

The bothersome crow people and the silent princess: exploring the orientations of children as they play a digital narrative game

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Abstract

This study builds on and extends our understanding of literacy through exploring children's encounters with a digital narrative game. The research analyses different stances or orientations that children take as they progress through the game and how they draw on schematic understandings about narratives and digital gaming to support their game-play. The study extends previous research exploring how children make meaning from visual texts and how we draw on resources across and between modes to understand narratives. Taking a socio-cultural approach, the research suggests a framework of possible orientations that children take as they engage with the storyworld of the game, showing how this is at times strategic and critical, and at other times immersive and reactive.

Key words

Digital games, reading, gaming literacy, multimodal, reading orientations, storyworlds

Introduction

In this article I argue that regarding gaming as a literacy practice adds to our understanding of children's engagement with narrative and can inform our approaches to teaching literacy and in particular, reading in the classroom. Using empirical data I propose a framework of different orientations aiming to illuminate the complex approaches that children take towards gaming narratives. What I term 'orientations' relate closely to what others have called 'stances' in theory about reading and about gaming (Rosenblatt, 1994; Murphy, Wilkinson, Soter, Hennessey, and Alexander, 2009, Soter et al, 2008; Gee, 2105), that is, the positions taken as a reader/gamer to approaching the text and whether these are aesthetic and immersed or more strategic and analytical. I argue that consideration of player orientations in gaming can enhance what we understand about children's approaches to reading verbal text if we take their engagement with the presented narrative features and storyworlds as potentially transferable across different story modes.

In the 21st century, children experience narratives in many forms yet the National Curriculum for England (Department for Education, 2013) does not explicitly include digital media. Because of this, it is important that teachers' conceptualisation of 'literacy' in the English context encompasses the full range of modes available to children so that when they see words such as 'reading' and 'writing' they automatically extend them to include response and creation of digital and multimodal text forms. Several authors (for example, Maine, 2015b; Marsh and Millard, 2000; Whitney, 2010) have noted that whilst technical codes might vary, there can be some commonality in approaches to reading narratives, particularly across visual and filmic modes. I argue that these commonalities can

also be apparent in digital games that have a narrative drive and therefore similar overarching structures. Bearne and Bazalgette's 'multimodal progression focuses' (2010, p. 7) utilise these generic features and offer a comprehensive view of progression in reading, analysing and responding to multimodal texts, demonstrating the skills and semiotic resources (Gee, 2007) that children use as they encounter different text modes.

Others have noted that children's literacy practices at home might mean that they come to school with quite sophisticated domain-specific and narrative schematic understandings (Parry, 2013; Levy, 2011, Wohlwend, 2015), yet as the literacy curriculum does not favour more popular culture modes, children are not enabled to make the links between what they already know about stories through films, television, gaming and digital story apps, and apply it to more traditional forms of reading verbal text. It is important that research continues to develop our understanding of literacy to embrace the multimodal potential of a variety of text forms, and promote their use in schools in order to keep challenging traditional literacy curricula, not least to close the gap between what children experience in their lives outside school and their more formal learning.

A useful inclusion in the field of literacy studies is research focused particularly on children's digital gaming experiences, with frameworks for understanding the reading and play that happen when these are encountered (Apperley and Walsh, 2012; Beavis, 2013; Buckingham and Burn, 2007). The pervasion of tablets and digital 'apps' has given much wider access to games with a narrative drive and potential storyworlds for children to create and extend. When engaging with a digital game, we draw on our knowledge about narratives, transferring our schematic understanding across modes, and our expectations for how stories might unfold (Douglas and Hargadon, 2000). Additionally we use domain-specific schema about digital gaming and 'the rules of play' (Salen and Zimmerman, 2003) to help us navigate through a game and its goals.

Can playing a narrative game be called reading?

We make sense of, or read, narratives by making connections to our prior knowledge of the world, other known texts and our personal experiences (Anderson and Pearson, 1984; Cairney, 1990; Pressley, 2006; Tennent, 2015). We create mental images and storyworlds to embellish this meaning and shape our understanding (Bruner, 1986; Keene and Zimmermann, 2007; Maine, 2015a). Wells suggests that it is the sharing of narratives that enriches our social reality (2009) and Hardy argues that narrative is 'an act of mind' (Hardy, 1977). It is how we make sense of the world itself.

