

Reading visual and multimodal texts: how is 'reading' different?

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This paper examines the differences between reading print-based texts and multimodal texts within the context of changed literacy practices. The author closely analyses aspects of a novel, a picture book and an internet site to determine the similarities and differences in the way readers would process each text. The 'affordances' of modes are considered in relation to a text's purpose and meaning-making involved.

Introduction

In the realm of literacy education there is much discussion of the textual shift, and thus 'paradigm shift' (Bearne, 2003) that has occurred for today's students whose environment is filled with visual, electronic and digital texts, those texts that are referred to as 'multimodal' (Kress & Van Leeuwen, 2001; Kress et al, 2001; Kress, 2003; Unsworth, 2001, 2002, 2003). Several researchers, nationally and internationally (Arizpe & Styles, 2003; Callow & Zammitt, 2002; Jewitt, 2002; Lankshear, Snyder & Green, 2000; Lankshear & Noble, 2003; Lemke, 2002; Gee, 2003), are investigating what new theories of literacy and new pedagogies are needed to respond to a changed learning environment. This paper considers the reading process within this changed context. Although multimodal texts and print-based texts are not mutually exclusive, I will examine some of the differences that occur in the reading of multimodal texts compared with the reading of print-based texts.

Two theoretical perspectives are brought together with the purpose of considering a conceptual framework for the reading of multimodal texts. The first perspective is based on established theories of reading education that have been traditionally applied to print-based texts and mostly monomodal texts. The second perspective draws on recent innovative research and conceptualisation by others regarding the reading of images and multimodal texts.

Multimodal texts are those texts that have more than one 'mode' so that meaning is communicated through a synchronisation of modes. That is, they may incorporate spoken or written language, still or moving images, they may be produced on paper or electronic screen and may incorporate sound. Different types of multimodal texts that students commonly encounter in their educational environment in print form are picture books, information books, newspapers and magazines. Multimodal texts in non-print form are film, video and, increasingly, those texts through the electronic screen such as email, the internet and digital media such as CD Roms or DVDs.

The 'reading process' with print-based texts

Research over several decades has established that reading incorporates socio-cultural and contextual dimensions together with cognitive, affective and visual processes. Luke and Freebody's reading practices model (1999) and Durrant and Green's three dimensional model (2000) are both a culmination and incorporation of traditional and newer theories of reading. Reading involves different levels of decoding, responding and comprehending at affective and cognitive levels, critiquing and analysing. Reading is not static, it is a constant interaction between reader and text. This interaction between reader and text can occur within a number of contexts simultaneously: the social or cultural context of the individual reader, the socio-cultural context of the text production, the genre and purpose of the text, the interest and purpose of the reader and the immediate situation in which the text is being read at any particular moment. The relationship between the reader and the text within the whole reading process is a two-way recursive and dynamic interaction that occurs within both an immediate and wider socio-cultural context.

Interaction between reader and text does not occur without what is traditionally referred to as decoding. Decoding involves using strategies of word recognition, pronunciation, vocabulary knowledge, and the recognition of graphic, morphemic and phonemic patterns. For the proficient reader these happen unconsciously. Levels of meaning, depending on the type of text, can be enhanced by the reader's background knowledge of the world, of how language works and of how texts work as well as the recognition of discourses and ideologies. There are different aspects of previous knowledge that a reader may 'cue' into in the act of reading and these may be cultural knowledge, general knowledge, specific content knowledge, or linguistic knowledge. Both intertextuality and intratextuality are important aspects in the process and in the way a reader 'fills in gaps'. These gaps are those aspects that a reader needs to visualise, infer, predict, conceptualise and imagine as the words of a text will never be able to 'tell' everything. Critical reading is an important part of the reader identifying different discourses and understanding what ideologies are presented.

