

Multiliteracies: New Pathways into Digital Worlds

New Pathways into Digital Worlds

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Abstract: This investigation describes a theoretical model that considers the way in which learners establish and develop meanings in popular-culture contexts. These contexts have become increasingly sophisticated and multimodal in the digital age. The framework is based around the multiple modes of meaning as proposed by The New London group (2000). It explores the nature of multimodal texts, the multiliteracies learners bring to the texts and the transactional nature of the meanings generated between the two. Such connections enable learners to access new digital worlds. The paper draws on Rosenblatt's transactional theory of the literary work, and Iser's phenomenological approach to reading to inform our understandings of the meaning making processes. It also explores learner engagement when exposed to digital forms of texts and provides a focus on the increased complexity of these processes when learners move away from the more traditional forms of written literary texts.

Keywords: Multiliteracies, Multimodal Learning, Literacies, Visual Literacies

PRESENT DAY TECHNOLOGIES have changed the ways in which many young learners use their leisure time, the range of literacies they use to make meanings from texts and the sorts of learning they engage with as they access the digital worlds of new media. While the researchers and writers of this paper, have engaged in a range of research projects related to multimodal texts and multiliteracies, their purpose here is to describe the theoretical model that they are developing in relation to the ways learners access meanings from multimodal texts, with a particular focus on the multimodal games that take players into new worlds.

As Buckingham and Sefton-Green (2003) recognize the development and use of such texts gives rise to the debate about the degree of structure and agency that occurs within these forms of texts. They rightly point out that the playing of games and the use of the different types of texts that these forms of entertainment generate gives rise to far more complex thinking about the roles of both structure and agency rather than simply setting them up in opposition to each other. They argue that while the amount of activity required by the users to engage with these texts gives them degrees of autonomy both in the games and the social milieu that exist around them, the design structures of the texts and the related marketing structures also play an important role. In principle, they consider that Anthony Giddens's (1984) theory of structuration provides a 'useful way of moving beyond this dichotomy between structure and agency' in that he suggests 'structure and agency

are interrelated and mutually interdependent: agency necessarily works through structure and structure necessarily works through agency' (p. 390²). They conclude however, that his work lacks 'empirical specification of how these processes occur (p. 390).

With these thoughts in mind and our previous research findings we have begun to develop a theoretical model to help us to explore the processes that users of these texts draw on in order to access and make meanings from them. It uses, as a foundation The New London Group's (2000) theory of multiliteracies. They propose a framework which identifies the multiple modes of meaning that designers of these texts work with, and the reciprocal multiliteracies that these demand of users if they are to have some agency in making meaning from such texts. It then explores the ways in which these intersect and extend Rosenblatt's (1978) transactional theory of the literary work and Iser's (1988) phenomenological approach to reading. Through this process our intent is to inform our understandings of the meaningful ways game players engage with multimodal texts to access portals into the digital worlds offered to them in the games they choose to play. The paper will draw on a range of data specifically relating to Pokemon to demonstrate this meaning making in action.

In 2000 The New London Group considered it was time that literacy pedagogy moved from its traditional role of 'teaching and learning to read and write in page-bound, official standard forms of the national language' which meant that literacy pedagogy 'was restricted to formalized, monolingual,



monocultural and rule-governed forms of language' (p. 9). As a consequence they argued that 'literacy pedagogy now must account for the burgeoning variety of text forms associated with information and multimedia technologies' (p.9). They identified visual, linguistic, spatial, audio and gestural modes of meanings, combinations of which designers use in the construction of their multimodal texts. Specifically, the different forms and varieties of Pokemon texts clearly fall into this category (see Clancy and Lowrie 2002).

In the reciprocal sense, the users of these texts need access to a range of literacies if they are to make meanings from them. No longer is it sufficient to simply read words on a page. The dynamic nature of multimodal texts give multiple access points as they interplay across a range of modes of meaning. Such texts require users to have the ability to work with visual, linguistic, spatial, audio and gestural literacies if they are to successfully access their chosen texts.