Embracing gaming as a literacy practice then raises the question of whether we *play* or *read* narrative games. If we use the reading strategies above to enable our comprehension, then it can be argued that this is reading, as we bring our schematic understanding of narrative to the fore. Beavis argues that, 'analogies between the structures and narrative of game-play with film, literature and media offer valuable lenses on the nature of games and game-play, as do multimodal conceptions of literacy' (2013, p. 58). I argue that this is a two-way street. By examining children's approaches to engaging with the digital worlds of narrative games, insights are also offered into children's engagement with other storyworlds, verbal or visual, and we can learn something about their orientations as readers generally. But whilst it is useful to identify the parallels that games have with other visual media that we might 'read', there is a difference in the transaction of meaning-making

that occurs with a digital narrative game. For Gee (2015) this is summed up by the more genuine communication that occurs between player and game which involves, 'a turn-taking, real-time, responsive and reciprocal conversation' (p. 10). In other words, games answer back through their response to a player's actions and this then creates a dialogue between text and reader (Maine, 2015a) as each responds to the actions of the other. The transaction (Rosenblatt, 1994) between the reader and the text within a game is usefully transparent as the reader/player actions are visible and sometimes audible through players' interactions with characters in the games (Sipe, 2008).

Apperley and Walsh (2012) acknowledge the narrative and the play of digital games in their Heuristic for Understanding Gaming (HUG) model and also emphasise the importance of the paratextual elements of digital games, describing the importance of the literacies that happen around playing the game itself (for example, through accessing walkthroughs and fan forums). Mukherjee (2015) describes 'playing stories and reading games', arguing that a flexible framework that encompasses playing and reading needs to capture the complexities surrounding engagement with any text, and stressing that binaries are not helpful in trying to capture how we engage with written, visual and gaming texts. She draws on the notion of 'assemblage' to capture the complexity of engagement with texts, locating, like Apperley and Walsh (2012) and Beavis (2013) the gaming texts within their social and cultural contexts. Playing a game does not happen in isolation, and access to what Beavis describes as the 'world around the game' (2013, p. 67) is part of the experience, and she proposes a model which defines 'game as action' and 'game as text' responses. Burn and Buckingham (2007) argue for a specific theory of 'game literacy' proposing that it is important to examine these analogies, and also to look at what is very specific about 'gaming' which would warrant it assuming its own 'literacy'. They conclude that any game literacy theory must extend beyond the ludic and textual to include the critical and social. Mackey (2007) also rejects binaries, and describes an 'ecology of 'playing the text' (p. 165) which details a palette of play actions including: imagining, performing, engaging with the rules, strategizing, orchestrating and interpreting. I argue that investigating children's game-play orientations can offer insights into their general literacy stances (Rosenblatt 1994), and whether these are more strategic, creative, reactive and aesthetic or goal-driven. This approach also examines the resources that children draw on as they engage, and whether these are domain specific, that is, their knowledge of gaming, or intertextual, drawing on their schematic understandings of narratives across modes. In order to unpack these focuses, the questions that steer this research are then two-fold:

RQ1 What are children's game-play orientations as they play a digital narrative game?

RQ2 What domain-specific and intertextual schematic understandings do they draw on as they play?

Research context

The research underpinning this paper took place in a medium-sized urban primary school in a town in the East of England. The eight children who chose to be part of the project were all 11 year olds and experienced digital game players, familiar with accessing games on a range of devices and platforms. They identified themselves as gamers, and were keen to take part in after-school 'iPad Club' sessions, where they played the digital narrative game, *Monument Valley* (ustwo, 2015) in pairs to enable close collaboration. They chose who they worked with, and played in same-sex partnerships. Whilst gender is not highlighted specifically in this study, there was a balance of

gender across the group. The children's game-play was recorded using video and additional audio, and each iPad Club session included a post-play reflective discussion where the children talked with me about playing the game, their responses to characters in it, their evaluations of its challenge, and how it related to other games that they played. They were each encouraged to keep a notebook where they could write or draw their thoughts as they played. Each of the children was also interviewed to explore their profile as a gamer, and to gain some insight into the personal socio-cultural influences that might have affected their approaches to playing the game, and collaborating with another player to play it.

