

## CHAPTER 6

# The Case of Rebellion: Researching Multimodal Texts

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*Rebellion* is a computer game created by a 14-year-old boy. Because it affords insights into how multimodal texts are designed (and games are perhaps the most multimodal of texts), I will use it as an instance of how to approach the analysis of such texts.

For me, the most important theoretical and methodological opportunities and problems of social semiotics and multimodality theory are rooted in a claim made by Kress and Van Leeuwen (1992) in a paper critiquing the work of the later Barthes (1978). In it, they made the claim that social semiotics is “the theoretical, analytical and descriptive branch of cultural studies” (pp. xx–xx). What might this claim mean?

My reading is that it indicates a desire to operate with the theories of culture emanating originally from the work of pioneers such as Williams (1961), and subsequently from the tradition of cultural studies. It relates this tradition to a theory of textual analysis rooted in the cultural and social function of the text, derived from sociolinguistics, and Halliday (), in particular. As a necessary corollary of this, it connects textual meaning with the social interests of its related sign makers—those who make it, and those who use, read, view or play it. In the context of education, it offers a theory of signification ready for synthesis with the work of scholars of children’s media cultures, in particular

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Buckingham (1996, 2003; Buckingham & Sefton-Green, 1994), who provided influential research in how children engage with media texts (e.g., 1996), as well as proposals for how the pedagogies of media education might be influenced by cultural studies (Buckingham & Sefton-Green, 1994; Buckingham, 2003).

This seems like a marriage made in heaven. The field of cultural studies has been an immensely invigorating development in media research, radically shifting the emphasis from textual structures to lived cultures, from ideal spectators to real audiences, and from abstract textual politics to situated cultural politics. In developing its methodological apparatus from forms of ethnographic investigation, discourse analysis, and social theory, however, it gradually became apparent that it never really developed a new way to think about signification and text. When cultural studies scholars reached for techniques of textual analysis, they reached back in time, as Fiske (1989) and Hebdige (1979) did for French semiotics in their respective analyses of Madonna and punk.

Q3

So the merger Kress and Van Leeuwen () proposed with a new semiotics—which offered to recover some of the clarity of structuralist semiotics, modified by a rigorous attention to social meanings realized as text and discourse characteristic of functional linguistics—seemed timely, to say the least; however, there are some problems.

To the best of my knowledge, no research project has yet truly fulfilled the promise of this merger. No full project has connected a semiotic analysis of media texts with research into the cultures of those who produced them and those who received them. The best I can do here, then, is to use a current funded research project as an example of how I hope such a synthesis might go in the future. The project does not aim for such an accomplishment; however, it has been useful in sharpening my sense of what is needed, and this sense has informed some of my analysis of the data that has emerged so far. I will use a small selection of this data, then, as an example of what questions such an approach might offer, attempt to model them as I go.

### Making Games

This is a three-year, funded research project, in its last year at the time of writing. Its aim is to develop—with a software company—authoring software for computer games. The funders are the United Kingdom's Economic and Social Research Council (ESRC) and Engineering and Physical Sciences Research Council (EPSRC), as well as the Department for Trade and Industry. The software has been developed by the industry partners in the project, Immersive Education, Ltd. The researchers are Caroline Pelletier (also project manager), David Buckingham, and myself. In addition to developing the software, a main research aim of the project is to develop a model of game literacy,

which would, in principle, be a subset of moves in recent years to expand the notion of literacy beyond print toward multiliteracies (Cope & Kalantzis, 2001; Lankshear & Knobel, 2003), media literacy (Buckingham, 2003), and multimodal literacies (Kress & Jewitt, 2003).

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Q5

This was not conceived primarily as a research project in multimodal textuality; however, its rationale does refer to the multimodal nature of computer games in particular, drawing on work in earlier projects. In addition, my own contribution to the project has partly been to think how students' gaming experiences (an obvious element of game literacy) can be analyzed in multimodal terms (Burn, 2005); and how the texts they themselves produce (the other obvious component of game literacy) can be analyzed in the same way (Burn, *in press*).

Q6

Furthermore, this project has, for me, helped to focus a range of theoretical and methodological questions in relation to (a) multimodal theory, (b) social semiotic theory, more broadly, and (c) media and cultural studies theory and research at an even more general level. Some of these questions and problems find at least partial answers in this project; others remain for future exploration.

This chapter will, then, select the work of one boy who participated in the project, and consider not only how social semiotic and multimodal theories can help to analyze the games he made, but also how the games realize meanings derived from his own cultural experience, especially in the domain of computer games. The student in question is a Mongolian boy, Ogedei,<sup>1</sup> who has been involved in each of the three years of this research project. In the first year (when he was 12–13 years old), we interviewed him about his gaming experience. In the second year (ages 13–14), he created a game in an after-school club, using the second iteration of the software developed in the project, and was also interviewed about his experience regarding the game, book, and film *Harry Potter and the Chamber of Secrets* (Electronic Arts [EA] Games, 2002). In the third (14–15 years old), he took the software home and produced a second game, using the third iteration of the software. I have selected data for this chapter from these broad contexts.

When we are confronted with this data, social semiotic and multimodal theories afford us a number of choices:

1. We can approach the data from the point of view of the four strata proposed by Kress and Van Leeuwen (2001) in relation to multimodal texts: (a) discourse (knowledge of some aspect of reality); (b) design (choice of semiotic mode; e.g., language, visual design, music); (c) production (choice of medium; e.g., paper, marble, computer programming); and (d) distribution (getting the text to an audience, sometimes through another layer of technology; e.g., broadcasting)

Q8

<sup>1</sup> The name of the boy whose game forms the subject of this chapter has been changed.

Q9 or Web display). In addition, I would add *interpretation*—Kress and Van Leeuwen () have a chapter on this, but do not conceive of it as another stratum. For me, however, it is the logical consequence of distribution. Since interpretation, as Kress and Van Leeuwen () argued, consists of further sign production, it then feeds back into discourse, creating a dialogic cycle in which, as Bakhtin (1952/1981) observed, “Each utterance is filled with echoes and reverberations of other utterances to which it is related by the communality of the sphere of speech communication” (p. 85).

Q10 2. We can approach the data within a framework of semiotic metafunctions, adapted variously from the metafunctions of systemic-functional linguistics, which Halliday () presented as the ideational, the interpersonal, and the textual. These propose that all texts (a) represent the world, (b) communicate between producer, text, and audience, and (c) are organized as texts through processes of composition that ensure coherence across the whole text. These metafunctions are interpreted into visual semiotics by Kress and Van Leeuwen (1996) as representational, interactive, and textual, and by Lemke (2002) as presentational, orientational, and organizational. The emphases differ somewhat in each of these transformations.

Q11 3. We can approach the data by focusing on the modes, perhaps isolating a particular feature such as how spatial design is carried out using visual image, bodily movement, and gesture; movement between different spaces and views; or how written and spoken language is used to impart information, give instructions, and construct dialogue between characters in the game.

These choices are useful in different ways, depending on the data available and the interpretive intention of the research. The second two are most useful when only the text is available—for instance, if we wanted to analyze a sequence of film or a comic strip. The first one is more useful if we have access to data that represents the various stages of creating a text (or interpreting one). For this reason, I will use the first option to consider the contexts in which games were authored in this project. At the same time, I will embed the second option (the metafunctions) within the consideration of design and production, in order to analyze a section of one particular game text, the first level of Ogedei’s game *Rebellion*.