Although multimodal texts in digital forms offer many different possibilities and experiences from the more traditional forms of written text, there are also enough similarities to make it worth considering the kinds of cognitive strategies and processes readers of print use to make meanings as a starting point to developing any theory that underpins meaning making for digital texts.

The interactive nature of the connection between the user and the multimodal texts is evident in that any observer can watch players physically pressing the necessary buttons as their eyes flick backwards and forwards across the screen. While the physical aspects of reading may not be so obvious, Nodelman & Reimer (2003) none the less suggest 'reading also is an interactive process' (p. 52), but their focus is on the necessary cognitive processes readers engage in to make meanings from the written text. A similar argument can be put forward for users of multimodal texts, in that the physicality of their activity is only the tip of the iceberg, it is the cognitive engagement with the text that provides the real key to unlocking the portals into the digital worlds. This argument is based around the development of schemata, pre-existing structures that users develop through recalling, interacting with, modifying and applying past experiences. While some of these will come from real world experiences there is also the cumulative knowledge that users develop over a period of time engaging with the texts of their choice. Cognitive psychologist Neisser (1976, p. 22) argues that 'because schemata are anticipations, they are the medium by which the past affects the future; information already acquired determines what will be picked up next'.

Buckingham (2003) also recognizes the importance of cognitive processes, '(p)laying a computer game... involves an extensive series of cognitive processes: remembering, hypothesis testing, predicting and strategic planning' (p. 175). In the case of Pokemon, Buckingham and Sefton-Green (2003) discuss the detailed taxonomy that users require and the amount of long term engagement needed to find, process, remember and apply their knowledge, if they are to fully enjoy their texts.

Such thinking forms the focus of a reader response to text and both Rosenblatt (1978) in her transactional theory of the literary work, and Iser's (1988) phenomenological approach to the reading process develop their thinking within this framework. Rosenblatt theorizes that in the process of finding pathways through the text readers develop an active engagement with the text as they work through organizing their initial basic responses, seeking a framework to fit the meanings they are working with, rereading to check their findings, foregrounding different experiences and continually revising. She argues that 'the transaction will involve not only the past experience but also the present interests and preoccupations of the reader' (p. 20). Rosenblatt (1978) attributes her use of the term transaction to the "transactional" terminology developed by John Dewey and Arthur F. Bentley, in that it contradicts the notion of dichotomies. In so doing she designates transaction as being 'the ongoing process in which the elements or factors are, one might say, aspects of a total situation, each conditioned by and conditioning the other' (p. 17). She sees that the relationship between the two is not linear '(i)t is a situation, an event at a particular time and place in which each element conditions the other' (p. 16).

She makes a distinction between the personal lived through experience of aesthetic reading (what happens during the reading) and the more impersonal non-aesthetic reading where concentration is on finding the information required (what remains after the reading). In essence, the difference between the two is what the reader actually does, the stance adopted and the activity carried out in relation to the text.

In a similar manner, Iser (1988) posits that what brings the literary work into existence is the convergence of the text and the reader (p. 50). He considers the process to be dynamic, with a degree of autonomy for the reader, but he also recognises that 'written text imposes limits or unwritten implications' (p. 51). He describes the reading process as 'a sort of kaleidoscope of perspectives, preintentions, recollections' (p. 54). He considers that 'through the reader's mind working on the raw material of the text they enable it to reveal its potential multiplicity of connections' (p. 54).

To do so readers engage in processes of filling gaps by anticipating and retrospectively, by examining the fragmentary nature of the text and searching for consistency across the fragments by picturing, grouping and putting ideas together, and by using subsequent readings, and seeing the text from different perspectives.