Monument Valley is a 10 level strategic problem-solving adventure, which sees the main character, a mysteriously silent princess, Ida, move through several geometrically challenging scenes. She is at times accompanied by a four-block tower figure called Totem. Along the way she encounters 'bothersome' crow people and a floating ghost figure who taunts her with questions about her motives and gives some clue to the backstory which positions her in the storyworld. The narrative of the game is highly ambiguous and it was chosen because of this. The goals of the game are not immediately clear, though the game design leads the players towards certain action and has an inbuilt 'on-going learning principle' (Gee, 2007) which enables the players to build their knowledge of the game's structure and overcome increasingly complex challenges. The findings below use extracts of talk from the four pairs of children as examples to highlight different orientations in their approaches to playing the game, and the domain-specific and intertextual resources that they drew on to support this game-play.

Saba and Molly

Of the eight children, Saba was one of the most experienced gamers. She described playing regularly on a variety of devices, often with her younger brother. Interestingly, she talked about moving beyond the 'rules of play' (Salen and Zimmerman, 2003) to invent her own games within games. For example, when playing a game which required two players to dogfight with World War II style aircraft, she recounted that more often than playing that game, she and her brother would play a game of hide-and-seek within the virtual world of the game, cutting their engines to avoid vapour trails leading the other to their hideout. Playing in this way, she was used to extending the 'space of possible future actions' (Salen and Zimmerman, 2003, p. 67) to accommodate her own creative goals. Already flexible in her approach to different games, Saba quickly became engaged in *Monument Valley*, immersing in its storyworld through her transparent narrative responses (Sipe, 2008) which led her to talk directly to the characters and sometimes assume their voices. Rather than try to develop a story around the virtual world she was engaged in, she responded 'in the game' (Mukherjee, 2015), reacting to events as they occurred, and assuming the role of omnipotent director who could steer the characters to obey her will. The extract below highlights one of many exchanges where she tried to more formally assign herself a character from the game (Ida, the protagonist) and give her partner Molly the role of Totem (the sidekick, or loyal friend).

- Saba: I want to be Ida. You can do all the Totem stuff.
Molly: Ida steps on ...
Saba: He does steps... Oh now we just have to get Totem there, I think.
Molly: Yeah, get him on the button. Totem!
Saba: You can do all the Totem stuff, and I can do all the Ida stuff.
Molly: Yeah. Okay. Wait. Ida. No, I get to... Look I get to move...

Saba Totem has to move. You are Totem.
Molly: Yeah I'm Totem.
Saba Yeah you look exactly like him. I'm Ida... I'm Ida, I'm Ida
Molly Okay...

Molly too immersed quickly in the game. She became attached to the character of Totem, expressing despair when he disappeared (potentially forever) and then squealing with delight when he returned. She offered an almost constant monologue describing her actions as she was taking them when she had control of the tablet, which served the practical purpose of cutting Saba out of the action and also keeping her involvement in the game very 'present'.

Neither of the girls said much to explore the wider storyworld of the game until they approached the end. They were more involved in the action as it happened and their spontaneous reactions to characters. The video of the above transcript shows both children with their fingers hovering above the iPad, which is positioned between them, both insistently touching the screen whenever possible. Theirs was an affective, 'in the game' orientation which was reactive, rather than proactive, and they often repeatedly tapped the iPad screen quickly and randomly, rather than stopping to discuss what they might do next to progress through the game, or what the wider narrative might be. As a result Saba and Molly made few explicit references to narratives beyond the game that they were playing, though their understanding of the role that Totem played in relationship to Ida and their affective response towards him indicated that they were familiar with the sidekick role in adventure stories. They seemed to draw more on domain-specific knowledge gleaned from their gaming experiences, so they were quick to recognise magic doors leading to new levels, and to assign the ghost like figure the role of the 'story-teller' who might give clues about the game goals. There was evidence that Saba in particular was accessing paratextual information beyond the sessions, reinforcing the importance of acknowledging the 'world around the game' (Beavis, 2013), as she described other games which had appropriated the characters from *Monument Valley*. She was also clearly in discussion with her brother about the game, and told me that she had shown him videos of walkthroughs.

