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Textual analysis, methodology, player analyst, representation, disability, ability

Abstract
This article is about textual analysis, methodology, and representations (of bodies, identities and social groups) in digital games. The issues under consideration include textual analysis as procedure, the role of fragmentation in textual analysis, game ontology and the remit of textual analysis, and the role of the player-as-analyst in relation to subjectivity and embodied interpretation. These issues are discussed using a combination of game studies literature, film theory, and literary theory–and with reference to *Deus Ex: Human Revolution* (2011).

Draft version

Methodology, Representation, and Games

This article is a contribution toward ongoing efforts to refine a methodology for the textual analysis of representations in digital games. The article was inspired by *Deus Ex: Human Revolution* and the methodological problems that it posed. These included problems relating to the role of the player-as-analyst, the remit of textual analysis, the practicalities of method and process, and questions of thoroughness and omission. Improbably, a film theory article from the mid-1970s offered a way forward. In Bellour's (1975) playful, melancholy essay 'The Unattainable Text', he lists some of the difficulties associated with the textual analysis of music, image, theatre, and especially film. In the process, he makes points that are relevant to game analysis.

The article begins with a review of game studies literature on representation and textual methods, followed by a reflexive summary of the author's previous work on the development of a game-appropriate version of textual analysis. By these means, two particular aspects of the method are identified as opaque. Firstly, there is a need to clarify the procedures that support fragmentation and to address related questions of omission: What does it mean to fragment a text as variable as *Deus Ex: Human Revolution*? What would it mean to be thorough? Secondly, there is a need to clarify some aspects of the relationships between the different elements within a game and textual analysis: What does it mean to describe a game as a text? What are the ontological implications? To what extent should these ontological considerations shape our understanding of the applicability and limitations of textual methods? These issues are explored using points drawn from Bellour's essay in combination with reflections on the experience of playing and analyzing representations in *Deus Ex: Human Revolution* (2011, Eidos Montreal, Square Enix).

Representation and Textual Methods

Game researchers have explored meaning as it emerges during play using a variety of concepts, including frame analysis (Linderoth, Bjork, & Olsson, 2012) and cognitive approaches to embodiment (Gee, 2008; Gregersen & Grodal, 2009). Other researchers have developed ontological and phenomenological accounts (Sageng,

Fossheim, & Larsen, 2012), debated the permeability of the "magic circle" (Zimmerman, 2012), or raised questions about the relationships between subjectivity, rules, and proceduralist meaning (Bogost, 2008, p. 99; Treanor & Mateas, 2013). This literature demonstrates the complexity of meaning-making in games. However, these different conceptual and methodological perspectives would be difficult to reconcile with each other or with the topic of representation as it is framed in this article.[1]

The term "representation" as it is used here connects to a long tradition of work within humanities-orientated screen, media, literary, and cultural studies that addresses the ways that social groups are depicted in popular media (e.g., Bernstein & Studlar, 1997; Dyer, 1993; Hamamoto & Liu, 2000; hooks, 1992; Kuhn, 2013; Neale, 1983; Smith, 2011; Young, 1996). As reflected in Stuart Hall's introduction to Representation (Hall, 1997), this literature is often informed either by semiotics (e.g., Barthes) or by theories of discourse (e.g., Foucault). It shares certain tendencies, including an interest in centrality and marginality, normalized inequalities, privilege, and the "othering" of particular social groups, all of which are considered significant because popular texts reflect the cultures they emerge from and because "how we are seen determines in part how we are treated; how we treat others is based on how we see them" (Dyer, 1993, p. 1).

Some game theorists have used the term "representation" in ways that correspond with this tradition. Others have used alternative definitions. Klevjer, for example, employs the term "representation" when discussing phenomenology, ontology, and the links between player actions and simulated acts in virtual worlds (Klevjer, 2013). Likewise, the term "text" has been used in different ways. For example, in her essay on the "split condition of digital textuality," Ryan explores digital texts in terms of their relative status and contrasts literary hypertexts against FPS games (Ryan, 2007). The different framing of these terms is not a problem, but it does highlight the need for specificity. In this article, the term "text" is considered primarily in relation to methodological issues, while the term "representation" is used to refer to the cultural politics of depiction.