#### *Discourses and Interpretations of Gaming and Play*

In recent research in cultural studies, the notions of ideology and resistance characteristic of the early history of cultural studies have often given way to notions of discourse. The implication is first that, while the issue is still about power, competing discourses seem more mobile (and therefore less deterministic) than the static structures of ideology; second, while different discourses

might be differently empowered, everyone can access a discourse, whereas one can only be on the receiving end of someone else's ideology. How discourses represent and mediate "reality," then, is a process to which all members of society contribute, in small or large ways, just as all must negotiate which representations they will believe and value.

In their model of semiotic strata, Kress and Van Leeuwen () have defined discourse as "knowledge of (some aspect of) reality." The word "knowledge" in this definition should perhaps be extended. It does not seem to encompass the wide-ranging cluster of representations, utterances, and communications available in a society to represent an area of interest or the identity of a group of people. These two orientations—one oriented to the epistemological and the other to the ontological—are worth distinguishing. Though all discourses are both, the emphasis may be on one or the other. Therefore, a discourse of childhood is a discourse of adults who construct childhood, not a discourse spoken by children, and is thus epistemologically oriented. By contrast, the discourse of computer gamers is expressive of the identity of the group and is ontologically oriented.

Q12

Like texts, discourses are generically structured, in the ways suggested by Volosinov (1973) and his "little speech genre." These structures make meanings recognizable, possible, and accessible, though in other ways, they constrain, reproducing familiar patterns and resisting change. These features of discourse and genre will become highly pertinent to Ogedei's game.

Finally, discourses are themselves multimodal and need to be rethought beyond the language model, which is still dominant in research methodologies such as discourse analysis. The discourses of computer-game players are verbal (e.g., they may write walkthroughs or spoiler stories), visual (e.g., fan art), and even gestural and dramatic (e.g., as in costume role-play; Burn, 2006).

Q13

First, then, we need to consider how Ogedei's own authorship of a game text emerges from the discourses of games. In a group interview in the first year of the project, he referred to a wide selection of games he has played: *Age of Empires*, *the Sims*, *Red Alert*, *Spider-Man*, *Formula One*, *Crash Bandicoot*, *Star Wars*, *Silent Hill*, and *Resident Evil*. Simply the act of naming so many games—more than any of the other children in the group—marks this as the discourse of an experienced and expert gamer, or at least someone laying claim to this status (in his case justifiably, as we were to discover). In fact, the discursive context of this interview itself involves a claim to such status, as the group of six students identified themselves as game players (a separate interview was conducted with those who identified themselves as nongamers). This *expert-gamer* discourse, which Ogedei strongly features, is in certain ways a performance of gendered identity, as Pelletier argued (2005) in an analysis of this same interview and other data sets from this project. Girls in the interviews tended to claim—at least at the start—limited experience with games and game genres often perceived as girl-friendly (in particular, *The*

*Sims*), while further exploration revealed more extensive and varied experience. Boys, on the other hand, claimed wide experience, particularly in sensational genres and titles. Ogedei is a good example of this kind of claim.

More specifically, Ogedei's references to games he has played invokes a *discourse of horror*, which, as Buckingham (1996) argued, can serve as a testing ground (for teenage boys, in particular). In an interview during Year 8, Ogedei was anxious to point out where games have a horror dimension. He emphasized that *Silent Hill* (Konami Computer Entertainment, 1996) is a horror game, and later described the experience of playing *Resident Evil*:

When we run and he appears, so I start running around. Well it's like the druids are like, they keep turning you around, and they keep running in circles, every time it comes up...You don't know where it comes from. Like black landscape....It is like they just randomly spring up...Whatever you like, if you have ten seconds or one minute they just spring up. It's weird. And it's like creepy stuff....I get freaked out by *Resident Evil*.

This account foregrounds the affective thrill of "horror," the only genre named after the emotion it inspires, as noted by film philosopher Noel Carroll (1990). It also, however, relates the affective impact of the game to the modes in which it is designed: the graphic design of the landscape, the dramatic actions available to the player character, and the apparently random design of the appearance of the evil druids (an effect he recreates two years later in his own game, *Rebellion*).

The discourse of horror games appears again a year later, when Ogedei was designing his first game using the second iteration of the authoring software produced by the project. On this occasion, he was designing the game in an after-school club set up by the project, and was talking through his design. He said that his intention was to make his game "more like an actual game." He then immediately referred—as he did a year earlier—to *Silent Hill* (Konami Computer Entertainment, 1996) as a model: "I've played a game that's really scary—*Silent Hill*" (Q16). As we shall see, his game designs reflect intentional adaptations of aspects of these games.

A third discursive theme is what we might call a *proto-critical discourse*. Part of this is an awareness of aspects of the political economy and regulatory domains within which games are produced. In the Year 8 interview, for example, he claimed that the horror games to which he has referred are certificated as 15, which is indeed the certification for the *Silent Hill* and *Resident Evil* series in the United Kingdom. A year later, he referred to the certification of *Manhunt*, another game he cited as an influence on his design: "I've only played it once, I got it from another country, it wasn't 18 there, it didn't have a rating, then it turned out to be really violent" (Q17). This rather elaborate plea of ignorance may well indicate an awareness of the controversial history of this game, certified 18 by the British Board of Film Classification (BBFC) and

the subject of a widely publicized murder case in 2004, in which the victim's mother claimed that the murderer had been obsessed by the game.

Within this proto-critical discourse, we can also locate critical judgments Ogedei frequently made about games. In the Year 8 interview, he made critical comments about quality that echo player-review discourses in gaming magazines and online forums: "I play Red Alert on PC which is good. It's better than PlayStation because it's got better graphics" (cite). In a rather different kind of judgment, he disparaged games developed from movies as "rubbish," suggesting that they are developed in a hurry, and relating the quality of games to the length of time it takes to develop them.

Q19

In an interview with children who have played the game *Harry Potter and the Chamber of Secrets* (EA Games, 2002; for an analysis of this, see Burn, 2005), Ogedei made specific critical judgments about the game. Unlike other children in the group who compared it with what they see as the originating text, J. K. Rowling's novel, Ogedei judged inauthentic as compared to other games in the action-adventure genre. It is also clear, however, that his unease with the character (that he is a "teachers' pet") indicates a desire for more subversive images of boyhood and its relation to authority. In particular, he proposed that Harry should have more powerful spells. When asked by a girl in the group whether this could be *Avadakedavra*, the killing spell (a reference to the Harry Potter books), Ogedei replied, "No—a flamethrower." In one sense, this remark displays his critical judgement of the game: It is low in what Van Leeuwen (1999) termed "presentational modality," or truth to its genre; the flamethrower metonymically indicates what a "real" adventure game would be like.

Q20

His remark, however, also relates to his wider interests in horror and representations of violence. These interests are the kinds of textual preferences that routinely awaken popular anxieties about media effects. In respect, it is important to remember the history of such debates. In particular, we can invoke Buckingham's (1996) study of young people's engagement with horror films, as well as his finding that such preoccupations are not the obsessive preserve of a minority of young male delinquents, but a common strategy for young people coming to terms with a range of social anxieties about the world they inhabit and the turmoil of growing up. Ogedei's unfavourable view of Harry Potter indicates similar preoccupations on his part.

