z** Exactly, I can control the reader's perception, whereas with a video they would have been allowed to interpret themselves. And, you know, that's ok if you're doing non-fiction where you present all the facts, you allow the reader to interpret. That's what's good about non-fiction. But I didn't want to do that because I'm too creative. Fiction is about getting your story down on to your chosen medium and ensuring that story is understood by the reader in a way that you mean them to. So that is the process that struck me.

**J** What way did you want the reader to feel, respond, react?

**Z** I wanted it to be spooky. And to get them thinking about the title, the voice. I can't remember if it came at the beginning or at the end, but I wanted it to be the voice of inspiration, imagination and fear and each one of those would be up to the readers' interpretation. So I read it to my husband, he didn't really take on board the title and he didn't say it was bad. I said: "Who is talking in this?" and he said "Bad people are talking this...and you know they are following people around". Umm, OK, thank-you. No, it's not really a person. The very first thing I say is that "I'll creep inside their minds and show them why they should be scared...blah...blah...blah." And I said "how can another person creep inside another's mind? And he's like, oh yeah...I didn't read that bit, and that's just my husband. So...I wanted people, my readers, to feel uncomfortable.

**J** Did you do that by making them feel close to the action, removed from the action? Did you play with that distance? With what's happening and how they relate to that?

**Z** For me, my writing style is first person and I write in that way. I think it enables you to get straight inside the character that is speaking. If you do it well. Umm, and so if I talk to the readers in first person and they make the connection and go along with that journey. And once they are in that journey they feel a bit uncomfortable. I don't know...you read it....what did you think?

**J** I felt uncomfortable with it, yeah it did work for me. I think there was growing discomfort from a readers' perspective, and so it built up. So the Troll, ok a bit discomforting. The stranger, a bit discomforting. I was still able to see that. The locked door, I was definitely discomforted by that. This one [pointing at the second to last image] I felt closer to the action, and this one I felt I could have almost been the voice, because of that shot there. If you're asking me as a reader, that's how I felt about that.

**Z** Probably subconsciously you're right, the photos they kind of get closer and closer don't they. Do, outside and we're quite a distance away, then we're getting more intimate, and then we're close but that [second to last image] at a sort of a leg, you know and that [last image] near someone's head.