Theorists writing about representations in games have explored the relationships between game setting, characterization, rules, play, and performance while undertaking work on gender (Burrill, 2002; Carr, 2002; Voorhees, 2016); sexuality (Youngblood, 2013), colonialism, religion, and ethnicity (Hanli & Tshabalala, 2011; Kirkland, 2011; Leonard, 2006; Mukherjee, 2016; Šisler, 2008); disability and ability (Carr, 2013, 2014); and intersectionality (Champlin, 2014).[2] Analysis generated through play is central to this literature. These authors have often focused on narrative-orientated, figurative, offline games, including action adventure games, survival horror games, and Role Playing Game (RPG) hybrids. It is not unusual for this work to combine concepts from game studies with theory from cultural studies, literary studies, or media studies. Game scholars writing about representation have balanced justifiable caution about the applicability of theory drawn from other fields, with recognition that games themselves frequently borrow from comics, literature, film, and television, through imagery, soundtrack, narrative elements, franchise membership, and generic convention. The meaning of an avatar's playable body, for example, might be shaped to some extent (for some players, in some contexts) by associated materials, including advertising, packaging, fan art, or film adaptations (Kirkland, 2012, p. 126; see also Dovey & Kennedy, 2006, pp. 90–91, or Carr, Campbell, & Ellwood, 2006).

Humanities scholars engaged in games research have frequently worked from the perspective of the player-as-analyst (Aarseth, 2003).[3] When discussing textual approaches to games analysis, Krzywinska and Atkins point out that playing a game is a necessary step in understanding that game as experience. Games have rules and

they are played, as well as viewed, heard, read and felt; they are "played objects that are only mobilized by the action of the playing subject" (Krzywinska & Atkins, 2007, p. 3). The experience of playing a game is very different from that of watching a game being played. Game theorists writing about textual methods have acknowledged the definitive aspects of games (as involving rules, etc.), while discussing the scope, applicability, offers, and limitations of textual analysis. Buckingham argued, for instance, that "To call a game a text is not to deny that it involves play, mutability, chance, interactivity or change" (2006, p. 12). Krzywinska has emphasized that the textual analysis of games embraces "story and representational gambits" alongside the "code, rules, and mechanics [that are] intrinsic to the creation of games as 'readable' textual artefacts" (Krzywinska, 2015, p. 24). Kirkland has made similar clarifications when writing about masculinity in survival horror games: "The gendered video-game experience is not solely—or even primarily—an issue of visual representation but is expressed through game mechanics, structure, and goals" (2009, p. 169).

As this review indicates, there are a number of common threads running through game studies literature on representation and textual methods. These include recognition of the significance of play to game interpretation. While there is agreement that games can connect to other media (including film and literature), there is also acknowledgment of the need for caution when adapting theory originally devised in other fields. Finally, recognition of the specific offers of games (as having rules, as being played) is reflected in a concern with establishing the scope and limitations of textual methods.

Reflections on Method

In previous work, I argued that the analysis of representations in games is complicated by play, player prerogative, and context (Carr, 2006, p. 178; Carr, 2007, pp. 228–229). With these complications in mind, I proposed an approach to games analysis that was influenced by games, by game studies literature (e.g., Salen & Zimmerman, 2004), and by Barthes' literary theory.[4] This approach involved playing a game, fragmenting it, and then considering these fragments through three overlapping lenses: structural, textual, and intertextual.[5] The idea was that any given element in the game (a tiara, for instance) might be considered through a structural lens (as a key, an object of exchange, or armor) and through a textual lens (e.g., its connotations as precious, gendered, alien, sentimental, or ritualistic). Following Barthes, reference to the structural lens would involve a focus on the "organization of the game's constituting units and the ways in which these units interrelate in time and space" (Carr, 2009, p. 3). Reference to the textual lens would involve a focus on the game as actualized during play because, for Barthes, textual analysis is not about "where the text comes from (historical criticism), nor even how it is made (structural analysis), but how it is unmade, how it explodes, disseminates—by what coded paths it goes off" (Barthes, 1977, p. 127 cited in Carr, 2009, p. 3).