Q21

Buckingham () also argued that we need to remind ourselves of the fictional nature of such media representations. Play and game theorists make the same point about the nature of games: Their fictional status, and the lack of consequences for the real world, is a shared understanding by those who enter the game world. Sutton-Smith (1997) elaborated the difference, both for animals and humans, between play fighting and real fighting. Salen and Zimmerman (2003) developed the idea of a magic circle, the game world that is governed by clearly defined rules understood by the players. This kind of

rational view of games is clearly important to Ogedei; he talks about the logic of games, the strategies needed to defeat end-of-level bosses, and how characters can impart instructions and information to players. In this respect, he engaged with practices and discourses of games in the sense of Roger Caillois' (1958/2001) *ludus*: play as a rule-governed system. His engagement with the discourses of horror games (and films) and the unpredictable, liminal adult pleasures they afford, however, seems much closer to the category Caillois (1958/2001) opposed to *ludus*, which he termed *paidea*: a looser, more chaotic form of play. Similarly, in the rhetorics of play he identified, Sutton-Smith (1997) isolated a progressive rhetoric that views play as educative, orderly, and rule-governed, one that he called "the rhetoric of Fate," in which more-adult forms of play (from Dionysian rites to gambling) are seen as dangerous and chaotic. It seems plausible that it is the combination of rule-governed, rational mastery and the (safe) experience of forbidden adult pleasures that provides precisely the exhilarating experience sought by teenagers, an experience that grows out of the reassuring structure of playground games and aspires toward the heady risks of adulthood.

Finally, we can identify a *proto-designer* discourse. This is, of course, specifically invited by the nature of the project, since we wanted to find out as much as possible about how the children thought games could be designed. Many of the children were quite uncertain about this in the Year 8 interview. Ogedei, however, made some specific suggestions that were entirely feasible in the light of actual game production practices. For instance, he suggested the following:

I think one of the first things you need to know is what kind of drama. You have to choose like drama, like the name of a character, like idea about it and develop on that....Drama, the characters and the storylines. You know, storylines and endings, then you need the stuff for the levels..., and the bad guy on the levels.

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Ogedei also suggested that character designs would begin with sketches, which was again entirely consistently with industry practices, especially in the production of, for instance, Japanese role-playing games in which elaborate concept drawings come early in the production process.

Q23

Later this same year, after using the first iteration of the project's authoring software, Ogedei had a number of interesting suggestions to make, which showed particular insights into the design process. He made one proposal that, although he presented it as a novel idea, seemed to derive from the so-called "bladder motive" in *The Sims 2* (Maxis, 2004). "None of the other games have this, but after while, they should have a need to go to the toilet."

Although this game was not released in the United Kingdom until later in the year in which this interview took place, it is possible that Ogedei had read of this feature in the gaming press or on the Internet. It is noteworthy

here—perhaps, because it expands the discursive field on which he was drawing—to consider game design beyond the stereotypically male areas of first-person shooters.

He also asked if the future software development will allow characters to talk; again, an area of design that was generally of more interest to the girls in the group:

If they could talk, if they could give you objectives, or get you involved in objectives, or get new parts of the story of the game and all that, more clearer, clearer what's happening, and then more logical, cos if it just says do this with no reason it'd be weird.

Q24

His interest in talk, then, is as one choice of mode the designer can use to convey to the player information about both the representational and ludic aspects of the game.

In general, then, the discursive patterns identified here suggest that Ogedei is deeply immersed in the culture of games. He has played many different titles and genres. He possesses a multimedia PC and a PlayStation 2. He is familiar with recently released titles, in some cases even before they have been released, presumably from previews in magazines, on the Internet, or on television. He has a good sense of the social anxieties that surround games and the regulatory mechanisms that exist to circumscribe them. His interest is not always in games, *per se*, but in cross-media experiences of narrative and genre, such as the experience of horror in games such as *Resident Evil* and films such as *Jason X*; or quest narratives in the games and films of *The Lord of the Rings*. Finally, he has some sense of how games are designed, belonging to the minority of players who seek out proto-design opportunities such as level editing.

As part of his life, the culture of games intersects with Ogedei's sense of self. On the one hand, he clearly obtains a certain status from his expertise; however, games and other media also serve as semiotic material through which he can articulate subversive meanings that challenge the conventional order of school and the adult world, offering fantasy alternatives to forms of childish obedience that he may wish to leave behind. In one sense, gaming expertise and experience can be seen as a form of cultural capital, though how such capital can be recognised and augmented by school is one question of this project. For conventional schooling, games are largely invisible, in Bourdieu's (1984) sense that to see (*voir*), one has to know (*savoir*): "A work of art has meaning only for someone who possesses the cultural competence, that is, the code into which it is encoded" (p. 2). The discourses of expertise, design, genre, and critique that Ogedei has displayed represent exactly this kind of cultural competence.

In relation to the broader questions of the application of theories of multimodality, one further point needs to be made. Kress & Van Leeuwen's () four strata are not, they emphasize, to be seen as sequential—a chronological

Q25

sequence of the gestation of a multimodal text. This is true in many senses. These discourses of gaming do not merely precede the design of Ogedei's game; they permeate it, surround it, and inflect every choice he makes. Perhaps Kress and Van Leeuwen () missed the opportunity, however, to recognise a cycle of discourse, design, and interpretation that is, in other ways, a useful image. In particular, Ogedei's gaming discourse is, of course, also a complex of interpretative commentary and engagement—a response to other texts that precedes the design of his own, very much in the sense of Bakhtin's (1952/1981) dialogic cycle.

### *Game Design and Production*

In Ogedei's entry into the world of game design, his representation of certain social meanings through his own game was a choice. Some students in our study made games as part of a sequence of lessons, and this choice was therefore made by the teacher. Both of Ogedei's games, however, have been made in a voluntary context, the first one in an after-school club and the second one at home. The choice to commit considerable amounts of time to this can be related to his use of the expert gamer and proto-designer discourses. Games are a cultural medium from which he derives a sense of status, an activity in which he feels he is skilled. His use of the level editor in *Timesplitters 2* (Free Radical Design, 2002) indicates that he occupies the space in which gamers move some way toward forms of production practice. When he made his first game, *Maniac Maze*, in the summer term of 2005, he had a clear sense of what the game needed to feel like. He made the game over six weeks, in weekly sessions. He was impatient to design and produce the game using the software, resisting efforts to encourage him to plan on paper first.

I will now move on to look at a new game, *Rebellion*, which Ogedei made in 2006, the third year of the project. At the time of writing, this game is incomplete, so this analysis will consider the single level that he has created. The analysis here will be structured according to the three metafunctions that social semiotics derives from Halliday (1985). Here, the terms used will be *representation*, *interaction*, and *organisation*.

Briefly, the setting of *Rebellion* is a grim futuristic city ruled by alien Overlords and their stormtroopers. The player is part of a group of rebels, an insurgent slave class with chips planted in their heads, reminiscent of the replicants in *Blade Runner*, though there is no evidence that Ogedei knows this film.

*Representation.* In earlier work, we have used the representational aspect of games to refer to those aspects that make up narrative in conventional texts. Here, importantly, representation includes characters and location attributes, as well as the system of actor, action, and goal known as “transitivity.”

In addition to narrative system, however, the game also must construct itself as a game through what we have called its “ludic” system. Its grammar is

based on the fundamental proposition of conditionality: “If this door opens, the player can go left or right; if the player fires the gun, then the enemy will return fire.” It is realized as the rules, economies, challenges, and defined win/lose states of the game.