Anna and Kirsty

In contrast, Anna and Kirsty took a very collaborative and creative problem-solving approach to the game. That is, they verbalised hypotheses about the actions that they felt they should take together, with Anna, in particular, often offering Kirsty a 'turn' or suggesting, 'Shall we try....?' Anna and Kirsty's management of the negotiation of their play meant that it felt less rushed and random, with them taking purposeful actions. Their discussion was peppered with the language of creative thinking, for example, 'maybe', 'possibility', and 'perhaps' (Maine, 2015a; Soter et al., 2008), and they built on each other's contributions to 'interthink' (Littleton and Mercer, 2013) and create joint meanings. The extract below is typical of their exchanges:

Anna: Okay so now we need to... He can't go on the stairs, and he's *got to* somehow get up there. So... If we turn that over... So he would be tall enough...
Kirsty: Yeah, if we turn it over then he can go on there.
Anna: Oh maybe like... Yeah. So maybe like on each level, if you get a black circle then you *need to* connect everything single black circle with the light.
Kirsty: Yeah. Oh! Well she's *definitely got to* get on him somehow, to get up there...

Anna: I wonder... Hey Kirsty look! Kirsty look! If we move him, then this lever stays open, it doesn't close. So he can be moved anywhere.

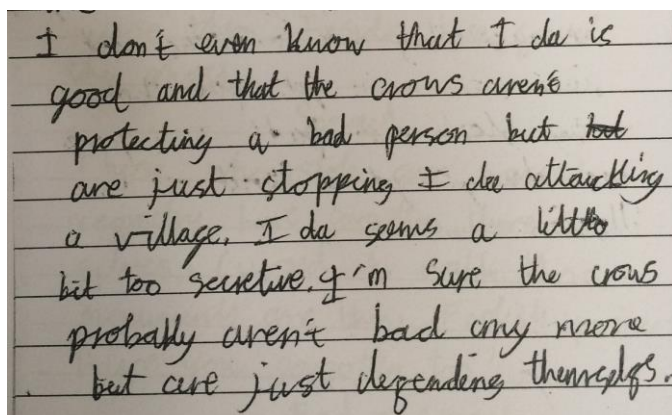
Kirsty: Yeah so if... So if we can get her on him then she will be able to go on the button.

Whilst without seeing the video footage of the session this is quite a challenging extract to comprehend, it does illustrate quite clearly the pair's hypothetical language (underlined) and how it enabled them to build on each other's ideas. It also shows how they pieced together information to understand the game goals, and that they showed a creative problem-solving orientation in their game-play. Unlike Saba and Molly, Anna and Kirsty did not rush to randomly tap the screen until they chanced upon solutions, they were more thoughtful and collaborative in their approach. In the extract above, the iPad was positioned equally between them, but unlike Saba and Molly they pointed to places that they intend to touch, waiting whilst they took turns to control the play which they alternated even as they spoke and listened. They explored the virtual world as they sought solutions. They used the language of gaming, talking about 'levels' even though in *Monument Valley* these are called 'chapters', drawing on their domain-specific schematic understanding about games. In addition to using language which was exploratory, they also used more goal-driven language, for example, 'need to', 'definitely got to' (italicised in the transcript). They realised that there were goals for the characters and working these out was part of the play. They were drawing on their knowledge of gaming to understand what to do, rather than thinking about the wider narrative.

Wes and Stephen

By comparison, Wes and Stephen could be described as story finders. They were by far the most concerned of all the pairs with unlocking the puzzle of the story behind *Monument Valley*. They recorded their ideas carefully in their notebooks and Wes used his as a journal to write his developing ideas. He did not just respond to the action as it happened, but took each new scenario as a clue to a bigger story. . In the extract from his notebook below (see Figure 1) he wrote about his changing feelings towards the crows and Ida:

Figure 1 Extract from Wes's notebook



I don't even know that Ida is good and that the crows aren't protecting a bad person but they are just stopping Ida attacking a village. Ida seems a little bit too secretive. I'm sure the crows probably aren't bad any more but are just defending themselves.