Then, because interpretation is inevitably a culturally situated activity, it was necessary to include a third lens as "a means by which it becomes possible to culturally situate the interpretive framework of the player-analyst" (Carr, 2009, p. 3). This third lens was devised using the theories of intertextuality and reading formations developed by Bennett and Woollacott (1987). Reading formations describe the "cultural and ideological forces which organise and reorganise the network of inter-textual relations within which texts are inserted as texts-to-be-read in certain ways by reading subjects organised to read in certain ways" (Bennett & Woollacott, 1987, p. 249 as cited in Carr, 2009, p. 4). I described this third lens as a default setting because it would always be present. Implicitly or otherwise, the context, subjectivity, and lived experience

of the player-as-analyst informs the interpretations (or the "readings") produced, although not necessarily in predictable ways.

The approach was later demonstrated with an analysis of *Resident Evil 4* (Capcom, 2005). This involved playing the game through several times and then engaging in a closer consideration of particular moments within the game through forms of fragmentation (repeated play, taking and reviewing screenshots). These fragments were then fragmented in turn, their elements "unpacked" through the aforementioned lenses in combination with a selective (rather than strict or systematic) application of the five codes suggested by Barthes in *S/Z* and summarized here as action (acts and consequences), enigma (mystery, delay, and revelation), the semic code (connotations or "flickers of meaning"; Barthes, 1974, p. 19), the cultural code (truisms, references to recognizable schools of knowledge), and the symbolic (antithesis). A focus on tools (shovels, wheelbarrows, and pitchforks) within a particular fragment of Resident Evil 4 led to the identification of a seme—"work"—which was then followed across the game. The eventual finding was that in Resident Evil 4, deviance was associated with impairment and diminished agency, while the protagonist's dependence on colleagues and technology was normalized: Leon's headset is an augmentation that slots him into a particular chain of command. As such, it mirrors the infestation that facilitates the arch villain's control over the villagers. One form of augmentation is constructed as positive or advantageous. The other is constructed as a disease or deficit. (Carr, 2009, p. 5)

In short, this version of textual analysis facilitated an inadvertent move past conventional readings of the game's zombie-like antagonists to highlight the materiality of zombie bodies (as manifestations of impairment) and the meaning of zombie bodies (fueled by discourses of disability as social contaminant). This matters because, from a critical disability studies perspective, the pervasive convention of reading zombies as metaphors of labor or otherness in general "accomplishes its own repression of the monster's material form and of the culturally and historically specific notions of disability that make horror's metaphors possible" (Smith, 2011, p. 27).[6]

This work was extended through an engagement with critical disability studies theory (e.g., Mitchell & Snyder, 2000; Siebers, 2009; Smith, 2011; Thomson, 1996) and through the analysis of a selection of horror and science fiction–themed games. Through textual analysis, it was found that quantification—which carries cultural associations of the factual, the clinical, and governance—takes on particular significance in figurative games that combine depictions of impairment with "an interest in the depiction and performance of skill and ability, and the construction and testing of measurable ability" (Carr, 2013). Representations of ability and disability in games have attracted limited critical attention despite the frequency with which impairment is depicted as a threat to agency that must be held at bay by a vulnerable protagonist who is doomed to compulsively reaffirm their status as able-bodied through assessed performance, and despite the extent to which these representations connect avatars with players through assessed performance and role, and despite the extent to which such patterns reflect mainstream discourses of ability and disability (Carr, 2014).[7]

As a method, then, this process of play, fragmentation, and "reading off" has proved effective in the sense that it has the potential to generate unexpected findings.[8] As such, it offers an analyst a chance to move beyond what Dyer calls positive or negative "images of" work (Dyer, 1993, p. 1) and toward recognition of "the complexity and elusiveness, the real political difficulty, of representations" (p. 2). There are other indications that the approach has merit. For instance, game researchers

have used it to further explore representation (Hanli & Tshabalala, 2011), referenced it when developing game orientated methods of analysis (Bizzocchi & Tanenbaum, 2011), and made compatible arguments about methodology using similar theoretical resources (e.g., Jennings, 2015).