At certain points, however, the representational and ludic systems fuse. If the player, as protagonist, kills an enemy, this action is at once part of a transitive sequence that is in turn part of a narrative sequence. At the same time, it represents a player choice from a series of potential actions; it realizes a rule of the game (kill enemies) and an economy of the game (player health and enemy health are depleted by gunfire); and it permits the player to progress toward a win-state (or not). The actions taken here are, then, simultaneously representational (narrative) *and* ludic. In this respect, aspects of the ideational or representational function are transferred to the interactive function. Where interaction in the conventional sense means negotiating meaning, modality, and systems of address, here it means taking on one term of a narratively and ludically inflected transitive sequence.

The multimodal nature of the text is important here in two senses. First, the game is multimodal in a conventional sense, as are most media texts. At the point of player reception, the game text is experienced as a synthesis of animation, 3-D visual design, sound, and written text. As I will discuss next, meanings are constructed between and across these modes, in a variety of different intermodal relationships: complementarity (both parallel and serial), contradiction, amplification, depletion, and so forth.

Second, the game is multimodal in a hypertextual sense, or *hypermodal*, as Lemke (2002) called it. Below the surface of the game as it appears to the player is the layer of programming that determines the dynamic qualities of all entities of the game. Strictly speaking, there are several layers of programming, beginning with the “lowest” level of machine code and moving up to the “highest” level of programming language (see Walton, 2005, for a detailed analysis of how programming languages in games function as modes). In the context of the present project, the software allows the designer access to a rule editor, in which rules can be constructed to determine the conditions of any event in the game, from the opening of a door to the behavior of a character.

Q27

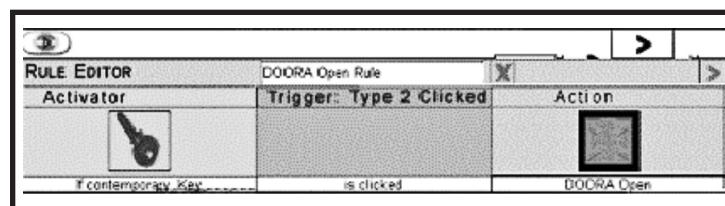


Figure 6.1 The rule editor of Mission Maker.

Q30

In Figure 6.1, for example, the rule editor allows the student to choose an action (Door A opens), a trigger (something is clicked), and an activator (contemporary key). This results in what is in effect a piece of high-level programming: *If contemporary key is clicked, Door A opens.*

Below the surface of the game, however, lie other programmed elements that relate to the rule editor. The world in which the game takes place is designed by the player through the use of a *tile editor*, a generic form, which appears in certain commercial game-composition software, such as 3D *Gamemaker*, which we used with the participants in this project. It also appears in a level editor packaged with the game *Timesplitters 2* (Free Radical Design, 2002)—a feature that allows the player to design his or her own level—to create a space, populate it with characters, and assign attributes to these characters. Ogedei was one of the three boys in the group at his school who were experienced players of this game. They brought it into the school, along with Ogedei's PlayStation, and demonstrated it on the interactive whiteboard. Ogedei showed the level editor, and his comments emphasized the notion of "game logic," a menu in the level editor that allows the player/designer to specify conditions to trigger events. Figure 6.2 shows the tile editor of *Rebellion*, a series of spaces chosen from collections of predesigned, 3-D chambers.



Figure 6.2 The tile editor of *Rebellion*.

Aspects of narrative—for example, events, characters, and locations—are designed and produced, in different modes and through the design of conditionality, through the rule editor. In respect of these narrative functions, we can ask questions of this Level 1 of *Rebellion* such as, “Where are we?” “What is happening?” or “Who is doing what to whom?” We can ask how this information is conveyed: “In what modes?” or “Using what signifier material?” We can also ask what forms of social interest lie behind this sign making, through the processes of both design and production. Here, we will focus (as an example) on the first of these questions: “Where are we?”

Ogedei has chosen a bleak, urban, sci-fi landscape. While the constituent chambers are predesigned, he has “dressed” them with objects that intensify this sense of anomie: steel barriers, fuel drums, a metal cauldron, a ventilator shaft, a metal door, an animated futuristic machine with spinning balls. The meanings here seem to be industry, technology, science, confinement, and danger. These meanings emerge from the process of connotation, well-known in the history of semiotics, adapted from Hjelmslev by Barthes (), and developed further by him into different levels of meaning either implied by the text or discerned by the reader, with an increasing emphasis on the latter. This notion is addressed by Kress and Van Leeuwen’s (2001) notion of *provenance*: the meanings imported by signifier material, either by virtue of its natural properties or by its previous cultural shaping. In this case, the objects (such as all those in the asset library) have been shaped by the software designers with a wide range of possible uses and meanings appropriate to different game genres. These possible meanings, however, are newly shaped by Ogedei’s intentions, which in turn relate to the discourses of game play and game design explored earlier. We can relate these individual signs, and the complex they form (a landscape; a narrative route), to his cultural experience of games. The combination of warehouse sci-fi and urban noir is characteristic of classic first-person shooters: in particular, *Doom*, but also the FPS Ogedei knows well and has demonstrated, *Timesplitters 2* (Free Radical Design, 2002).

Q32

Q33

Furthermore, the design of this space and its affective charge of doom and danger extend to modes other than the 3-D visual design of the space. In the first sequence of the game, in which the player progresses down a corridor, turns left and goes through a door to meet two enemy stormtroopers, Ogedei added a range of sounds. He placed a trigger volume (an invisible cylinder programmed to trigger an event when the player enters it) in the corridor just as the player turns left, and he programmed it to trigger a strident alarm and a recorded voice file (his own voice, heavily disguised) shouting: “Intruder Alert! Intruder! Alert! Protect the Overlord!” This audio file has three very clear functions. First, it has two clear representational functions. Most importantly, perhaps, it infuses the space with a heightened sense of menace and urgency. If this were a film, we would worry on behalf of the protagonist. As it is a game, the effect on the player is to quicken the player’s pace, implying that something

unpleasant is about to happen. In fact, there is no such ludic consequence (such as the appearance of an enemy or the triggering of a booby trap. The effect, arguably, is a transformation of the word he used two years earlier to describe *Resident Evil*: “creepy.” This emotion is his interest and his intention, and he realizes it here through his combination of visual and audio design, in a relation of complementarity across the modes.

The second effect is also representational: it carries forward the narrative, in effect introducing us, albeit enigmatically, to a key character we have not yet met. In this respect, the verbal mode (which *names* the Overlord) augments and anticipates the visual mode, which will *show* us the Overlord soon.

Its final function is ludic. In effect, it gives us an implicit instruction: Our mission is to attack the Overlord. It also warns us that he will be defended. Again, this verbal instruction amplifies the other clues that the game will give us when we meet the Overlord; it anticipates them.

Clearly, then, it becomes hard to disentangle the representational meanings relating to narrative from those relating to game. The landscapes, objects, and sounds help to make up Ogedei’s narrative of alien Overlords and rebel commandos. At the same time, they signify familiar game genres, just as elves, orcs, and mages would signify role-playing games and the Tolkienesque cultural history that lies behind them.