.....I don't even know that Ida is good and that the crows aren't protecting a bad person but are just stopping Ida attacking a village. Ida seems a little bit too secretive. I'm sure the crows probably aren't bad any more but are just defending themselves. (Wes's notebook)

Initially introduced early on in the game as ‘bothersome crow people’, the crows block Ida’s path and squawk at her when she tries to move past them. As the game progresses it becomes apparent that the crows can be manipulated into moving in certain ways, and thus can be used to help Ida achieve some of the goals of the chapter. Earlier in the game, Wes and Stephen discussed whether the crows were friends or enemies and Stephen decided that, ‘Crows are foes!’ enjoying the play on words and repeating the phrase. Wes’s response to the crows in his notebook demonstrates that he was beginning to build a backstory to explain *Monument Valley*. He was starting to question the ‘crows are foes’ assumption. His notebook also shows that he had some doubts about Ida’s motivations, viewing her as a character rather than merely an avatar to move around and was taking a more critical stance (Sipe, 2008; Soter et al., 2008) as he tried to interpret the ambiguous narrative.

The discussions that Wes and Stephen had demonstrated that they were also orientated towards problem-solving. However, unlike Anna and Kirsty, their interest lay in the narrative and the storyworld beyond the game as presented, and they drew on their experience of fantasy adventure stories to make sense of the game. Stephen talked about ‘good and evil’ and used simple Manichaeism to identify that the crows are most likely ‘enemies’. Like Saba and Molly, Wes and Stephen also reacted affectively towards Totem, the four-block tower. In his notebook, Stephen described Totem as ‘the best of friends’ and Wes also wrote that he was, ‘an amazing friend to Ida and would never let her down’. Their responses show that they were drawing on their understanding of narratives to identify a ‘buddy’ role, a normal feature in an adventure story. Wes was the only child to recognise that ‘Totem’ looks like a totem pole, which may have influenced his description of the ghost figure, Saba’s ‘story-teller’, as a ‘spirit-guide’.

Michael and Fred

Michael and Fred played the game in a different way, fixed clearly on finishing it before the other children, and moving through it as quickly as possible. The transcripts of the pair’s game-play show that they spoke far less than any of the other pairs, with shorter turns made of disconnected words. As a result of this limited talk, they did not build on ideas or use the language of creative thinking. Rather, their communication was based on imperatives, and they used more imperative verbs, such as ‘go’ ‘stop’ ‘drag’ and ‘wait’, than the other children. Viewing the video of their game-play it is clear that, like Saba and Molly they tapped quickly and randomly on the screen until they found the right combination of moves. The extract below is typical of their talk:

Michael: We are stuck up there now ...Where are we? .
Fred: Level five is harder.
Michael: Rotate. Double stairs. No. Go back. Go back. Stop. Go back. No, more, more...
Fred: Michael, wait so ...
Michael: No. Now go back. No other way. Yeah. No this way. Yeah that’s just...
Fred: Really.
Michael: We are not meant to go that way.
Fred: Oh, that’s a waste of time.
Michael: Oh no. Yeah, we were. Yeah, we were... Come back. Come back.

Fred We need to get the stairs in the right place.
Michael: Oh what! Oh.
Fred: Oh there. Oh, we will just...

Michael: Wait. No I've got it.
 Fred: Yeah.