Reading in a multimodal environment

Is the reading of multimodal texts a different process from the reading of print-based texts? A reader of a picture book or an information book needs to simultaneously process the message in the words, picture, images and graphics. With an electronic or digital screen there will be added combinations of movement and sound. Kress and van Leeuwen (1996, 2001) have challenged the notions of traditional literacy's emphasis on print in the light of the growing dominance of multimodal texts and digital technology. They contend that a language based pedagogy is no longer sufficient for literacy practices that are needed in our information age. Crucial issues being raised by Kress and others (e.g. Heath, 2000; Bearne, 2003) are that 'the screen' and multimodal texts are developing new ways of communication. Written text is only one part of the message and no longer the dominant part. Heath (2000) has argued that visual texts are impacting on 'neural networks' and changing conceptual schemata. New types of texts require different conceptualisations and a different way of thinking. Kress (1997, 2003) describes significant differences between the words and images. He shows that,

with writing, words rely on the ‘logic of speech’ involving time and sequence, whereas the ‘logic of the image’ involves the presentation of space and simultaneity. Thus the reading of visuals involves quite a different process than the reading of words. Kress and Bearne (2001) have shown that schools foster the ‘logic of writing’ whereas contemporary children’s life experiences are grounded in the ‘logic of the image’ and the ‘logic of the screen’.

Reading of print-based texts compared with reading multimodal texts: similarities and differences

Keeping these research developments in mind, I will examine the process of ‘reading’ more closely by comparing the reading of print-based texts with multimodal texts. In the following discussion I demonstrate similarities and differences that may occur in the reading of three texts that use the subject of a ‘wolf’. The first two are literature texts, a novel and a picture book, and the third is an information text on a web site. All would be suitable for students in an upper primary or a junior secondary class.

Reading words: reading a novel

Figure 1 presents an extract from the beginning of a children’s novel, *Milo’s Wolves*.

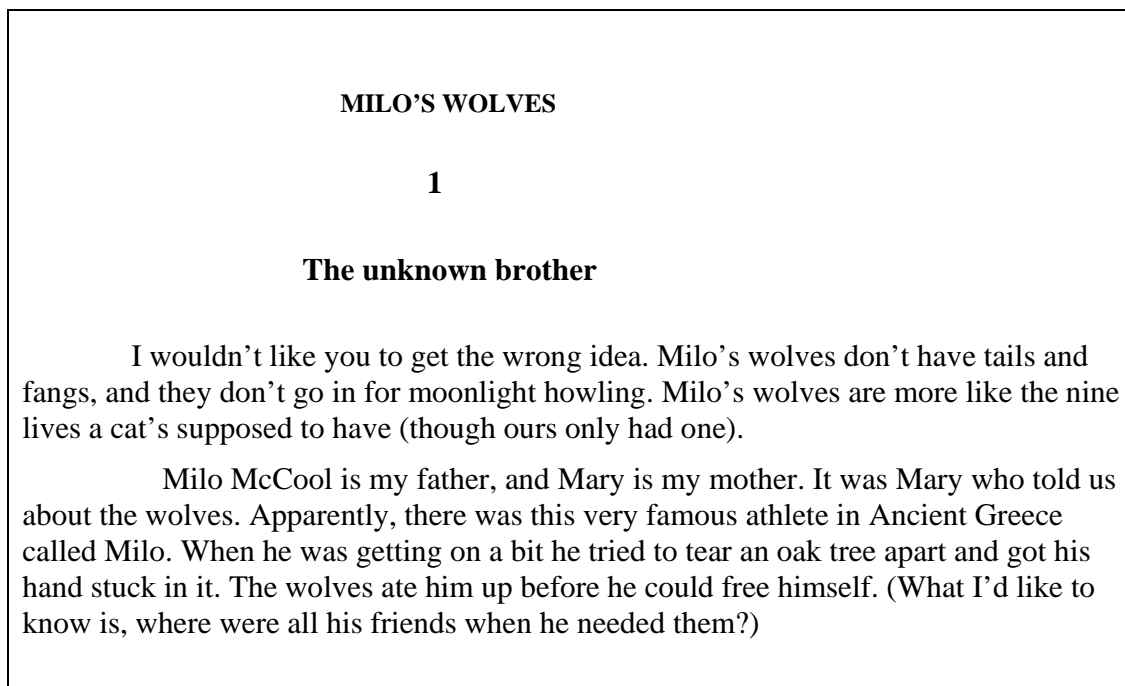


Figure 1. From *Milo’s Wolves* (Nimmo, 2001, p.3)

What does a reader need to do to read this text with meaning? First of all the reader’s curiosity would be aroused by both the unusual title of the novel itself and the title of the first chapter. An important aspect of reading is prediction and both these headings invite the reader to predict, guess, imagine or question aspects such as who or what is Milo? What sort of wolves are these? What have the wolves and Milo got to do with an

‘unknown brother’? Immediately the reader is cueing into the context of this literary genre of narrative with a sense of mystery and adventure, possibly drawing on any knowledge about wolves or stories about ‘unknown’ characters.