**J** In a way the angle may suggest where you are.

**Z** Yes, it succeeds better than I thought!

**J** How did you then order the story? Did you split your story in the order you wanted it
<table>
<thead>
<tr>
<th><strong>published in? Did you upload the story to the website manually? Or did you use an application or feature to help link it together then upload it?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Z</strong> I just downloaded my photos, chose the right ones, then cos I'm used to blogging platforms so I then...I erm...I had a very clear image in my mind how I wanted to lay it out, which is why I contacted you and said can I just do it.</td>
</tr>
<tr>
<td><strong>J</strong> And why did you lay it out in this way?</td>
</tr>
<tr>
<td><strong>Z</strong> I wanted the text that I wrote to be exactly opposite the photo but I didn't have the time. Why did I want that, I don't know. I guess the little bit of authenticity or commitment to the project to do that, but also of course because each text was, the purpose of the photo was to bring something to the text that I had written, so I wanted the text to be next to the photo that it related to. But I also wanted it to be visually pleasing. I didn't just want it to be down one side. That would look very clinical and whereas for me you have to read it and it flows all nicely and then the pictures add to it on the side. So, that layout is important to me, so then I just uploaded the photos through the blog platform. Then typed up the text on the side. Actually it works the other way around, you put the text in first then you click on where you want the photo to go and upload the photo</td>
</tr>
<tr>
<td><strong>J</strong> What did you like or dislike about the mStory process?</td>
</tr>
<tr>
<td><strong>Z</strong> I like the challenge, umm, and I am proud of myself for not cheating. I felt email would have enabled me to cheat...Tempted me to cheat. So I am proud of myself for sticking with the text and photos. What I didn't like was the restrictive nature of texting because...yes it is laborious and my brain is quicker than my thumb.</td>
</tr>
<tr>
<td><strong>J</strong> How was writing an mStory different to how you use your phone normally- and that can be for things like facebook, photos, or other ways of creating text and image content?</td>
</tr>
<tr>
<td><strong>Z</strong> Well I've changed the way I use facebook recently because I’m being befriended by fans...or supporters lets say...and my husband and I agree that it would probably be best if I didn't have photos of the children up anymore. So now the way I use Facebook, my blog and camera, it's kind of similar I guess. All the photos I take relate to an event which I will then write on facebook about. And I do follow the layout, a bit on the blog and obviously on facebook you just upload the photos and then you might write a little spiel about it underneath which is part of the uploading process. Whereas with this I wrote the story at the time because I was in the moment and because you feel when you are alone in the park first thing in the morning, you can feel &quot;what are my first thoughts??&quot; You know. It was easier to write in the moment, I feel when you write stories the traditional way on a computer I often write from notes that I have taken at the time...spontaneously, so umm contemporaneous notes. So when I go travelling I always carry a notebook and make notes of what I am seeing and thinking, smells and all your senses and stuff. And then when I am on my computer then I use that to reference. Whereas this could skip that process but I was there anyway. Cos I couldn't start with a document in it...I had to find another way to compensate for that so that was just writing at the time.</td>
</tr>
<tr>
<td><strong>J</strong> So just to summarise that....Normally when you write, you would take notes contemporaneously, then you would use those notes when you are at the computer. But with facebook you upload things at the time then blog about them??</td>
</tr>
<tr>
<td><strong>Z</strong> Facebook- after I have taken the photos I would upload them and add captions. then with the blog I would normally write in wordss, and report on an event and add photos. I guess in theory this is similar to that but apart from the texting at the time, no document I write I impose on myself.</td>
</tr>
<tr>
<td><strong>J</strong> Would you use a mobile again to either create a story or assist you in your own story writing?</td>
</tr>
</tbody>
</table>
| **Z** Before this project came I have often used text in the past to make books. So if i’m in a bar and I just have my phone, keys and wallet and I suddenly have an idea i’ll send myself a text...
as a reminder. What’s sad is that I don’t even understand it myself, so it’s not a whole story. I think in the future I might do the email thing if inspiration strikes. But more or less when I’m around the house i’m with the children or with husband. Very rarely travelling makes me much anymore, so i’m just working from home. So if I was the type of person to do anything new or to do this again I could very well use my phone in that respect. And I may use it again, i’ll probably use it for ideas as I have them as I have in the past and if I were to write another mStory for myself and not for the project I would probably use email but I probably wouldn’t use photos because I don’t know where I would sell a story with photos in? They probably wouldn’t be allowed in competitions or anthologies at the moment. This hopefully might be the start of something. So, i don’t know what the future will bring but it’s an option that I could utilise now because I know I can do it.

J  Is there anything you experienced during the project, or anything we haven’t covered during the interview?

Z  After I wrote the story I made some notes for myself but I think we have covered every single thing. The problem with the texting, the thumbs and the brain working at different speeds.

J  Did you find the size difficult in terms of seeing the text?

Z  No that was fine. When people send me stories from writers group I always print it out on 9 or 10 font to save on paper.
APPENDIX E: Post project survey
mStories evaluation

Introduction

Thank-you for participating in the mStories project. Now that you have completed your mStory we would like to find out about how you experienced this process. This survey aims to find out about how you used your mobile phone, what story you created and the process you went through to create the finished product. The total survey is divided into 21 questions. The survey should take you no longer than 30 minutes to answer.

The data from this survey will form part of the mStories project research; findings will be collated analysed and made available to all participants. All personal data will be kept strictly confidential. If comments include references to your own story or other identifying information, these comments will be deidentified before inclusion in any publication.