There is also scope for refinement. Aside from the logistical problems (the approach is time consuming), there are questions about how—or if—this method transfers to different games, or how it might be adapted for different game genres. For instance, the degree of variability and customization on offer in a game would have implications for fragmentation. There are also questions about what it means to combine this method of analysis with a focus on representation. The point of fragmentation is that it undermines the solidarity or totality of the text, breaking it open so that its plurality or multiplicity can be unpacked (Barthes, 1974, pp. 15, 23). What if, by focusing specifically on representations (of disability or gender, for example), I risk closing off the game's plural meanings to fit a particular meta-narrative? If this is a risk, it underlines the need for reflexivity, and it indicates the benefits of using codes or lenses that emphasize plurality, tensions, and contradictions in games.[9]

Deus Ex: Human Revolution (aka *Deus Ex*), for example, accommodates erratic shifts between stereotypical and more insightful representations of disability. At the stereotypical end of the spectrum, disability was physiognomic—a materialization of bitterness and isolation (Mitchell & Snyder, 2000, pp. 58–59). At the more nuanced end of the spectrum, there were references to complex aspects of disability as a lived experience. For example, the game depicts augmentation as an expression of power relations and shows employers pressuring workers to undergo modification. The three-lens framework proved helpful for thinking through these tensions. A reoccurring problem with these same lenses, however, is that they have a tendency to warp into a form of classification during use and again during peer review. This warping can manifest as an expectation that the method relies on a fixed distinction between the "structural bits" and the "textual bits" of a game. During use, these accidental slides into ontology can become additionally complicated when the lenses are employed in proximity to particular issues (including representation) or particular game elements, such as narrative. According to Aarseth's (2014, p. 484) definition, a formal game ontology asks "what are the functional characteristics and components of game objects, and the relations between them." This potential for the three lenses to mutate into forms of classification links back to concerns raised in the game studies literature about the scope and applicability of textual analysis.[10]

To summarize, refining this particular version of textual analysis will involve addressing two interrelated problems. Firstly, there is the question of how stable or transferable the approach is and what counts as a workable or viable fragment in different games. Secondly, it is an issue that the use of the three lenses (structural, textual, and intertextual) implies a version of game ontology, which in turn revives questions about the remit of textual analysis. In the next section, these problems are explored with reference to an essay in which a series of relevant points are made, albeit in relation to cinema critique in the mid-1970s.

Textual Analysis: Definitions of the Game as Text

In The Unattainable Text, Bellour (1975, p. 20) draws on Barthes' work to argue that in order to grasp at the "full experience of the multiplicity of operations" within a text, the analyst requires a fragment or quote. For Barthes (1974, p. 15, emphasis in original), fragmentation is an "affirmation of the plural" that helps to expose "any ideology of totality"—it is an act of "*manhandling* the text, *interrupting* it" that undermines its "naturalness.".[11] Discussing the analysis of film, Bellour (1975,

p. 20) states that as soon as the analyst

> quotes a fragment of it, one has implicitly taken up a textual perspective, even if feebly and one-dimensionally, even if in a restrictive and regressive fashion, even if one continues to close the text back onto itself although it is [. . .] the locus of an unbounded openness.

Extrapolated to games, this suggests that if the fragmentation of a game is central to my approach, then I have "taken up a textual perspective" (as above) which means that I am doing textual analysis. It suggests that textual analysis is a way of working that constructs the object of analysis in a particular way: The game is a text because I'm doing textual analysis. If that is the case, then presumably I can consider myself released from the need to list provisos about a game's definitive constituents when describing the scope and limitations of textual analysis—or its relevance to rules, play, performance, sound, screen, navigation, interface, avatars, nonplayer characters, fiction, genre, or narrative. Similarly, once I have provided a rationale that connects a theory with a method (i.e., the game is a text because I am doing textual analysis by fragmentation) that indicates that I am working within a coherent conceptual framework. In which case, providing additional rationales would be unnecessary.

Bellour's essay suggests that textual analysis is best understood as an epistemological stance (a strategy, a perspective) that produces a provisional ontological statement as a by-product: The game is a text, for the moment, because I am doing textual analysis.

Fragmentation, Omission, and the Player-as-Analyst

Bellour's essay is about problems faced by film analysts in the mid-1970s, but he makes points about fragmentation that are helpful to think about in relation to textual analysis and the role of the player-as-analyst. Bellour argued that the film text could not be fragmented without shearing off its defining qualities, including movement. He laments the implausibility of the process of textual analysis and the unattainability of film as text, while affirming the relevance of textual analysis to the study of cinema. As Bellour (1975, p. 25) states when discussing film stills, such fragments fulfil "the absolutely contradictory function of opening up the textuality of the film just at the moment they interrupt its unfolding," and thus, film analysis involves submerging oneself in a quixotic process:

> it constantly mimics, evokes, describes; in a kind of principled despair it can but try frantically to complete with the object it is attempting to understand. By dint of seeking to capture it and recapture it, it ends up always occupying a point at which its object is perpetually out of reach. (p. 26)