The reader has to instantly cue in to the fact that the first person narrator is used – a common technique for children’s novels – and to realise that they are being given a filtered point of view through this focalising character. There is a very strong interpersonal exchange between narrator and reader through the use of the personal pronouns, “I”, “you”, “us”. Experience of other novels that use this technique would help the reader. There is an accompanying colloquial style with this form of narrative, more a spoken than a written mode. Familiarity with how this language is used in literature is needed. Several intertextual references are made, such as the reference to Greek mythology, to the habits of wolves and to the folk idiom of a cat having ‘nine lives’. The reader has to understand the way wolves are referred to metaphorically, the way this metaphor will be sustained throughout the narrative and to detect the humorous undertone of the asides in parenthesis.

The orientation of the novel suggests an aura of mystery with the use of the one word ‘unknown’ in the heading for the chapter ‘the unknown brother’. The reader is immediately brought into the context of a family situation with the narrator telling us the names and some details about her/his parents. The tone and asides suggest that this will be a humorous novel. The fact that the narrator calls the parents by their first names is unusual giving the reader a sense that she/he is more ‘equal’ to them, even in some ways ‘superior’ to them. The names and the personal pronouns convey particularly the interpersonal meaning and establish a relationship between child reader and child narrator.

For a proficient reader, all these understandings – particularly previous knowledge of narratives - would interact simultaneously with intertextual links, an important aspect of reading literary texts. This process is an excellent example of how much of reading does not rely on the decoding of print but occurs ‘before we even look at the page’ (Wallace, 1990). For full appreciation of the meaning the reader has to be ‘reading’ at a number of different levels – interpersonal, symbolic, social. These are all ‘inside the head’. All this meaning is conveyed through the choice of words and the way they are arranged, in other words, the grammar of the text.

Reading words and images: reading a picture book

How does ‘reading’ occur when images are part of the text? Is the reading process as described for the novel, a print-based text, applicable to the reading of images in a picture book? As a comparison, I will examine the cover of the narrative picture book *The Wolf* (Barbalet and Tanner, 1991) which also uses a ‘wolf’ metaphor within the narrative.

The cover, reproduced in Figure 2, shows the words of the title, *The Wolf*, at the top within a framed illustration of three children sitting around a table. Two of the children are concentrating on stacking playing cards into a pyramid formation. Another child, a girl, is looking out towards either the reader/viewer or something else. In the background is a dark sky with light reflected from the moon onto some clouds. Some

light is reflected on the children's faces, more so on that of the girl on the right. The frame is surrounded by a blue that tones in with other hues of blue and blue-grey in the clothes, the sky and the children's eyes. The name of the author and illustrator at the bottom are outside the frame, separated from the title and its picture.