However, because these theories have as a focus, the literary work, they also have their limitations in relation to thinking about the multimodal texts of the 21st Century. While they recognize that the process of reading is an interplay of structure and agency between the author's text and the reader, we believe that it is more complex than this. What these theories don't allow for in any explicit way is the notion of texts that use more than the linguistic mode of meaning in their creation, the role of the author's schemata and intentions, and a recognition of the pervasive influences of those that actually produce the texts and the socio-cultural, economic and political contexts in which they work. Rather than it just being explored as the interplay between the text and the reader, we consider that it is also important to explicitly acknowledge these other factors.

There is also the assumption that the texts they are talking about rely on the written linguistic mode of meaning, and that readers already have the basic decoding skills required to access this. Given the time of their work and the changes technology has wrought in the development of text we now cannot work with the same assumptions. Game players need to be multiliterate, which requires them to develop new and different sets of code-breaking strategies, in order to take them beyond the linguistic mode of meaning.

Given the additional dimensions identified here, in the context of game playing in digital worlds, we see this as loosely providing two main levels of interactions. Firstly, the micro levels of the interplay across the designers, the text and the users and secondly, the macro levels of interplay which occur around the structural constraints and opportunities of the game manufacturers (usually multinational companies) and the socio-political and economic contexts in which these games are constructed.

In terms of finding intersections, between these theories and the ways game players use multimodal texts, what sorts of meaning making processes do these theories alert us to? The basic principles of organizing ideas by anticipating and retrospectively, looking for a framework for meaning by bringing together fragments of texts that will enable consistency across the text, rereading and checking and reading from different perspectives all have a role to play. They also recognize that there are different ways of reading factual and fictional texts.

Players are constantly organizing their ideas by anticipating and retrospectively ,

Morgan: These are the two pokémon you need to catch. When you find these two...when you find that one after that one, before...no. When you find this one you've got to save it.

Researcher: What's this one called? Is it a water pokémon?

Morgan: It's not a water pokémon, it's a fire pokémon...and that other one I showed you, it was actually a water pokémon and a fire pokémon.

Researcher: It can be both?

Morgan: Mmm (nodding).

Over time players work at building up their schemata, a process which includes finding frameworks for meaning and recognizing the often fragmentary nature of the texts and the need to fit all the pieces together.

Researcher: So you had watched to cartoons before (*being given the Gameboy*)?

Savannah : Yeah but we have the videos of it and it helps us out with Pokémons.

Researcher: So how does the video help you out?...Tell me some of the things you learnt from the video.

Savannah : We learn about what pokémon and what sort of powers they can use...and um, what sort of pokémon they use.

Evidence from our research indicates that users of multimodal texts use both the aesthetic and non-aesthetic stance when playing their games and often they are constantly moving backwards and forwards along the continuum between the two. For example, in the following quote, Morgan feels like he is in the game, he is taking an aesthetic stance in that he is the person on the bike.

Researcher: Tell me about these little things down here...Tell me what you use them for.

Morgan: I use that to um like, I've got my bike and it's got this thing next to it, and when I press that I get straight on my bike....sometimes on your bike you get to do wheelies like that. Sometimes you just bounce.

In this next quote however he has clearly been playing from a non-aesthetic stance in that wanted to retain information about the game.

Morgan: You get Garado, he's a water pokémon. A big one. You get that in Shootport City. It's overseas. You need to dive to get there. You

need to dive down and there's like an opening underwater. So you go through there.

Researcher : That's an overseas city, or is it underwater?

Morgan: No it's not underwater, it's on top. You go under water. You press speed. You go up then you...that way and then you find you are in it.

Researcher: So it is lucky that you found that or did you know to go there?

Morgan: I know to go there. In the old game I went through it. I went through the whole thing and I actually went through and I didn't get the big Pokemon.

In terms of working along a continuum between the two stances, Morgan expresses it in the following way.

Researcher: When you are playing this game, do you feel like you are in the game playing it or do you feel like you are outside the game?

Morgan: Outside the game. Yeah, but sometimes I wish that this was the Pokemon world, but it doesn't come true.