The characters Ogedei has chosen also recall earlier games and genres. There are three categories: (a) friendly rebels, (b) enemy stormtroopers, and (c) their leaders, the alien Overlords. Rebel commandos and stormtroopers are familiar figures from commercial FPS games. The idea of rebellion also has earlier gaming connections with science fiction, especially in *Star Wars: Rebellion*. As with the landscapes and objects, the debate raised here is broadly about the virtues and vices of generic reproduction. There is a debate in the industry at the time of writing, for instance, about the extent to which commercial game design might be locked into the conservative reproduction of formulae assumed to appeal to the perceived core demographic (young male gamers). Aleks Krotoski (2006), a UK-based games journalist and researcher, wrote in the *Guardian* newspaper, “At the moment, in-store displays groan under computer games with hackneyed paradigms and established genres” (pp. xx–xx), as well as of the need for new ideas from the next generation of game designers.

For Ogedei, the excitement and danger of the FPS and action adventure genres, and the dangerous worlds they present, seem to be connected on the one hand to the discourse of horror in games (and films), which, as we have seen, appeals to him as a transgressive body of texts, offering glimpses of new and independent identities and tastes, distanced from school, authority, and aspects of boyhood he is eager to transcend.

At the same time, it is possible to subject the representational matter here to forms of critical reading which, while they might uncomfortably collide

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with these social meanings, might also productively challenge them, or at least problematize them. While the male-dominated world of the FPS offers a kind of playground for a certain kind of rite of passage in some ways analogous to paintball, it also raises questions about the limitations of such play. Most particularly, it raises questions about the representation of women. While many girl gamers might enjoy playing male characters in FPS games, and might even find this an experience liberating from stereotypical female social roles (cf. Cassell & Jenkins, 1998, p. xx), it seems entirely reasonable to ask a young games designer the question "Will there be any female characters in your game?" This is the kind of critical question a media-education classroom would routinely raise in relation to representation. This simple but profound issue seems a valuable example of critical thinking for tomorrow's game designers. In a previous research project on role-playing games, we were a little dismayed to work with one company in the United Kingdom that had produced a game which, though inventive and interesting in many respects, had no female characters and was designed entirely by young men, with no real discussion, as far as we could tell, of the rationale for such a representational bias.

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What can social semiotics say here? Three things, in my view. First, it can at least demonstrate what has been designed, that is, what processes of signification are in play and what social meanings they convey, or at least wish to make claim to.

Second, it can look at the notion of creativity itself as a rhetorical process, not so much an essential truth, but as a cluster of evaluative discourses and social efforts to negotiate what is valuable and valued, especially in the aesthetic life of the society. In this respect, as we have seen, horror and FPS games may indicate Ogedei's subscription to forms of popular taste that emphatically prefer spectacular, transgressive imagery. In Bourdieu's (1984) inversion of the Kantian aesthetic, this kind of preference is entirely positive; he refers to it as "the expressive content which explodes in the expressiveness of popular language" (p. 34) and "the violence to which the popular spectator consents" (p. 48).

Third, perhaps most usefully here, it can propose a theory of transformation. Signs always adapt signifier material; they never create it out of nowhere. In this sense, Ogedei is like any other creator; however, there are greater and lesser degrees of transformative effort. For Ogedei, the point here is absolutely *not* to transform the FPS genre beyond recognition, but rather to harness it, to produce it as authentically as possible, as we shall see in the next section. The creative work lies, not in the transformation of representational structures, but in the composition of the game, the complexity of this composition, and the well-crafted ludic experience it offers the player, some of the detail of which will be analyzed later in this chapter.

When all is said and done, however, there remains something we might reasonably regard as an aspect of game literacy: the politics of

representation. While this may be a distraction from Ogedei's central motivation, and the strong connection of his game with his gaming culture, it can be seen as part of an apparatus of media education that helps the learner to move toward more abstract conceptualisations of text and meaning of the kind Vygotsky called "scientific."

*Interaction.* Characters are typically part of the representational system of a text, so that the previous question—"Who is doing what to whom?"—is usually a purely narrative question. Even in games, it can be considered at least partly under the heading of representation; however, to take the protagonist as the main example, while the protagonist fulfils all of the usual narrative functions (e.g., setting out, encountering other characters, overcoming obstacles, doing battle, achieving some kind of resolution), there is a critical—even a *criterial*—difference in games, where the player character is also the "puppet" referred to by the game theorist Gonzalo Frasca (2003) as a kind of "digital dummy" (Burn & Schott, 2004). It is the dramatic point of entrance to the game, and in semiotic terms, it allows the operation of a grammatical sleight of hand, in which one term of the transitive sequence, the *Actor* (in the terminology of functional grammar), becomes the spectator/player. A number of actions performed by the protagonist are passed over to the player. Importantly, they are not all the actions represented in the game, but only those controlled by the interface—typically, *walk, run, jump, shoot, and get*. In this sense, we are working not with the infinite number of actions available in a conventional narrative, but with a restricted language, which works like the restricted languages of other games, such as the suits in a deck of cards, as Halliday (1974) described. Neither designer nor player experience this set of actions as restricted, however, as they are juxtaposed with a variety of environments, characters, sounds, and narrative events, and they also undergo forms of semiotic amplification, expanding into wider sets of actions (e.g., *escape, dodge, hide, meet, hover, teeter, blast, kill, make friends, steal, buy*, and so on).

In designing his game, Ogedei is working with a player character that is simply a first-person point of view, with no visible substance other than a hand, a gun or a wand to hover in front of them as a metonymic indicator of agency. Furthermore, most of the player character's actions are predefined by the authoring software (e.g., *jump, walk, crouch, look, get*). In this sense, the ludic design work here is a little like being given a pack of cards and asked to invent a new card game. You can attribute new meanings to the suits and numbers (you must get five black cards to win; or the initial letters of your cards' names must spell a four-letter word); but you cannot change the components with which you are playing. Similarly, you could be given a chess set and invited to make up a new game with new rules; however, the provenance of the components—two differently colored sets representing state, church,

and military—are likely to suggest a conflict-based game distantly symbolic of actual historical conflict (though it might be possible to convert chess into a peace game, perhaps by adapting and boosting the powers of the bishops and queens; or a game of proletarian revolution, by boosting the power of the pawns).

In the same way then, Ogedei has been given defined actions with which to work. He makes certain important decisions. He chooses to provide guns and ammunition, consistent with the generic style of his game, and adding the action *shoot* to his player's repertoire. Beyond this, however, his transformative work is in creating the semiotic arrays with which the player character's actions will connect. These include the landscape, which transforms the limited set of actions into a much richer set, through syntagmatic links made provisionally by the designer as possibilities, then by the player as actual combinations in a particular game session. We will next see how this works. Here, we will focus on another semiotic mode, which transforms the actions of the player character through a central interactive function of the game: speech.

At the beginning of *Rebellion*, the player emerges from a transporter pod and meets a friendly ally, one of the rebel commandos. Using the branching dialogue tool of the authoring software, Ogedei has designed the following conversation between player and commando:

Rebel commando: You made it! Quick, we must hurry. Even as we speek [sic] the hunters are teleporting in.

Player: OK, but without weapons I wouldn't be able to do anything.

Rebel commando: Doesn't matter. I have a ray gun and 50 rounds of ammo stashed in the box next to me, I'll follow you after you get them.

Q38

This short interchange, in interactive terms, accomplishes a good deal. First, it strikes a balance of mood at the beginning of the game: in terms of the functions of demand and offer, which Kress and Van Leeuwen () have adapted from Halliday (), it offers goods (the gun and ammo) and services ("I'll follow you"). It also demands action, both explicitly ("Quick, we must hurry") and implicitly, in what is effectively an instruction to get the gun and ammunition.

