Computer games on the playground: ludic systems, dramatized narrative and virtual embodiment

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1. Introduction: the proximity of computer games and playground games

This chapter focuses specifically on the form of computer games, and its relation to the games of the playground. The Opies were unable to study this connection, of course: though a little more recent work has begun to touch on it. Curtis, for example, notes how the narratives and structures of specific computer games were beginning to appear in

boys' imaginative play; and how these games form part of the shared 'lore' which migrates across and between groups of children:

It was not only football which surmounted the school-class barrier. One group of boys played imaginative games based on computer games: *Metal Gear Solid*, *Predator*, *Alien Resurrection* and *Tunnel Number One*. (Curtis, 20001: 69)

Like other media forms, games form part of the discursive hinterland of the playground, and can be drawn on as a resource in the continually-evolving cultural practices of physical play.

This chapter will continue the kind of trajectory signalled by Curtis' research, asking how playground games incorporate influences from computer games, based on the evidence in our ethnographic studies. However, it will also seek to distinguish this particular cultural form from other media forms, and from other aspects of children's media culture. For computer games, most importantly, are *games*. Since they are already organised around ludic principles, we might expect them to be more similar to the games of the playground than comics, pop songs or advertising jingles, which are not in themselves organised as ludic structures, but are adapted into games on the playground.

Games of any kind have been well theorised in the history of scholarly work on play and games. The imaginary world of games and play, and the 'magic circle' which forms its boundary, was first proposed by Huizinga (1955), and later developed by scholars of

computer games (e.g. Juul, 2003; Salen and Zimmerman, 2004). The continuum from loose, chaotic play through to formally-ordered, rule-governed games was influentially theorised by Caillois (1958/2001) who also proposed the typology of kinds of play and game that variously included combative (agonistic) forms, vertiginous play, games of chance, and mimicry and role-play. More recently, Brian Sutton-Smith has proposed seven rhetorics of play, ways in which we think about and conceive play and games, and the contradictions and ambiguities these raise (Sutton-Smith, 1997, cited in Chapter One).

These theories of play and game are applied both in the field of playground games and in the field of computer game studies. Sutton-Smith's notion of the rhetorics of play is a good example. One of the rhetorics is the idea of 'progressive' play, an adult-dominated emphasis on play with supposed pro-social, developmental benefits. In the playground, we have seen such an emphasis on games which involve collaboration, inclusion and peaceful pursuits (see Chapter Eight). In the world of computer games, the game most often positioned within the 'progression' rhetoric is *The Sims* (Maxis/Electronic Arts, 2000), widely seen as constructive and peaceable, sometimes proposed as a possible contributor to the 'citizenship' curriculum, providing an 'ethical laboratory' (Williamson, 2004) in which young people can explore the dilemmas before them in the adult world.

By contrast, Sutton-Smith's rhetorics of Fate (adult-orientated games of risk and intoxication) and Phantasmagoria (child-orientated games of fantasy) defy the rationalism of the progress rhetoric. In these categories we could place the playground games involving play-fighting, proto-sexual fantasy play and scatology; while in the world of the computer game, shooting games and war games such as the *Call of Duty* series (Infinity Ward/Activision, 2003-2011) and games with adult urban themes such as the *Grand Theft Auto* series (Rockstar, 1997-2009) represent these rhetorics, attract anxious adult comment, and feature in the aspirational play of teenagers. However, they also feature in the play discourse of much younger boys: the *Call of Duty* series was widely reported as popular choices among primary school boys in this project (see Chapter Two), as well as in another project on media literacy in primary schools which found that *Grand Theft Auto* and *Call of Duty* both featured in the choices of primary boys (Buckingham et al., forthcoming). The implications of this culture will be discussed in the third section of this chapter.

These rhetorics can also be applied to playground games. Sutton-Smith himself documents how many forms of play are not only perceived by adults to contribute to social, emotional and cognitive development, but are actively deployed by adults in pursuit of these developmental ends (Sutton-Smith, 1997: 42-43). By contrast, his category of phantasmagoria represents the 'irrational, wild, dark or deep play' which adult Western culture seeks to constrain, repress and rationalize (ibid: 151), but which surface in play such as the pretend play scenarios (see Chapter Seven).

So computer games and playground games both appear ambiguous in their social functions and their imaginative content. However, the similarities run deeper still. Games are often defined in quite specific ways; although a subset of the wider category of play, they are often seen as ludus rather than paidea: the polarity (or spectrum) proposed by Caillois, in which paidea is looser play, while ludus is more structured, rule-governed play. These structures have been subject to many attempts at definition. The computer games scholar Jesper Juul, for example, proposed six features criteria to 'gameness': that games are rule-based, have variable, quantifiable outcomes, have value assigned to possible outcomes, require player effort, involve player attachment to the outcome, and have negotiable consequences (outside or within 'real life') (Juul, 2003: 35).