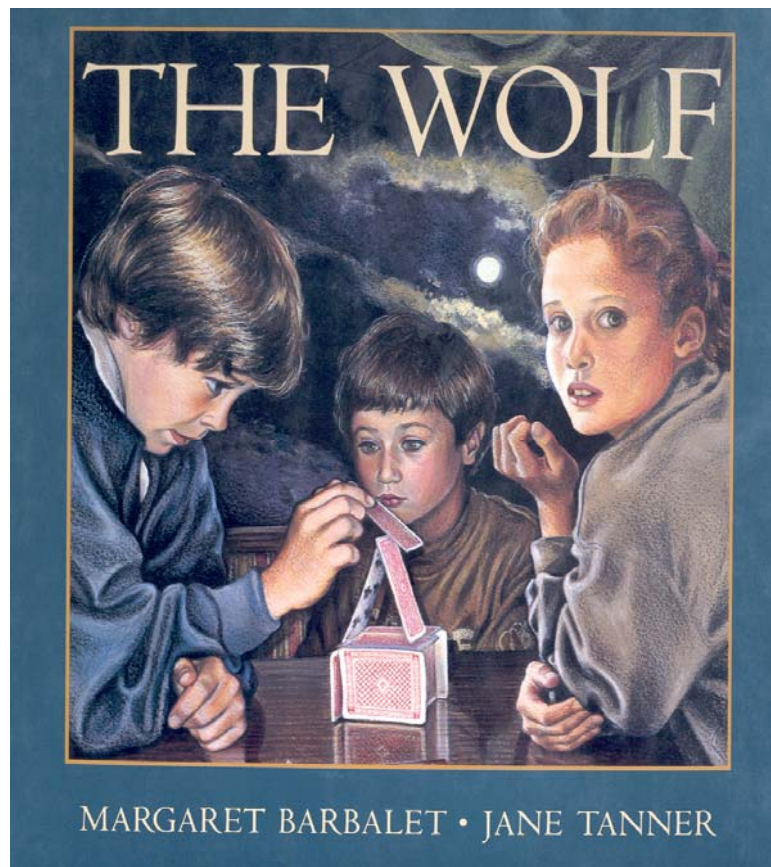


Figure 2. Front cover from *The Wolf* (1991). Written by Margaret Barbalet, illustrated by Jane Tanner. (Reproduced with permission from Penguin Books Australia Ltd.)

There are a number of things that a reader needs to know in order to be able to 'read' the cover and to begin to predict how a narrative picture book with this title will develop in plot. While there are only the two words of the title to introduce this story

the picture itself conveys meaning. Both contextual knowledge and background knowledge are needed for the reader to infer that there is something mysterious and frightening suggested by the title '*The Wolf*' with no wolf, but three children, shown in the picture. This absence of the wolf, the darkness and the full moon give 'the wolf' a more sinister connotation than if a wolf was included in the scene or if the text was an information book about wolves.

An experienced reader will instantly know this book will be a narrative. Images of wolves are highly significant in literature of western society and this cultural knowledge may be invoked. A reader may feel the unease created by the image – the children seem as if they are waiting, trying to distract themselves with the cards. What are they waiting for? What has the wolf to do with them? They could be inside but at the same time seem to merge towards the evening landscape of clouds, sky and moon. The absence of a barrier between a safe world inside and the world outside reinforces the sense of threat. Where is the wolf? What is suggested by the image of the playing cards? A reader who is familiar with the meanings constructed by particular narratives, would glance at this cover and understand many of these aspects instantly and respond imaginatively or affectively.

These types of responses would occur unconsciously in the same way that a fluent reader makes meaning from a written text, yet the responses are evoked by the effect of visual codes such as colour, framing, line, angle, perspective and vectors, in other words the 'visual grammar' (Kress & van Leeuwen, 1996; Simpson, 2004; Unsworth, 2001). In interpreting meanings from images we don't need to 'decode the words' as with print but we do need to be able to 'break the visual codes' in a different way. This involves a different type of interpreting of a different coding system. We need to be able to identify where the image-maker is using colour, position, angle, shape and so on to construct a meaning. There are other effects of images that are different from words, particularly at the affective, aesthetic and imaginative levels.

For example, with the cover of *The Wolf* the different hues of blue, grey and brown suggest a sombre, suspenseful mood that is reinforced by the contrasting effects of dark and light. Intensity is created by the facial expression of each child who is either staring at the cards or out at us. The angle is medium distance which draws the reader towards involvement with the characters especially with the girl who is looking out at us and 'demands' us to be drawn into this situation, to be curious and uneasy.

With the picture book, interaction between reader and text is different because of the use of images and how images interact with words. The image is different from the words that we read sequentially and syntactically. The image is there at once and fills the page. Do the reader's understandings and responses all happen holistically and simultaneously? How do we know what part of the picture the reader's eyes go to first and in what order? What is the reading path? Do our eyes go immediately to the girl on the right hand side of the image because of the diagonal vector of light between the moon and her face.

For both the reading of words and the reading of pictures for these two texts, *Milo's Wolves* and *The Wolf*, the similar processes that would occur would be prediction, the activation of schema or repertoire and cueing in to various contexts. For each text the reader would be questioning and imagining a plot while drawing on background knowledge of the world, and knowledge about narrative genre whether it is presented through words or pictures. A reader would also be responding to interpersonal meanings in each text. The purpose of each text is similar because they are both literary narratives and written to engage a reader in the story at a number of different levels. The wolf metaphor is used in the novel for humour and irony while in the picture book for representing fear.

Reading words and images: reading an electronic text

Each of the above literature texts, though very different, use the 'wolf' as a metaphor for their narrative. Use of metaphor and multiple layers of meaning is itself a characteristic of narratives whether in the form of novels, picture books or film. Meaning is developed differently in information texts, whether in print or electronic form. To stay with the theme of 'wolves' I will now discuss a website on the internet that is an information text. It is the website for *The International Wolf Center* as shown in Figure 3.