Q39

Second, however, in addition to the ludic actions already conferred on the player character (*walk*, *jump*, *crouch*, *get*), and the extra one added by Ogedei (*shoot*), it adds another: *speak*. To activate it, the player clicks on the dialogue line as it appears on screen. Again, as with the pack of cards, the player cannot choose what to say, but she or he can choose whether to say it or not; in some cases, a player can choose from a number of different responses, with different consequences for the game. Of course, the dialogue also serves representational purposes, economically sketching in the situation, implying the genre and initial narrative state, and providing character motive.

After the player has encountered and overcome three enemy stormtroopers, of whom more later, s/he meets the first of the alien Overlords, and the following conversation takes place (see Figure 6.3):

Overlord: Ah it's the rebel, tell me, do you plan to kill me?

Player: Yes you evil bastard, You will pay for your crimes.

Overlord: Is that so? Well I will have you know that mine is the only eyes that shall open the door to the mind control structure and to retake the city you will have to destroy the structure, and to destroy me would mean that you would never destroy it and thus never retake the city. So what say you will let me open the door, on the condition that you will let me live.

Q41

In representational terms, this develops the narrative in certain ways: it names the player character as rebel; it expands the landscape beyond the limited number of chambers the game will actually contain to an imagined wider scope of the city; it implies future narrative events; it also names large-scale narrative actions the player as protagonist will take: open the door to the mind control structure, retake the city.

In interactive terms, it provides a set of ludic challenges and options. We can tell that we need to open a door (we may have already encountered this earlier

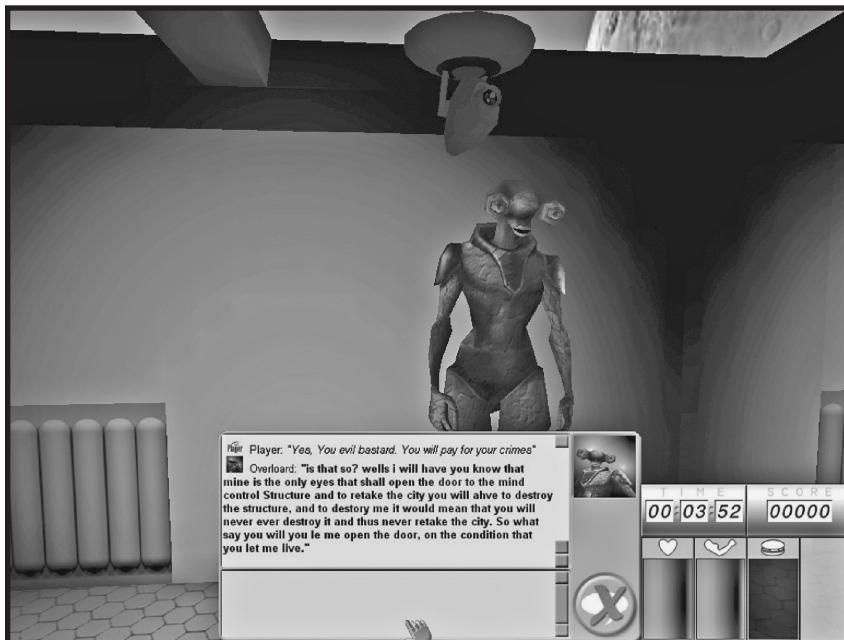


Figure 6.3 The player's dialogue with the alien Overlord.

as a locked door). We can tell that our mission is to destroy the “mind control structure.” And finally, intriguingly, we are presented with a ludic dilemma. We know that the Overlord’s eyes are necessary to open the door; but if we kill him, it seems we will defeat our own purpose. The next two lines of dialogue offer further clues. We can now choose from the following:

Player: Fine. Just remember to keep your end of the bargain.

Or

Player: Is that so? Well I can just rip your eyes out!

In ludic terms, the structure is clear and interesting. We have no way of knowing which option will work best, so our ludic choice may be informed by narrative interest (be merciful to the enemy); or by generic experience of this kind of game (when in doubt, blow away the enemy). In effect, an element of chance is introduced into the ludic design.

In representational terms, the dialogue operates a semiotic amplification of the restricted language of the game. Where technically we have only five actions available through mouse and keyboard, these are expanded through this dialogue: (a) *tell*, (b) *plan*, (c) *retake*, (d) *open*, (e) *destroy*, (f) *let (me live)*, and (g) *rip*.

The answer to the question “Who does what to whom?” then, is that what would be a fixed system of transitivity in a conventional narrative is a provisional system of transitivity in a game, in which one term of the transitive sequence, one Actor of the pair in each event, is the player. The peculiar grammar of games, then, is that this central aspect of the *representational* system of the text—a focalized Actor and the actions he or she performs—is passed over to the audience, who becomes part of the *interactive* (and ludic) system, both grammatically and in the popular sense of the word.

More specifically, in Ogedei’s game, we can say that he allocates to the player the necessary quantified resources for the gleeful exercise of dramatic and ludic power in the fictional world of the game. The ability to blow away stormtroopers and rip the eyeballs from alien Overlords is precisely the kind of authentic game play that he saw as missing in *Harry Potter and the Chamber of Secrets* (EA Games, 2002). The careful regulation of options, and the provision of just enough ammo at the right times, ensures that the rule-governed structure of the game is delicately balanced, while the affective thrill of danger and an adult fiction are effectively constructed.

#### *Organisation*

The game is organized as a complex multimodal text. As previously noted, Ogedei has worked his way through a number of different compositional pro-

cesses. He has composed three separate levels altogether as the gameworld, using the tile editor (see Figure 6.2 earlier), a process like a jigsaw, or a mosaic. He has dressed the world with objects and placed characters and pickups. He has constructed rules that determine events, choices, challenges, win-lose states, and other ludic features, using the rule editor, a process similar to writing if-clauses, mathematical equations, or high-level computer programming. He has composed dialogue, a process similar to writing a play script, but also like improvised drama.

There are too many aspects of spatial and temporal design, ludic and narrative design, here, to do justice to. We will focus on two: (a) the routes of play designed for the player; and (b) what makes this a coherent text.

The notion of the route through the text invokes Kress and Van Leeuwen's (1996) notion of reading path in visual design: that, while the visual text may indicate a preferred route through by forms of salience attributed to elements of the composition (size, center-margin, foreground-background, etc.), the viewer can choose his or her own route, to some extent. Lemke () extended this idea in relation to hypertext, naming the text's suggested route the *trajectory*, and the player's preferred route the *traversal*, in recognition of the greater possibility of disparity between the two in hypertext, where the designer cannot predict all the possible routes.

The relation between trajectory and traversal is partially realized in popular discourses of gaming as a debate about "linearity," as in this review of the popular Japanese role-playing game, *Final Fantasy VII* (SquareSoft, 1997): "As is typical of the Japanese RPG form, the game is extremely linear. You may not see the train tracks, but the feeling that you've been railroaded is unmistakable" (Burn & Schott, 2004, p. xx).