These criteria have been much debated, and it is not the intention of this chapter to critique or support them in detail. However, it is generally agreed that games involve a kind of suspension of disbelief, or awareness that the game-world (like the drama-world) is 'as-if' (Heathcote, 1984/1991: 149); that rules of one kind or another operate; and that players deploy resources to meet challenges or overcome obstacles to achieve some kind of goal or outcome. In many games these structures are relatively clear. In noughts-and-crosses (tic-tac-toe), there are clear rules (e.g. turn-taking), resources (the grid; noughts and crosses); a defined outcome or win-lose state (three-in-a-row or not). In chess, similar systems operate: defined rules, resources, win-lose state. In many games, chance is balanced against skill: in board games, for example, progression may be achieved by player judgment as well as the throw of the dice.

In computer games, these structures are programmed into the game engine. The rules determining which way a player might go, what resources are made available and when, how such resources are balanced finely against the difficulty of challenges and obstacles, and what conditions need to be met to achieve the outcome, are all managed by the game

engine. In role-playing games (RPGs) derived originally from table-top Dungeons-and-Dragons, the game engine actually simulates the rolling of the many-sided dice used in the table-top game (Burn and Carr, 2006).

In playground games, certain games are just as clearly based around these structures. Tig (Tag or It), for example, always has a rule governing how the one player might affect other players by touch, and often has compensatory resources for protection, such as safe areas, or mechanisms that reverse the effect of the touch. However, in all kinds of game, there are grey areas as far as these definitions go. The rules may appear looser in some games; or even negotiable; the outcomes might seem fuzzier, or not defined at all (in playground games as in *The Sims*). It is also the case that, as Carr et al. argue (2006), the ludic structure of games (rules, economies, assets, levels, win-lose states) are integrated with representational structures (landscapes, characters, narratives, dialogue). Where the ludic system is strongest, the representational system might be sketchy, even completely abstract (chess, Pong, Tetris, Tig), and the interest for the player entirely ludic. Conversely, where the representational system is stronger, the ludic system may be more sparse, as in games rich in narrative and dramatic action, whether these be playground games enacting theatrical scenarios, or computer games with a predominant interest in imaginative worlds and narratives.

An important element in both representational and ludic systems is the figure of the *avatar*, the player's representative in the game (Burn and Schott, 2004). It has a dual function: it is a play object, like the top hat or boot on a *Monopoly* board, carrying the

player through the systems of chance and strategy to the final win-lose state. It is also the narrative protagonist, with the dramatic properties of such an object: appearance, traits, a backstory, motivation, relationships, emotions, and agency (prescribed by its narrative function, though also connected with its ludic function). Children's interest in this figure appears in their play and their discourse about their play, and how the avatar might be translated into the physical play of the playground is discussed in Section 3.

Finally, computer games and playground games both construct imaginary worlds; and in this, they resemble drama. In computer games, these worlds are often referred to as 'virtual' worlds, a contested term (Boellstorff, 2008), but one which suggests a world which is governed by Huizinga's 'magic circle' principle to some extent: it offers a space for exploration of scenarios which may or may not be fantastic, may or may not directly relate to concerns of the 'real' world; but which provide some degree of protection from the consequences of actions in the 'real' world. Sutton-Smith also recognises mediaderived virtual worlds as imaginary spaces for play: "the virtual realities of videogames, computers and virtual worlds" (Sutton-Smith, 1997: 155). He sees such virtual worlds as always fantastic, opposed to the mundane reality of everyday life. He does not dismiss the importance of these spaces, regarding them as "crutches for the development and standardization of fantasy"; but he suggests that they lead to solitary and internal play, and does not consider how the playground itself might be a location for virtual worlds, or for an adaptation of the virtual worlds of computer games. This possibility will be developed in Section 5 of this chapter. The question there will be what is the relationship, not only between the 'real' world and the 'virtual' (Sutton-Smith's question); but

between different kinds of virtual world: that of the playground and that of the computer game. This question will be discussed in relation to Foucault's notion of *heterotopias*: transgressive spaces found within the real world, but somehow detached from it, and governed by different rules (Foucault, 1984).

Playground games and computer games are structurally similar, then. They both feature rule-governed structures, quantified assets, obstacles and challenges, dynamic 'engines' of play. They can vary from loose improvisation to tight rule structures. Like drama, and indeed any kind of fiction, they involve an imagined world of some kind whose governing principles are understood to be different from those of the 'real' world: though there are well-documented debates about the nature of such imagined worlds, and how impermeable or leaky the boundaries between such worlds and the 'real' world might be (Boellstorff, 2010). Both kinds of game provide complex, often impenetrable forms of pleasure which range from the purely ludic – beating the rules of the game – to the representational – the pleasures of mimicry and role-play. They can provoke, in equal measure, adult delight at their apparent social benefits and adult dismay at their apparent celebration of violence: and these celebratory and censorious reactions are as likely to miss the point as they would be if directed at representations of violence, cruelty and death in children's folktales (Zipes, 1983).