Thank-you for participating in the mStories project and taking the time to complete this survey. If you have any questions about the survey or the research being conducted please contact Jessica Frawley on Jessica.Frawley@uts.edu.au

Using your mobile device

1. What features on your phone did you use to create your mStory?
   Please select all that apply.
   - Text (SMS writing)
   - Mixed media messages (MMS)- Text, image or video messages
   - Email (for writing)
   - Camera
   - Video
   - Sound recorder
   - Photo editor
   - Video editor
   - Applications (eg. Hipstamatic, painting or drawing app.)
   Other:

2. Why did you choose to use this (or these) feature(s) specifically?

3. Why did you decide not to use other features available to you on your phone?
4. Did your mStory include any images, video, text, sound, music or any other items not created with your mobile phone?
   - Yes  
   - No

5. If 'yes' please state what you added and why you did not use your mobile phone to create these parts of the story:

6. If 'yes' please explain how additional non-mobile images, text, sound etc. added to your mStory:

---

Your mStory

7. Briefly describe what your mStory was about:

8. Why did you choose that theme or focus for your mStory:

9. Briefly describe how you wanted to engage a reader or viewer in your story.
10. How does your final finished mStory compare with what you had imagined at the beginning of the project? Was it better, worse, different etc? Why?

Your mStory experience

11. In what place or places did you create the text, image, video of your mStory? (eg. at home, on the bus, several places)

12. After you wrote your text, filmed your video, or took your photos did you edit, change or organise your mStory at all?
   This might involve rewriting text, using an image editor to change the picture or just selecting some images and deleting others- anything that is additional to the original.
   
   - Yes
   - No

13. If you did edit your mStory what did you do and why did you do it?

14. If you did edit your mStory where and when did you do this? (as you went along, straight after, in several different places etc.)
15. If you chose not to edit or change your mStory why was this?

16. Out of the following options, which best reflects your mStory experience.
Select one of the following.

- I had a specific plan of what I wanted to do and I stuck to this throughout the project
- I had a specific plan of what I wanted to do and adapted this throughout the project
- I had a vague idea of what I wanted to do and this became more specific throughout the project
- I had no plan or idea of what I wanted to do and just started using my phone to let a story emerge

Other: 

17. In a recent interview with an mStory participant it was found that one participant created their story in the following way: 1) They saw something interesting 2) They used their phone to capture this 3) They thought about how this could be used in a story 4) They added other ideas with their phone The participant repeated this process, exploring the same themes until they had a finished story.
What process did you go through to create your mStory? Was it different or similar to this? In your own words describe the process that you took from beginning to end.

18. How was the mStories experience different or similar to the way you currently use text, image, video or sound files?
If you write stories or blogs, or use twitter or social networking sites such as Facebook you may refer to these practices in this question.
19. What did you like or dislike about the mStory process?


20. Additional Comments.
This space is for you to write any additional comments, thoughts or suggestions you have about the project.


Thank-you

Thank-you for taking the time to reflect and comment on the mStories project. Your experiences and comments will be used as part of research that is working to understand how we make meaning in different forms using these mobile devices.
APPENDIX F: mStories dissemination
A multimedia storytelling project that might just inspire you.

A short time ago, I received an intriguing message through the Northern Beaches Writers' Group website (which is the critique group I run in Manly, Sydney). The message was from a rather clever cookie at the University of Technology Sydney (UTS), Jessica Frawley, who was working on a collaborative storytelling project. Part of ongoing research into new forms of literature, the project was to explore the telling of local stories with writing, pictures, sound and images... using only a mobile phone. Well, she had me at ‘writing’.

The project has now completed its first stage, and the stories created are up on the mStories website. The next stage is to analyse the creation process. Well, from my perspective, it was certainly a challenge...

Usually when I write a story, I devise a plot, characters, make notes on setting, then start writing. Occasionally I do this in my head over a series of weeks or months, until the story’s ready to burst onto the page. But more often it involves writing down my ideas and research (yes, I’m a planner).

But with no notepad or laptop, only a mobile phone, I found I couldn’t plan at all (ie. it forced me to become a pantser).