Ogedei's game offers the player a very clear trajectory. As in many adventure games, there is only one way out of each section of the game, ensuring that the player progresses smoothly from section to section. Within these sections, however, there are choices. In the first level, having encountered the first enemy stormtrooper, the player is offered the choice of surrendering their gun or opening fire. The first option leads to game death, as the stormtrooper pursues you and shoots you until your health level is completely depleted. The second option allows you to kill the stormtrooper and gain a healthpack. You then proceed to the end of a corridor and can turn right or left. If you turn right, you enter a burst of electricity, which kills you. If you turn left, you come to the door to the chamber that contains the Overlord and the route to the next level. You then enter combat with the two stormtroopers in this chamber, after which you meet the Overlord, and are offered the two options just described. If you allow the Overlord to lead you to the door, you follow him, but are then killed as you go through the door. If you kill the Overlord, you are rewarded with his eyeball, which you place in your inventory, and which opens the door for you.

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The trajectory is clear, then: there is only one route in each case that leads to the win state and one to the lose state. These options introduce an element of chance: with each double option, you have, in principle, a 50-50 chance of success; however, this simple ludic structure is amplified semiotically by the representational systems of the text. Ogedei has chosen visual designs that will ring alarm bells for the player; and he has, in recording the voice files for their dialogue, used accents and intonations that suggest evil intent: sneering, threatening, and mocking. Here, visual and auditory modes amplify the ludic options to produce warnings and suggestions of characters' intentions. In some cases, these amplifications work as disambiguation: they clarify the options (e.g., the image of an electric storm warns you of a route that will lead to game death). In other cases, they do the reverse (e.g., the "Intruder! Alert!" warning is intended to panic the player and make the ludic route ambiguous and uncertain).

What, then, does the player's traversal consist of? Specific options are available. First, there are the choices outlined earlier, simple twofold choices, in each case. Second, there are choices about routes within the chambers. The chamber containing the Overlord is a large, three-level chamber. We can explore the lower levels (where we will find the barred door leading to the next level, which will inform our understanding of what needs to be achieved next); or we can go straight up the stairs and confront the Overlord. Third, we have choices about time. We can race around frantically, or we can take our time; however, time is constrained in certain places. As we approach the Overlord's chamber, we can see, just inside the entrance, two stormtroopers. Ogedei has placed, just outside the entrance, a trigger volume that, when the player enters it, will make the stormtroopers "seek and destroy" the player. The placing of the trigger volume is critical. It is on the far side of a small bridge so that the player has time and space to approach, see the stormtroopers, and equip a gun before (unknowingly) triggering the seek and destroy action. This allows the player the sense of slowly creeping up, peering into the room, getting prepared, followed by an intense bout of action in which speed and accurate firing makes the difference between winning and losing. The alternation of suspense and energetic release here is, of course, characteristic of horror films. As Carr (2003) argued in the case of *Silent Hill* (Konami Computer Entertainment, 1996), it is also a characteristic of the player's experience of horror games, positioned on the receiving end of the monstrous threat. Here, then, Ogedei's composition carefully balances spatial and temporal dynamics to work toward the ludic experience of the games he seeks to emulate.

What are the organizational features of this game that design the trajectory and make the traversal possible? One aspect of the design can be seen as textual cohesion, defined in the seminal text on this feature of linguistic semantics as "relations of meaning that exist within the text and define it as a text" (Halliday & Hasan, 1976, p. xx); however, the principle of cohesive ties

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needs to be rethought in the context of complex multimodal texts of this kind. Halliday & Hasan's () original five categories—(a) reference, (b) substitution, (c) ellipsis, (d) conjunction, and (e) lexical cohesion—need to be adapted, as Lemke (2002) has suggested.

This analysis will explore three examples of cohesion in Level 1 of *Rebellion*.

First, there are strong referential ties between different modes. When the rebel commando you meet first says that there is a gun and some ammo stashed in the box next to him, the verbal sign “box” (provided in both spoken and written form) refers to the visual sign of the “safe” in the 3-D environment (see Figure 6.4). The meaning relations made possible by cohesive ties, however, are, like modality, a process of negotiation between text and reader. In this case, the player has to know that a third semiotic act is necessary: for the player, using the hand that represents the player in the game world, to click on the safe. The cohesive tie here is, then, threefold: (a) the verbal sign, (b) the visual referent, and (c) the player action, which realizes its meaning as ludic and narrative action. There are many examples of this kind of referential cohesion, in which one sign refers to a ludic possibility subsequently realized by a player action. Here, then, reference can be seen as the signaling of potential meanings on the game, and the realization of those meanings in a specific game session. The meaning is constructed on two levels, as Frasca (2003)



Figure 6.4 The rebel commando and the safe.

pointed out: (a) meaning potential at the level of the game and (b) realized meaning at the level of the individual session. The semantic pair typical of this kind of cohesion in language is thus expanded to a semantic triad. In relation to this triad, it is important to point out that at least one element of the triad must be dynamic—that is, programmed to respond to player action. In this sense, the safe works like a hyperlink in the hypertextual cohesive chains analyzed in Web sites by Lemke. Objects in the gameworld may not be dynamic or programmed: the safe might just have been an inert prop, like an inert word or image on a Web page. It is its programmed dynamic nature that makes the reference salient and the ludic action possible.

This semantic triad has been composed by Ogedei through a combination of modes: (a) writing, (b) 3-D placing of objects and character, and (c) rule construction, in which the rule editor functions as the specific medium for the ludic mode, establishing the conditionality of the event. He has

- conceived the whole sequence.
- scripted the dialogue.
- recorded the dialogue.
- written rules to initiate the dialogue (the first being that if the rebel commando is clicked, then the first line of dialogue will play).
- written the rule to open the safe (if the safe is clicked, the safe will open; see Figure 6.4).

Second, there are multimodal conjunctive ties, syntactic links between segments of the text. Once you have obtained the gun and ammo, you may only move in one direction: along the corridor. In effect, this is an *and* or *then* kind of tie. It is cohesive because it allows the player to make sense of the sequence. As we go down the corridor, we pass through an invisible trigger volume activating the first enemy stormtrooper, who attacks our friend, the rebel commando. This interrupts the simple sequence with a tie roughly corresponding to “but”—an abrupt change of direction that demands our attention (all modes here work together in the interactive function to demand that we intervene). Again, there are many cohesive ties of this kind, and they correspond to the linear chain of the route Ogedei has planned for the player. They are balanced, however, by ties that offer not a sequential chain, but a choice: either left or right, either kill or have mercy, either surrender your gun or shoot.

Third, there are ties produced by different kinds of redundancy, related to cohesion, though also related to the structure of oral narratives, as Ong (2002) pointed out. The point here is that complex meanings must be repeated in one form or another in order to give the reader the best chance of understanding and, in the case of oral narrative, to give the narrator stalling time to improvise the next sequence. Both functions are relevant here. Redundancy teaches us how to play the game. Once we have met one stormtrooper, considered a choice, and learned—perhaps the hard way—not to trust them, the next time

we meet a character who looks like this, we have a better idea of how to deal with that character. Ogedei's extreme economy with character types (he has only created three) contrasts with the first impulse of the young users of this software to use all the visual resources on offer for the sake of variety. The economical use of only three types serves the purpose of redundancy as a form of cohesion, which in turn produces meanings we have noted earlier, such as a coherent narrative sequence, and references to generic patterns in games of this type familiar in the discourses of designer and player.