Researcher: So when you are playing it, it doesn't feel like you are in there playing it? You feel like you are out playing in a different world ...

Morgan: Yes I play myself but I am going around. I play myself in the world. I am like in this world but my person is in that world.

Comments from the players, however, give us additional information in a number of ways. Firstly there is evidence of their use of a range of literacies. For example, their spatial and visual literacies become important when they are using the maps to find their way around the game. Visually they continually move across a number of screens. Sometimes there will be a number of frames of information on the one screen, such as a health point graph at the bottom of the screen while the rest of the screen is showing another aspect of the game. At other times, when they are working with maps they flick screens from large overviews of a whole area to a more detailed smaller section from part of that area. In a spatial sense they have to use these maps to negotiate the pathways they want to make through the game.

Researcher: Why do they give you two maps?

Morgan: That shows you in that bit there, that shows you the whole place (*referring to the Pokenav map of Hoven*). .

Researcher: And if you move that little bit, will that change that?

Morgan: Yep. Even if I go there it shows me every place. That's Shootport City, that's the Poke Gym and it's the last place to battle.

Their auditory literacies assist them to recognize different pokemon and particular settings.

Morgan: ...I'll just show you the place. So you go here, then you go up there and go in that blizzard, I can easily show you because I know what thing is in it. (*Music is heard*).

Researcher: Does the music change in the place you're in as well?

Morgan: Yep.

Researcher: ...Can you tell by the music what place you are in?

Morgan: Yep. Sometimes this is that music and in another city the music is the same. Sometimes it is like that.

Researcher: So sometimes all cities are the same, but in the department stores it is different music?

Morgan: It is like houses, they are the same...In the Pokemon Centre it is different. In every Pokemon Centre it is the same music.

Secondly, there is also some indication of the role economic conditions play. This is evidenced in the players constant references to other forms of pokemon text they use when looking for additional information. Having the economic capacity to purchase additional texts (eg handbooks, videos, cards, etc) helps players to inform and add to their understanding and enjoyment of the game. This multifaceted dimension of the texts promotes many profitable marketing opportunities for the makers/producers of these games.

In terms of socio-cultural dimensions, there is also evidence of this both in the construction of the game and the particular social milieu generated between players. Within the game itself although there are battles, there is also a responsibility on the players to take care of their Pokemon. Additionally there is a respect for parents in that players have to gain mum's permission before setting out their journey, and when they earn money from their battles the mother has to look after part of it. A structural expectation such as this also has economic connotations within the design of the game.

The development of the social milieu highlighted an interesting spectrum of ideas. Some players told us they specifically became engaged in the game to make friends and to be accepted by groups within their school and neighbourhood, while for others, particularly a sister and brother, it was a very private activity that was only acknowledged within the family. In this way they kept their game-playing secret because they did not want other players to spoil their game by telling them what to do. They

wanted to find it all out for themselves. Interestingly these same players were not interested in looking at the cheat sites, an activity which for many players was an integral component of learning about the game.

While we are still in the process of refining and developing our ideas in relation to framing a theoretical model that illustrates the ways in which learners establish and develop meanings from multimodal popular culture texts, we believe that our explorations to date are offering rich opportunities to think differently. By carefully examining the potential of these texts to have players draw on a range of sophisticated cognitive processes, we argue that they offer learners many highly motivational avenues for learning. We also think that by developing our theoretical under-

standings in these areas, it will be possible to apply these understandings across a range of learning contexts in an informed manner.

As Nodelman and Reimer (2003) state, when referring to the process of children making meanings from children's literary texts, '(i)f readers possess expertise in filling gaps, they can turn a small amount of information into a surprisingly rich experience' (p. 54). These possibilities for rich experiences are also available when learners work with multimodal texts, but the complexity of the text designs and the need for users to constantly refer to multiple texts, while drawing on a range of different literacies adds multiple dimensions to the complex nature of the ways these interactions take place.

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