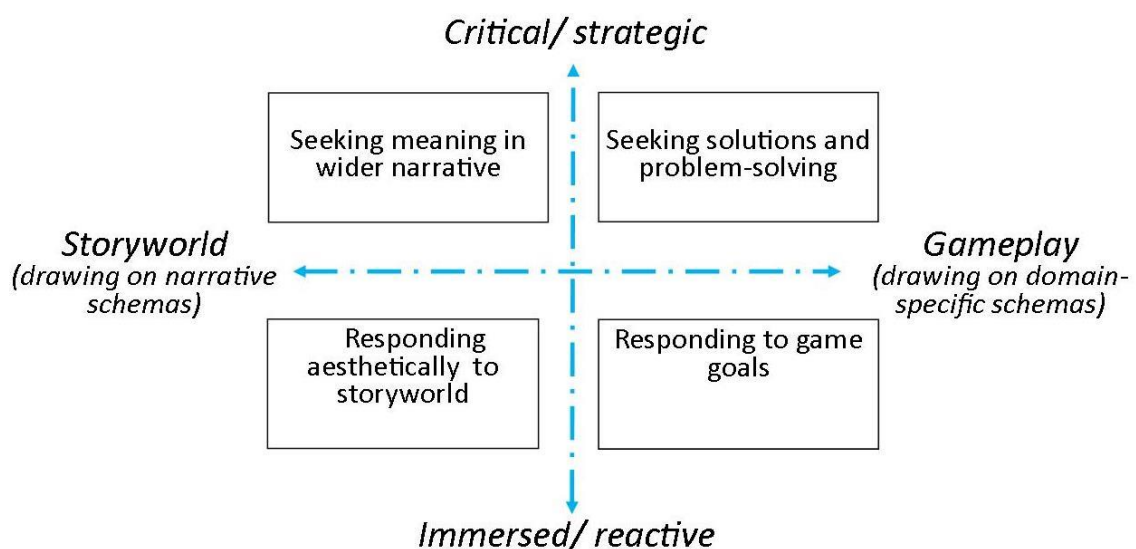
In addition to their imperative voice, Michael and Fred also made regular comments about their progress, so to hear them say, 'That was wrong' or, 'We're stuck' and, 'This is hard' is common in the data. Viewing the video data also reveals that they often turned around to compare their progress with the other children. They showed little interest in the story, in fact Michael forgot to bring his notebook after the first session. Unlike the other children they did not read aloud the chapter titles and subtitles at the beginning of each level, clicking past them quickly to move on to the action and Michael afterwards openly described how he had not really thought about the chapter headings, rather becoming 'carried away with the game'. They rarely mentioned the characters by name in the game.

Michael, in particular, showed a goal-driven orientation (Gee 2015), focused on completing the game and not stopping to explore the territory. Teasing the data apart, however, it becomes clear that there were many times that Fred tried to slow the action down by saying, 'Let's think', or, 'Just wait...' but largely their play was a gallop through the chapters, building on the internal learning progression of the game (Gee 2007) and reacting to events as they happened, rather than discussing their approach, planning a strategy or involving themselves in the storyworld.

Creating a framework of orientations for playing a digital narrative game

A four-quadrant model (see Figure 2) can be used to show the different orientations that the children demonstrated in the above examples, with the axes highlighting differences between their strategic or reactive play; and their involvement in the storyworld of the game (drawing on narrative schematic resources), or their involvement in the game-play (drawing on domain-specific understandings about digital games).

Figure 2: A framework of orientations for playing a digital narrative game



RQ1: What are children's game-play orientations as they play a digital narrative game?

Saba and Molly occupy a space in the bottom left quadrant of the model. Their engagement was mostly responsive and non-critical, they responded to the storyworld and its characters, reacting to the actions of the game as they occurred. Their stance was more a lived-through experience as described by Rosenblatt (1994). Wes and Stephen were similarly positioned in that they engaged more with *Monument Valley* as a storyworld than as a game to be completed, but their orientation was more critical and strategic, as they stepped back from the action to view the wider narrative, wondering about the larger storyworld in which the action was occurring, so they occupy a position in the top-left quadrant. Anna and Kirsty's orientation led them to predominantly view *Monument Valley* as a strategic problem to be solved. They gave the characters pronouns, rarely referring to their names and almost never directly to them. Instead they plotted a course through the game, discussing what they needed to do and how it could best be achieved. The examples in this paper show them acting as collaborative, dialogic readers (Maine 2015) and they are best positioned in the top-right quadrant. Finally, Michael and Fred's orientation occupies the fourth, bottom-right quadrant. The boys hardly engaged with the storyworld of *Monument Valley*, they responded to it as a game to be completed, and were more explicitly goal driven (Gee 2015)

The framework of orientations captures the movement between strategic and immersed play (Mackey 2007). Mackey describes 'diegetic border play' (p. 141) as a fluid movement between being immersed in a diegetic world and engaging in strategic discussion and enables children to be both aesthetically in the story and more critically outside it. It is important that this framework is not seen as a rigid categorisation, but rather a flexible model that might capture the possibilities of orientation within narrative games as children move between 'playing the story' and 'reading the game' (Mukherjee, 2015, p. 1).