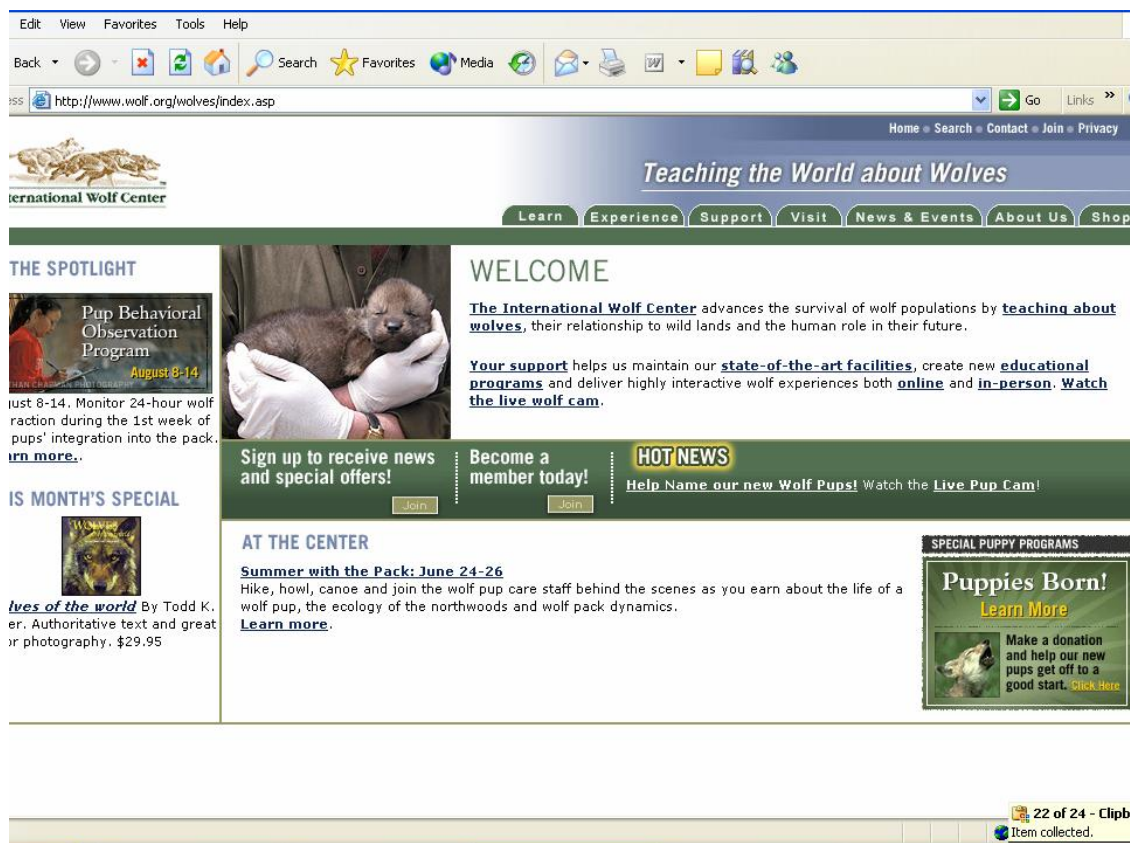


Figure 3. International Wolf Center homepage: <http://www.wolf.org/wolves/index.asp>

Consider what a reader has to do to gain meaning as she/he enters this site. With this text the technological differences [i.e. screen, windows, frames, links, navigation bars, menu buttons, use of cursor, mouse] are designed to assist the reader's learning, to attract and to maintain interest. A reader entering this site will do so to obtain information about wolves, will have expectations firstly about wolves – depending on the knowledge she/he already has - and secondly about what information the site will provide. The focus of this site claims to be about learning as it states its aim to 'teach the world about wolves'. The reader can find all kinds of information about wolves with a variety of linked activities. The background the reader brings to the website text, needs to link with the geographical and scientific contextual information and the understanding of the information that, again, occurs 'inside the head'.