Storytelling today involves so much imagery and visual stimulation, plus the mStories had to be inspired by our local area/lives, so I knew I wanted to incorporate photos into my story. But I found this restricted my creativity – there couldn’t be any spaceships, alternate lifeforms, or magic in my story... at least, no obvious magic. I couldn’t get away from my immediate surroundings, like I can in front of the computer at home, yet I still wanted to find some way to stretch my imagination.

When the idea behind The Voice finally came to me, I tapped through to my mobile’s text message application and started writing. I wanted to use text messages rather than email, because email would be too similar to Word and I wanted to embrace the challenge. The first paragraph of my story was three text messages. I saved them as drafts and snapped a photo. After repeating this sequence in several different locations, I had my story. Did I like it though?

I found it hard not to write in clichés, because it took so long to write using my phone’s keypad, even with...
predictive text, and that tested my patience.

The story itself ended up being really short, because short bursts of creativity was all I could manage before being interrupted, one way or another.

After writing the final line, I also couldn’t self-edit in my usual way and seeing repetitions in my work makes me cringe. A copy edit would have picked those up.

Still, the essence of a story was there. The question now is whether that essence is enough. I’m still not sure.

Follow the links to read the mStories that other writers created with their mobile phones, and tell me what you think. There are stories from London, Sydney and Cambridge.

Mine is called The Voice, and it’s a journey of discomfort set in Sydney. You can read it here.

---

Saul Garnell says:
20 October 2011 at 10:49 am

This is pretty cool. Even though I wrote a book by using 20 minutes of train commuter time, I’m amazed that you and other writers find ways to create stand alone literary works in short intervals. I would have thought poetry would take off in this format. But stories with a beginning, middle, and end? It’s quite fascinating. Keep us posted.

Reply
Thanks, Saul! I’m not saying it was easy... but it did feel good to complete the challenge.

And congratulations on writing “Freedom Club” while commuting on the train. You must have hated any commuters talking loudly on their mobiles!

Thanks Anne! Yes, I guess it is a rather impactual story.

But I think you can tell it was written quick because of the cliche writing.

*Shhh, inner critic ...it is what it is!*

Uh oh, do you think The Voice followed me too? Yikes!

Pingback: Book Bits #55 – All Hallow’s Read, Jane Austen, apostrophes behaving badly | Malcolm’s Book Bits and Notions

Pingback: My writing is being studied at university! A blogger award! & The story of NBWG! | Zena Shapter

Zena Shapter
Proudly powered by WordPress.
Three personal updates

Update 1: My writing is being studied at university!

It’s quite an honour to have my writing studied at university. In fact, wow!

Okay, so that statement probably makes it sound more than what it is. But my writing really has just been studied, analysed and dissected in a thesis paper at the University of Technology, Sydney...

UTS graduate of a Bachelor of Science (Honours) in Information Technology – Jessica Frawley – is a gifted academic and innovator. Last year, she conceived a brilliant idea: to initiate a collaborative storytelling project whereby individuals wrote stories using only their mobile phones. You can read more about my contribution to the project here. But, not only did Jessica instigate the mStories project, she also wrote a thesis about it... one that has awarded her with the highest mark for an IT Honours thesis.

And, in writing her thesis, Jessica used the mStory I wrote to prove how increasingly visual and multimodal the semiotic landscape is becoming, also that new literacies such as those created by mobile phones are reshaping and redefining literacy as a whole. She used highly intellectual phrases to refer to my work, such as ‘intersemiotic complementarity’, ‘visual and lexicogrammatic components’ and ‘metafunctions’... and I’m real chuffed that she did.

Shapter's story uses repetition, synonymy, antonymy, meronymy, hyponymy and collocation to provide intersemiotic connection between visual and lexicosemantic meaning-making elements.

Why, thank you, Jessica! Indeed I did.