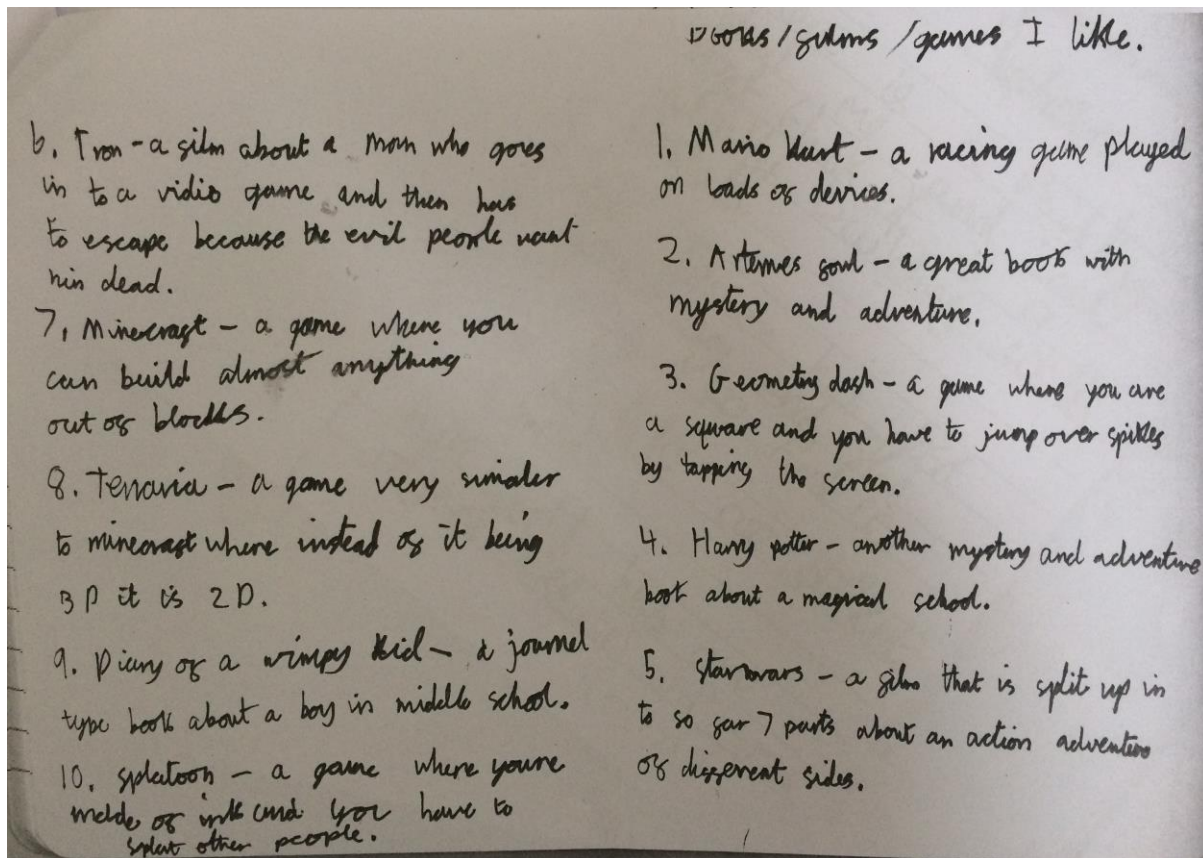
Of course, just because the children responded in this way to *Monument Valley* does not mean they would respond like this to all games, nor all children to this game. Rather, their responses help in the development of a framework of possible orientations, even though these might change according to the game or context in which it is being played, or even at different moments of game-play. In other situations the children might display different tendencies, and the game itself must be part of this. Whilst presenting a loose narrative and seemingly ambiguous, there are fixed actions to take that will support progression through the game, and which lead the player to draw on different domain-specific and intertextual schematic understandings. As such the degree of immersion or strategic play can be seen as influenced by the game itself. In other 'open-world' game encounters, the rules are not set and movement is less linear, the 'space of possible future actions' (Salen and Zimmerman, 2003, p. 67) are far more open. These games may engage further orientations which extend beyond strategic play into more divergent play.

RQ2 What domain-specific and intertextual schematic understandings do they draw on as they play?

The children were asked to note down favourite books and films and these seemed typical for their age, including adventure trilogies, popular fantasy films and choose your own adventure novels. The games that they played at home were more puzzle type or racing games, and all children were used to playing on different devices and platforms. It is difficult to draw any conclusions about their game-play from this, as they shared similar interests. However, it is worth noting that Wes was the

only child to give descriptions of his favourites (see Figure 3) His interpretations of *Monument Valley* are in alignment with this detailed account and reflect his eye for detail.