Redundancy also exists in the repetition of instructions in different modes. As we have seen, we may be cued to attack the Overlord by the visual design of the character, by the intonation of the voice characterization, or by the words used. While the modes complement each other, they also repeat the same message, giving us time to decide. If we see the player in the role of oral performer, who, like Ong's (2002) oral storyteller, must improvise on given formulae, depending on the rhetorical figure of *copia*, stalling devices for performer and reader. The player is, of course, both, like Janet Murray's (1998) notion of the game player as both audience and actor. As the player of *Rebellion* is poised outside the Overlord's chamber, then, the repetition of the figure of the stormtroopers just visible inside the chamber and the ludic sign of the gun in the player's inventory, already used once in the game, serve as repeated formulae that tie the game together. As in the semiotic triad of the referential ties, the meanings made by these clusters of redundant images are potential, dependent on player action to realize their meanings, and hence subject to the performative, improvisatory work of the player, just as the kennings and epithets of oral, formulaic, narrative verse are waiting for assembly by the bard.

#### *Distribution*

Q49 Like the other strata proposed by Kress and Van Leeuwen (), the question of distribution is partly about modes and media, but also about power relations. What has been a process of modal combinations (e.g., animation, sound, speech, game rules) now becomes a relatively fixed final text, but to be sent out into the world, it needs a medium of distribution, frequently more than one medium. In the games industry, this often involves the final contractual stage in the relationship between a developer (often, a small production company) and a publisher (typically, a very large international company); this relationship is marked by (a) forms of content and editorial control, (b) the targeting of markets across age, gender, and cultural and national groupings, and (c) the flow of capital investment and revenue income.

For education, the issue of distribution of media texts made by young people is also about technologies and power. The history of such work is effectively one of simulation, imitations of production practices throughout the world, which most often stop short of distribution. The work is seen by the class, maybe the school, perhaps parents, and sometimes examiners, but it

cannot command exhibition opportunities in the prized sites of the media: cinemas, peak-time television, and large-scale production for the retail market. At times, Internet technology seems to provide a solution for this prison of simulation: at last, young people's work can be published to the world. Significant questions remain about who exactly the audience might be, however, both in global and local terms. The exhibition sites that were once considered to be the most prized remain so, in many respects.

The Internet will be the distribution technology for games made by these students, eventually augmented by a free, downloadable player produced by Immersive Education. At present, Ogedei's games are on a password-protected site accessible to other schools, teachers, developers, and researchers in the project.

To return to the world of the simulation, however, the whole question of distribution and interpretation is also, for media education, about how young designers of media texts imagine their audiences. In this regard, the classes and clubs who used the authoring software were encouraged to write walkthroughs for their games, a tentative exploration of the interpretive practices of game fan cultures, which typically produce fan art, writing, text-based games, walkthroughs, and even poems and songs. This aspect of the project is yet to be developed, but Ogedei's walkthrough for his first game (a) displays an anxiety to capture the authentic experience of play, (b) evokes the discourse of hints and cheats that players delight in, and (c) adopts the mantle of the expert shared by the professional designer and the hard-core expert gamer.

#### *Conclusion: Analyzing Games*

We can make some conclusions about the game Ogedei has designed. It develops a coherent narrative, consistent with the genres he enjoys and wishes to emulate. It constructs a satisfying experience of play, which can be said to have a high degree of ludic cohesion, also consistent with these game genres. It is closely related to his gaming culture, developing forms of ludic pleasure he has experienced in commercial games, as well as representational and narrative devices typical of his favorite genres. Also related are social meanings with implications for gender, on the one hand, and for popular aesthetic taste, on the other.

The analysis of both the interview data and the game has told us something useful about what kinds of literacy, design process, and learning are going on here. It also answers urgent and pertinent questions about how the interests of literacy in schools might be served by including forms such as computer games alongside film, television, and print media texts in literacy (and literature) curricula. It is clear that one purpose of a multimodal analysis of a text of this kind is to demonstrate what kinds of literacy might be involved in its production. Games represent another example of how we might expand conventional print literacies to fit other representational modes, as Catherine Beavis (2001)

argued in her study of the use of games in an Australian classroom. Ogedei's game, produced outside the usual classroom pedagogies of media education, demonstrates that many of the competences usually associated with literacy are in evidence, including certain forms of critical distinction. In answer to the obvious question that arises from this—"What is the value of media education?"—two possibilities come to mind. One is that, for Ogedei, the value may be less than it is for (the majority of) other children who do not belong to the self-elected-elite group he seems to represent—the group who, in the 20th century, might have had their own darkrooms rather than being content with snapshots. The second, however, is that the analysis suggests that there are some questions that would not occur spontaneously to a game producer such as Ogedei. While his critical sense of authentic genres is highly developed, he has much less awareness of, for instance, the representation of gender and its implications, a question that would be raised by media education.

While Ogedei may be designing aspects of narrative of interest to media and English teachers, with certain character functions, temporal dispositions, generic patterns, and so on, his own interest is, principally, in designing a *game*. Whatever judgments adult might make about the aesthetic or moral qualities of first-person shooters, the analysis reveals two sets of features that relate to the game discourses Ogedei inhabits. The preoccupation with adult genres, especially the representational genre of horror and the ludic genre of the FPS, can be read as a kind of legitimate teenage rite of passage, though also as entry into a complex set of aesthetic debates about how certain texts and genres are culturally valued. Ogedei's careful work to produce a sense of eeriness in his games through combinations of word, image, spatial design, and voice characterization, represents his cultural capital, his cultural taste, and the pleasure he derives from it. The analysis of the representational structures in *Rebellion* that produce these effects show how he designs a story and a play experience that can, as observed earlier in this chapter, be characterized in terms of Caillois' (1958/2001) *paidea* and Sutton-Smith's (1997) rhetoric of Fate: play as (apparently) chaotic and dangerous.

The analysis of the ludic structures, however—Ogedei's skillful operation of the programming system, his consistency with the rules of his game, and the high level of ludic cohesion—suggests something else. They indicate a desire for fictional structures that, while their affective charge might be wild and apparently irrational, are rationally structured and controlled. They also relate to the discourse of game design, which he displayed more than most of the other teenagers in the research project. Before beginning this project, Ogedei had certain insights into the processes of design. For him, game design allows the realization of important social and cultural meanings; however, it might also be a step on a route toward some kind of specialized professional role as an adult. The kind of play here—Caillois' (1958/2001) *ludus*—is closely

regulated, and we have seen how Ogedei keeps the trajectory of the game and the possible traversals of the player quite close together.

Finally, some brief methodological points. My intention has been to open up the question raised by Kress and Van Leeuwen () about the relation between social semiotics and cultural studies. While this example is far from comprehensive (indeed, it indicates the problems of lengthy interpretation proceeding from small amounts of data), it is intended to show that textual analysis can never really demonstrate more than potential meanings. The formal structures of semiotic analysis need to be constantly connected with the cultural and discursive ocean (even pond!) in which the sign maker swims: in this case, discourses of gaming, play, and popular media.

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By the same token, however, it is not enough to analyze the cultural dispositions of social groups or individuals by simply appending the texts they make, read, view, or play as transparent, reified evidence of our cultural and social theory. We need to be able to analyze how the social and cultural currents of the discourse leave particular ripples on the sand of the texts. In this chapter, I have tried to do something like this in the case of Ogedei, his gaming experience, and the games he has made. Ideally, the whole dialogic chain, from producer through text to audience/interpreter, will form the full subject of this kind of research. The efforts of cultural studies to analyze cultural lives and contexts can be synthesized with the ability of multimodal semiotics to analyze signifying practices across modes and media, designs and technologies, and the cycle of semiotic production and interpretation.

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