Bellour is writing at a time when film analysts were compelled to depend on stills, but, for all the differences in context and technology, game theorists attempting textual analysis face a similar conundrum, and it is not merely an issue of hardware. Game analysts relying on fragmentation contend with the issues that Bellour associates with the use of film stills (loss of movement in time and space) plus those that he attributes to theatre, music, and performance. Games offer play, replay, and repetition with degrees of variation. Game play can be recorded, of course, but the recording would not be playable. The problem would not be solved by the provision of a playable game extract because—as anyone who shares a games console knows—each player produces a different game protagonist over time, with different traits, achievements, augmentations, inventory, fighting style and experience levels, and the player's own experience level shifts over time, and these shifts impact on interpretation (Carr, 2007, p. 230). The degree, extent, and forms of customization,

variation, and repetition on offer during play will vary, game to game, while replay will potentially generate different acts, events, traits, and consequences. In the context of the arguments being made in this article, replay raises questions about fragmentation, but it also raises questions about the kinds of choices that make analysis possible at all.

For example, playing *Deus Ex* for the sake of an intended analysis involved playing it once through, and then playing it again, this time halting to collect screenshots, and replaying the dialogue to explore its branching possibilities (e.g., the avatar Adam Jensen as vulnerable, resilient, belligerent, hostile). At this point, I encountered a problem. Collecting fragments in the face of this variability halted play. Then, it halted analysis. What was the point in converting an enormous game into an enormous (yet inevitably incomplete) collection of fragments? What does it mean for a player-as-analyst to document each version of a dialogue exchange, if that is not how anybody actually plays? What does it mean for the analyst with an interest in representation, if there are versions of the game (of the protagonist, achievements, or strategies) that remain dormant? The scale and variability of Deus Ex indicated the potential for the role of the player-as-analyst to blur into the role of the sort-of-player-as-earnest-yet-thwarted-archivist.

Bellour's doleful acknowledgment of unattainability resonated because I was attempting to capture something that emerges through play, through a process that had ceased to resemble play. To be clear, I am not framing this as a problem that could be solved by the identification of a more efficient way to collect, treat, or manage large amounts of data. My point is, rather, that games vary, so the relationship between a fragment and the game as played will vary. So, the would-be textual analyst needs to approach fragmentation itself as a process that requires adaptation, game to game. In which case, the analyst's first step would be to devise, through play, an appropriate, game specific approach to fragmentation. Before discussing the practical aspects of fragmentation in any more detail, I want to raise some related points about omission and the role of the player-as-analyst.

Variation and repetition are a part of play. Textual analysis exposes plural meanings through fragmentation. So, textual analysis generated through play will necessarily involve—and generate—selective omission. Omission within research practice is not a new issue. For theorists such as Law (2006), these kinds of omissions are an inevitable part of social research. Law is concerned with the policing and polishing that takes place during "writing up" and the extent to which "the vague, the imprecise, the multiple" (2006, p. 11) and the contradictory in social life and lived experience is erased or, if present, is seen as evidence of methodological inadequacy. So he is not proposing that there is a need to develop strategies to eliminate "mess" or noise from research practice. He argues, on the contrary, that researchers need to admit to noisiness, multiplicity, and mess (for more on Laws, mess, and game methodology, see Bogost, 2009). Law references feminist accounts of the ethics of practice, the need for reflexivity, and the politics of situated knowledge formation (Haraway, 1991). He proposes the use of allegory in writing-up as a way to produce a single account that nevertheless acknowledges multiplicity. For the sake of discussion, he defines allegory as "the art of meaning something other than, or in addition to, what is being said" (Law, 2006, p. 12).

Law's points are relevant to these reflections on the role of the player-as-analyst, but I am unsure about the benefits of building allegory into the textual analysis of representation in games. A more straightforward solution to the problems suggested by the relationships between fragmentation, omission, and interpretation would be to refer back to the "third lens" and Bennett and Woollacott's theory of reading formations,

according to which "texts, readers, and the relations between them are all subject to variable determinations" (Bennett, 1983, p. 14). Reading formations are a way to acknowledge that analysis will involve omission, that the potentials for meanings may be differently activated, and that these potentials could be accorded different weight or status in particular contexts and communities (Barthes, 1974, p. 7). In short, this version of textual analysis is a practice that, by definition, involves situated, embodied interpretation, and selective omission. It raises questions about the diverse kinds of meaning-making potentially activated during play and about the relative status that might be granted to these different ways of knowing in different social contexts—all of which has implications for analysts with an interest in the politics of representation.