Figure 3: Wes's favourite books, films and games



The children's game-play orientations were also affected by the resources for meaning-making on which they drew. For those children more involved in the storyworld of the game, they transferred their narrative understandings about fantasy and adventure, so characterised the figures in the game and had expectations of them that corresponded to narrative types. They talked about prisons, castles, tombs, magic, good and evil. The children more orientated towards *Monument Valley* as a game drew on domain-specific knowledge relating to portals, different worlds, goals, being killed (and starting again) and levels. They expected to have challenges, drawing on the ongoing learning principles (Gee 2007) that allowed them to gain experience and improve their game skills, understanding with increasing complexity what was expected at each level.

Central to the consideration of domain-specific knowledge is the mobile device that the children used to play the game. Collaboration on an iPad necessitates turn-taking and negotiation in a way that is physically different from two-player platforms which may include split screens or dual controls. As the tablet is responsive to only one player at a time the physical act of playing together is brought to the fore. Anna and Kirsty's tentative language and invitations to each other might have played out differently on a platform where they could both engage at the same time. Similarly, Saba and Molly may have found more space for collaboration had there been less competition for iPad control. Additionally, playing together and negotiating the space to do so will have affected their degree of immersion which is potentially a more solitary pursuit. The compromise of researching

children playing together in order to observe how they engage, means that the individual immersion in a storyworld is less visible. The children here were very much 'on show' and even though the cameras were as unobtrusive as possible, set behind each pair, the literacy event was one of public 'performance'. The individual interviews and group discussions highlighted some of the more personal responses to games and immersion in storyworlds, particularly around the way that children positioned themselves when playing games or reading stories, but this is an area to explore further.

What does this tell us about literacy?

This paper set out to develop a framework to explore the different orientations that children have as they engage with a narrative game, with the aim that by exploring children's responses to game narratives, we might gain some insight into reading narratives more generally. In fact, the outcomes of the research show that it is possible to use existing theoretical frameworks for reading to support understanding of how children position themselves when playing a narrative game, and the different semiotic resources that they draw on as they do so.

The data highlight that a goal-driven stance or orientation leads to minimal critical engagement or language which is indicative of high-level comprehension, unlike an orientation towards collaborative problem-solving which allows for strategic discussion. Immersion in storyworlds might lead to aesthetic and affective response and make motivations and consequences more meaningful, but it offers little to support the comprehension of more complex ambiguous narratives. With regard to verbal text, this is highlighted in research by Soter et al (2008) who investigated small group reading situations and found that it was the groups where the focus was more critical and analytical and where children had discussions led by teachers, but with opportunities to build on and develop their own lines of thinking, that produced the highest levels of comprehension. The small group (known in England more typically as the 'guided group') enables children to develop their reasoning and creative thinking in their responses, but with the additional support of teachers who can make learning explicit. Projects using a moving-image mode of narrative (Maine and Shields, 2015; Maine and Hofmann, 2015) showed the potential for drawing on multi-modal sources, particularly for children whose home literacies might include popular culture (Parry, 2013) but less literary texts. Parry argues that it cannot be assumed that children will make these links unless they are explicitly taught to do so and this seems a crucial point for the implications of using gaming narratives in the classroom.

Wohlwend (2015, p. 7) proposes that we need to reframe the literacy curriculum and 'start by building on children's existing digital literacy skills, pervasive mobile technologies and collaborative play skills'. In the first instance this means making the children's access to this knowledge explicit and modelling how, as experienced readers of narrative, we make intertextual links across modes, but also draw on domain-specific understandings. If the use of gaming narratives in the classroom as part of the literacy curriculum is a challenging step, then at the least we can make reference to children's home literacies and experiences with digital technology as they engage with more traditional literacy practices to emphasise the commonalities. The flexibility with which the children in this study drew on their schematic understanding of narratives and digital games, demonstrated in their game-play but also extensively in their reflections, highlights the importance of acknowledging different forms of narrative, as these all offer useful resources to support meaning

making. Discussions around texts should encourage children to draw on what they know of narratives and how these cultural codes (Whitney 2010) transcend mode.

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