This is a totally different text from the literature texts and has a different purpose as it is an information genre. It does not work in symbols or metaphors but in providing factual information in words, graphics and images. Its purpose is to give the reader who enters this text a variety of information about different types of wolves, their habitat and characteristics. At the same time the site is using many strategies to obtain financial commitment from the reader and the reader needs critical discernment to recognise the strategies of persuasion. The layout of the home page consists of several framed sections, with links to other pages, that are each designed to engage us to not just learn about wolves but to become involved in the "wolf center" in some way. Therefore the home page is communicating to us as if we are members of a club with the 'Welcome' section being the largest framed part, and with the other framed sections having headings such as 'In the News', 'This month's special', and 'Hot News'. We can choose to become involved with the staff to learn more about wolf pups, so we can 'hike, howl, canoe and join the wolf pup staff...' on excursions, for a fee of course. The language of the menu buttons invite us to be active participants, e.g. 'learn', 'experience', 'support', 'visit', including the commercial 'shop' section.

A reader can choose different pathways depending on their interest. For example if they choose the 'Experience' menu button there are offers for outdoor adventure programs with colourful photos of people trekking in the snow at <<http://www.wolf.org/wolves/experience/experience.asp>>. The reader is invited to 'Meet our Wolves' so can link to this page at <http://www.wolf.org/wolves/experience/meet/meet_main.asp>. On this page there are photos of individual wolves with their names under the photo. A reader can click on the photo to go into a digital 'photo album' with separate windows opening to show other pictures of that particular wolf with some written information. Alternatively you can click on to the name of the wolf for more detailed information on another screen.

Photographs are most important to represent 'real' wolves in their real-life settings. On the home page, the most salient image is the photograph of the white-gloved hands holding the wolf puppy, signifying the commitment of this centre to care for wolves. Authenticity is important to this centre's communication so one section of the site uses a digital camera or 'wolf cam' to provide up-to-date photographs of wolves in their geographical setting to within '60 seconds' of the viewer clicking on to the site. Here is

an attempt at creating virtual reality at

<<http://www.elyminnesota.com/cams/wolfcam/index.pho>>.

In the 'Learn' section at <<http://www.wolf.org/wolves.learn/learn.asp>> there are options for either students or teachers to choose different pathways for sites that may meet their needs.

Unlike a continuous narrative, every page of this website is fragmented into framed sections so that information is segmented. There is no beginning or end and the reader chooses their own pathway by using the menu buttons along the top of the screen or clicks on to hyperlinks within frames. There is no need to go to every page or every link. What sort of reading is happening here then? What will a reader do first – read the words or the images or use the cursor to move around the screen and to click on to different links without necessarily reading every word?

Similarities: meaning-making

The similarities in the reading of these three different texts occur in the meaning-making and interpreting process. Whether 'reading' words or images, or both, in a novel, non-fiction text, a media text, a picture book, an information text or an electronic screen we need to be able to understand the message to make meaning. We need to understand the social purpose of the particular text and its cultural context and this understanding will be linked to our own purpose in using the particular text. Whatever the text we often need to 'fill in the gaps' to understand the cultural, social and specific contexts. Any understanding is going to be tied to our previous experience or knowledge in some way. The previous discussion of each of the three texts would suggest that the reader's schema is a major factor in both the reading of print-based or multimodal texts. The way we interpret any new text, whether words or images, will then produce new interpretations, new responses, and new meanings. We go through a recursive, interactive process as we read words or look at images, negotiate electronic screens and hyperlinks. We make links with our previous experiences of words, images, screens and their content, then make new meaning. A new text will trigger these new responses and interpretations. These are processes that go on 'inside the head' of the reader. These 'inside the head' processes that contribute to meaning-making are summarised in Table 1.

Table 1 Similarities in the reading of print-based texts and multimodal texts: meaning-making

Similarities: meaning-making
<ul style="list-style-type: none">• Understanding of wider sociocultural context.• Any text is part of a particular 'genre' (e.g. literary, information, media, internet, 'game'/digital).• Reader adjusts expectations according to text type or purpose.• Various schemata are activated – background knowledge, knowledge of topic, knowledge of genre• There is an interaction between reader and text for meaning to be made. Meaning can be made with ideational, interpersonal or textual metafunctions. The reader is 'engaged'.• Understanding and interpreting at cognitive & affective levels. [e.g. literal, inferential, critical responses, empathising, analogising.]• Understanding, analysing and critiquing ideologies, point of view, 'positioning'.• Imagination can be activated.• Information can be obtained.• There is a a specific context, discourse and coherence.• Skills specific to each type of text need to be activated by the 'reader'/viewer [e.g. aesthetic/efferent; predicting or scanning/skimming]

These processes are all part of meaning-making, the core of reading behaviour, as well as all communication. The processing will occur depending on the type of text, its purpose and the reader's purpose. There are, however, many differences that occur with different text genres as well as with the wide range of multimodal texts. If meaning-making occurs as a basic process for reading all types of texts, the differences then must be related to the way different modes contribute to the process.