Fragmenting *Deus Ex: Human Revolution*

Deus Ex is a hybrid RPG. The playable protagonist is a reluctant cyborg and security professional named Adam Jensen. The game offers more choices around characterization than would be typical in an action adventure game, but less than would be found in a more typical RPG. Even as a hybrid, Deus Ex offered a degree of variability that complicated attempts at fragmentation, which in turn complicated attempts at analysis. What worked, in the end, was accepting that a thorough documenting of the game was unfeasible and abandoning the idea that the game's fragments should be a consistent size or duration.

The procedure developed as follows: The game was played through. Then, after a few false starts (during which I fixated on documentation precisely because a thorough documentation became untenable), my experience of playing the game became the basis of a decision about the richest and most relevant or evocative levels or chapters. These sections were replayed, and particular moments, incidents, sites, and sequences within these sections were replayed and revisited as fragments. These fragments were played in the game equivalent of "slow motion" (Barthes, 1974, p. 12). Slowed and looped to the point that it breaks, the game as text is fractured, and its plurals made available. In practice, this meant abandoning aims and goals (pertaining to either game progression, game documentation, or analysis) for playful meandering or tourism.

For example, I spent time in a particular research and development laboratory (a site-as-fragment). I killed off the armed antagonists with Adam's help and collected them into piles. I learnt that they were well groomed, heavily armed young men from a range of backgrounds wearing "urban-lumberjack" apparel and sensible shoes (which raised questions about masculinity, work, nostalgia and expendability). I looked in drawers, checked the stationary cupboard, and collected some pictures of the prosthetic hands posed on the work desks. To quote from my notes, "Some camera angles made the hands look spookier than others," and it was only then that I finally noticed that every prosthetic hand in the room was making a "monster, grrrr" gesture. This gesture is relevant to the representation of disability because it contributes toward the game's connecting of augmentation with monstrosity. I only "saw" it because I had abandoned progression through the game and given up the idea of systematic or thorough documentation.

At other times, what mattered was the way in which the threads of the game knotted together within in a particular sequence-as-fragment. In one early example, Jensen is interrupted as he makes his way through an industrial research and development facility (this sequence takes place close to the laboratory mentioned above). His colleague, Pritchard, exploits an implant in Adam's head to explain that there has been a security breach. Pritchard reports that his attempts to unlock a laboratory

door have been thwarted. Adam turns a corner and is faced by the phrase “control decontamination” stenciled on the wall ahead. Pritchard explains that Jenson is required to hack his way into the laboratory. The hack minigame involves moving components through an array while attempting to avoid detection. So, this example of a sequence-as-fragment incorporates references to locks, overrides, breached security, hacking, boundaries, constraints, invasion, contamination, thwarted restrictions, and trespass. All of which tie to issues of control and consent and contribute toward the representation of Adam’s own impaired, augmented body as a contested location.

Conclusion

The version of textual analysis explored in this article depends on fragmentation and reflects the situated and subjective aspects of the role of the player-as-analyst. Textual analysis is a disorderly process that involves improvisation, iteration, and adaptation. This can mean that the analyst finds herself attempting to apply a time consuming set of disintegrating procedures to a text that feels increasingly “unmade.” Textual analysis can be uncomfortable. Bellour’s essay has helped explain why, and it has also helped with working through some of the more opaque aspects of the practice. In the version of textual analysis explored in this article, a game becomes a text because it is the subject of a textual analysis, and textual analysis is taking place when the analysis involves fragmentation. It does not require the division of the game as played into textual and nontextual elements. When the topic is the representation of identities or groups, it is not necessary to restrict the inquiry to certain parts of a game or to assume that different forms of meaning generation within the game should automatically be prioritized over others. This work has emphasized the significance of play and reading formations to textual analysis. Reading formations, as a concept, suggests that it is entirely probable that the potential meanings attributable to specific elements of a game would attain greater or lesser significance within particular contexts.