To read my mStory, just head over to the mStories website and, while you’re there, think about getting involved too. Perhaps Jessica will apply ‘Royce’s (2007) intersemiotic complementarity framework’ to your story next! She’s just been awarded the UTS Chancellor’s scholarship for doctoral research. Go Jessica!

Update 2: A blogger Award!

Dear reader – you will also be pleased to know that you're reading good quality stuff here on my blog. A few weeks ago, I received a Versatile Blogger Award from JB Rowley for:

Your blogging contribution to writing, including help and good advice for writers

Thank you, JB (read more about JB here)! It’s very nice of you to say so, and to offer me this groovy award:
In accepting this award, I am obliged to share seven completely random things about myself. Okay, so these are:

1. I have a high pain threshold
2. Number 1 is not applicable when it comes to gardening
3. I have tangled with a real, live dragon
4. Although I love living in Australia, I miss England every day
5. My favourite animals are frogs
6. I don’t drive
7. I have been mugged four times

   Re point 3: It was a komodo dragon, while I was trekking across Komodo Island in Indonesia.

Also, in keeping with the spirit and rules of this award, I will now award the Versatile Blogging Award to the following eight awesome bloggers:

- Trent Jamieson – for taking the time, effort and creativity to entertain us with Pieo. I love that guy!
- Rowena Cory Daniels – for the generous and ongoing support you offer fellow writers. I aspire to develop as big a heart as yours.
- Ian Irvine – for sharing so much of your writing life, experience and knowledge with your fans. Thank you.
- Alan Baxter – for offering readers consistent variety, information and opinion. If it’s on your blog, I know it’s worth reading.
- Bothersome Words – for speaking from deep within the editing heart of transforming manuscripts into masterpieces. I acknowledge your candour and editorial wisdom.
- Lisa Hanett – for the chirpy voice which with you share your news, information and writing experiences. You’re a pleasure to read.
- The Story Department (Karel Segers) – for making me think outside the box. You have broadened my mind into applying screenwriting techniques to my novel / short story writing.
- M J Wright – for catching my attention with your interest-grabbing headlines! My curiosity is always sated when I read on.

Readers – if you’re not already following these bloggers, it might be time to start.

Fellow bloggers – these are the rules that go along with this award:

1. In a post on your blog, nominate 15 fellow bloggers for the Versatile Blogger Award (15 isn’t
mandatory, but it's a nice gesture. Try and pick at least 5).  
2. In the same post, add the Versatile Blogger Award.  
3. In the same post, thank the blogger who nominated you in a post with a link back to their blog.  
4. In the same post, share 7 completely random pieces of information about yourself.  
5. In the same post, include this set of rules.  
6. Inform each nominated blogger of their nomination by posting a comment on each of their blogs.

Update 3: The Story of NBWG!

And, in my final piece of news, I've been in the news – as the founder and leader of the Northern Beaches Writers' Group. Thank you Sue Raines for your article in the Partners in Crime (Sydney) February/March newsletter; and thank you Jacqui Dent for the write-up in the New South Wales Writers' Centre enews. You can read a pdf of the NSWWC 'member story' Writing in Isolation here: NSW Writers' Centre enews.
I am thrilled that your writing is being acknowledged and publicised. And, how clever of you to use so many ‘onymys’ in your story.

Although I have not met you in person I feel you have a vivacious and giving spirit and that’s the sort of person who deserves every accolade that comes her way. Well done, you! JB 😊

Reply

zena@zenashapter.com says:
21 February 2012 at 2:12 pm

Shucks JB, now I wish I had a teleporter so I could beam myself over to a place near you and arrange to meet for a hug and a hot beverage! Thank you for your kind words, only a spirit as giving and vivacious would think to say such things 😊

Reply

Pingback: I’ve been awarded Versatile Blogger. A third time. « M J Wright

Pingback: Bomb the Deprecation | Write Anything

Pingback: A good, good night at the 17th annual #Aurealis Awards! | Zena Shapter

---

Zena Shapter

Proudly powered by WordPress.