Differences: processing modes

What are these differences? Clearly differences are dependent on the way modes are processed and how particular modes activate a meaning-making process for the reader. In multimodal texts, compared with print-based texts, the reader will use various senses (sight, hearing, tactile, kinaesthetic) to respond to other modes. Table 2 summarises some of the differences that may occur.

Table 2 Differences between reading of print-based and multimodal texts.

Reading print-based texts	Reading multimodal texts
Words: The words ‘tell’ including the discourse, register, vocabulary, linguistic patterns, grammar, chapters, paragraph and sentence structure.	Visual images: The images ‘show’ including layout, size, shape, colour, line, angle, position, perspective., screen, frames, icons, links, hyperlinks.
Use of senses: visual some tactile.	Use of senses: visual, tactile, hearing, kinaesthetic
Interpersonal meaning: developed through verbal ‘voice’ - through use of dialogue, 1 st , 2 nd , 3 rd person narrator.	Interpersonal meaning: developed through visual ‘voice’ : positioning, angle, perspective – ‘offers’ and ‘demands’.
Verbal style: including tone, intonation, humour, irony, sarcasm, word play, developed in the use of ‘words’. Typographical arrangement, formatting, layout, font, punctuation.	Visual style: choice of medium, graphics, animation, frames, menu board, hypertext links.
Verbal imagery: including description, images, symbolism, metaphor, simile, alliteration [poetic devices with words, sound patterns].	Visual imagery: use of colour, motifs, icons, repetition.
Reading pathway: mostly linear and sequential. Reader mostly follows.	Reading pathway: use of vectors – non-sequential, non-linear. Reader has more choice and opportunity to interact.

While differences are itemised in Table 2 these are not always occurring separately, as many multimodal texts combine varieties of spoken or written forms. Particular modes and combinations of modes may influence a reader’s meaning-making process. Meaning will be affected by the ‘affordance’ (Bearne, 2003; Kress, 2003) of the modes as well as the purpose of both the reader and the text.

Affordance and purpose

Affordance means what is made possible by the modes used. In the case of print-based texts this affordance lies in the ‘telling’. The way the words are used in a narrative such as *Milo’s Wolves* enables the young reader to engage with the female narrator. The informal language and humorous asides reassure the reader that the ‘wolves’ may not be dangerous because they are used as a metaphor for the misadventures of the father, Milo. We are also given the sense from the early stage of the story that this Milo will be more of an anti-hero than a tragic figure like that of Greek mythology. It is the words (i.e. the whole verbal style, discourse, figurative language and grammar) or the ‘telling’ of the first-person narrator that reassure us. In contrast, the affordance of the visuals on the cover of *The Wolf* creates unease through the choice of participants and use of colour, angles, framing and perspective. The ‘showing’ of the elements of the visuals, together with the two words of the title, synchronously create the unease that is sustained throughout the book.

The purpose of each of these texts is to engage the reader in a literary narrative and the affordances of the modes are therefore designed to maximise this engagement and to create particular effects such as humour or fear. With the *International Wolf Center* website the purpose is to inform the reader but to engage them so that they become involved in the organisation itself. In this site the affordances of the words of the text are crucial in inviting the reader in various ways. The affordances of the site allow the reader to navigate various sections of the site using the cursor and mouse to move through screens, windows, frames, icons, links, and hyperlinks. With the electronic screen there are often multiple 'voices' being presented simultaneously to the reader through the photographs in different frames along with inserts and the words in the text. As discussed previously, they invite the reader to participate in the Centre by going to 'virtual' sites or by joining various 'real' programs that are offered.

Conclusion

Through this examination of extracts from three very different texts I have suggested how a reader might respond to each text. It is evident that the process of meaning-making itself occurs in similar ways for print-based and multimodal texts, yet the 'processing' of modes is very different. It is evident that the 'affordance' of different modes, within the purpose of a text, have an essential function in constructing meaning. As multimodal texts are becoming the 'norm', a conceptual framework for reading multimodal texts needs to include an understanding of the affordance and the processing of different modes. To inform relevant pedagogy, further analysis is needed of the complex combinations of modes in narrative and factual multimodal texts. At the same time further research is needed to examine how learners construct meaning from these texts.

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