Lived experience, including, for instance, experiences relating to class, migration, gender, ethnicity, family, work, technology, and disability within Brexit-era Britain, will generate particular kinds of knowledge which have the potential to shape interpretation. Of course, it does not follow that the relationship between lived experience and interpretation is straightforward. Resistant and oppositional discourses might be obscured, just as community affiliation can be fraught, conditional, and complex (Snyder & Mitchell, 2006). One of the ways in which disempowerment manifests is in the struggle to locate viable discourses through which to articulate lived experience. This is one of the reasons why the relationship between subjectivity and interpretation is so complex and unpredictable. It is one of the reasons why the textual analysis of representations of identities and social groups within popular texts is worth doing.

Notes

1. The term "magic circle" has been used to discuss the extent to which meanings made within a game might be considered as separate from meanings made outside of a game. Theorists interested in the cultural politics of representations are unlikely to argue that there is a fixed border between any such "inside" and "outside." It does not follow that these theorists overlook the complexity of the relationships between rules, contexts, play, and player subjectivity or assume a deterministic or effects-based concept of meaning.

2. My review of literature is limited to work published in English.

3. Previously I've used the term "player analyst" (e.g., Carr, 2012). Here, I use the term "player-as-analyst" because my students thought that player analyst meant "an analyst of players." The tendency for humanities-based game scholars to draw on their own experiences of play is long standing (see King & Krzywinska's ScreenPlay, 2002, or Krzywinska, 2005).

4. I use the term "textual analysis" because that's what Barthes calls it. This article involves an opportunistic adaptation of Barthes' approach, discussed through a selective reading of a specific article by Bellour. The method described here was developed as part of my doctoral research, "Meaning and the Playable Text" (2004–2007). A particular version of textual analysis is presented in this article because the topic is methodology. In other contexts, the use of a broader definition of textual analysis might be appropriate. One suggestion for a broad definition would be: Textual analysis is the exploratory application of a specific theory (of transtextuality, or agency, or affect, for example) to games, through play.

5. Barthes writes that lexia (fragments) can be selected at random but that "should have at most three or four meanings to be enumerated" (Barthes, 1974, pp. 13–14). Even a single screenshot would exceed four meanings—so this is very much an adaptation of Barthes' method.

6. Elsewhere I've argued that while MMORPGs are obviously social spaces, the conflicts over meaning that arise during play indicate that theories of textuality are relevant (Carr, 2012). However, games that feature a significant amount of variability plus the option to Role Play would not be an easy fit with the version of textual analysis presented here.

7. Game scholars using different approaches have generated compatible findings. Through ontological work, Karhulahti developed a definition of video games as "artifacts that evaluate performance" (Karhulahti, 2015, referencing earlier work by Frasca).

8. The analysis in Resident Evil 4 led me to critical disability studies literature. Prior to the analysis, I had managed not to notice that zombies embody various forms of impairment—despite having personal and familial experience of disability. Mind-boggling as this is in retrospect, it is a reminder that there is not a straightforward relationship between identity, lived experience, and interpretation. At present, this work is being extended in two directions: identifying the concepts that support work on disability and intersectionality in games analysis, and developing audience studies work on disability and science fiction.

9. There is scope for confusion given the references to three lenses and five codes, but when it comes to "reading off" the plural meanings of a game fragment, they are all potentially useful so I would rather not discard any of them for the sake of streamlining. The three lens approach can be adapted for thinking through theoretical applicability (Carr, 2013). For example, different theories of agency might be better suited to considerations of the game as made (structural), or the game during play (textual), or the game and player as

culturally situated (intertextual).

10. Aarseth defines two kinds of game ontology, functional ontology (as cited in this article), and "existential ontologies asking what are games and what kind of existence does a game have" (2014, p. 484). Existential ontology is interesting to consider in relation to the impact of social context social context on meaning, and so it also has relevance to the issues raised in this article. Aarseth makes his point about existential ontologies referencing notions of the fictional and the real and elaborates by citing Castronova's work on currencies in virtual worlds, specifically those currencies that have real-world exchange rates (Aarseth, 2014, p. 491). Perhaps it is possible to imagine the third lens (reading formations) as another form of "exchange rate"—one that responds to proximity, immediacy, modality, and authority. Consider, for instance, the use of player voice in online games, its potential role in the "exchange" of interpretive conventions that emerge within player communities, and the potential transition of these conventions, from one site, to another.

11. I appreciate that "manhandling" is a strange word to use, although perhaps strangely appropriate.

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