However, there are also differences. If we employ the model of the Circuit of Culture, widely used in Cultural Studies to consider the dynamic relations between media production and consumption, and the forms of representation, identity and regulation that intersect with them (Du Gay et al, 1997), certain differences between playground games and computer games appear. The economic model of consumption can only reasonably apply to computer games as a commercially-produced and marketed medium: though economic exchange only accounts for a small part of what it means to play a computer game. Playground games are 'consumed' quite differently: acquired by 'oral' transmission (though also by visual and embodied forms of apprehension and mimicry); and exchanged purely as cultural, never economic, capital. And while computer games are produced like any other media item, playground games are 'produced' by children, not through Fordist assembly but through improvisatory composition-in-performance (see Chapter Five). The fourth section of this chapter will explore such generative processes.

The central focus here, then, is the relationship between the two types of game. The chapter will consider three aspects of children's game cultures: the first looking at the computer games they report playing in our survey; the second at playground cultures of imaginative play deploying resources from specific shooting games; and the third at an example of girls' game creation, an early example of 'game literacy' integrating elements of computer game culture with more folkloric resources.

2. Gaming Culture

Our survey of all the children in the two primary schools in the project revealed extensive ownership of game consoles such as *X-Box*, *Playstation 3*, *Wii*, and *Nintendo DS*.

However, Monteney (largely white working-class) showed a considerably greater ownership than Christopher Hatton (mixed ethnicity, more diverse socially): 89% of children at Monteney reported having more than one game console, compared with 59% at Christopher Hatton. In terms of gender, predictably, across both schools boys reported having more ownership: 84% reported more than one games console, as opposed to 63% of girls. Nevertheless, this still represents extensive ownership across the whole cohort, exceeding TV and PC ownership for the boys, and very similar to these other media for the girls. Again predictably, ownership grew with age: in Year One (five to six year-olds) 32% reported single ownership of a games console, 29% multiple ownership; Year Five (nine to ten year-olds) reported 7% single ownership, 92% multiple ownership. These figures reveal patterns which are unsurprising in some ways: more extensive (console) gaming in working-class communities, among boys, and among older children. Yet they also reveal computer games to be a significant interest among children across age, gender and location.

We also asked what media children talked about to each other in different contexts. In terms of gender, more boys than girls discussed videogames (64% and 27%); more children discussed videogames at Monteney than Christopher Hatton (49% and 43%); more older children discussed videogames than younger children (56% Year Six; 40% Year One). The patterns seem similar to those identified earlier, and again unsurprising. It is noteworthy, again, that computer games can be described as an extensive cultural practice, and in relation to the question about discussion, a popular topic of playground talk for boys and for older children, supporting Curtis' (2001) argument that computer games form part of the shared lore of playground culture.

In terms of the games mentioned by the children, Willett notes (Chapter Two) that boys make more specific references to media texts in the 195 responses to an open-ended question about uses of media in the category we have called 'pretend play'. The largest number of references to a specific title are ten references to the Call of Duty franchise (Infinity Ward/Activision, 2003-2011), and in some cases to specific characters in *Call of* Duty: Modern Warfare 2 (Infinity Ward/Activision, 2009): Captain Price, General Shepard, Roach, Nikolai, Ghost. The specificity here suggests imaginative play which draws on particular narrative functions of the game. However, interview data revealed that, at times, *Call of Duty* references were a looser, generic shorthand for shooting or war-themed games. It may be that, despite wide reporting of *Call of Duty* among even the younger children, the younger boys have not played this 18-rated game, but are participating in a generic cultural discourse acquired through secondary sources. Whether or not this is true, it is clear that this particular franchise has a very broad generic as well as specific function in boys' playground culture. The next section will explore the range from specific to generic uses of *Call of Duty* references.

The other specific game titles named (each by one boy) were the third-person shooter *Gears of War 2* (Epic Games/Microsoft, 2008), the first-person shooter *Halo 3* (Microsoft, 2007), *FI Racing*, which could refer either to various free online Flash games or to the cross-platform console game *F1 2010* (Codemasters 2010); and *Dungeons and*

Dragons, which could refer to the classic table-top roleplaying game, though it is more likely to refer to various free online computer game versions. In addition, a number of other games are cited: *Sonic* (which could be any of the popular Sega series), *Super Mario Bros* (Nintendo, 2011), *Rey Mysterio* (a wrestler who appears in many games), *Final Fantasy III* (Square/Squaresoft, 1994), *Zombie Attack* (eg IUGO/IUGO, 2010), and *Wii Sport Boxing* (eg Nintendo, 2006).

Furthermore, various titles are mentioned which cover cross-media franchises, so it is not possible to tell whether the children are referring to game, film or, in some cases, TV series. What is clear is the evidence of what Jenkins has called 'convergence culture' (Jenkins, 2006), in which children's engagement with particular characters or narratives, or imaginary worlds such as the mythos of Pokémon or Harry Potter, is distributed across and between different media forms. The titles which include game adaptations are *Avatar*, *Dr Who*, *Ben 10*, *Bakugan*, *James Bond*, *Pokémon*, *X-Men*, *Star Wars*, *Lego Atlantis* and *Bionicle*. One notable feature of these titles is the variety. While, taken together, shooting games form the largest group, there are also references to classic roleplaying games, both mediaeval and manga-themed, to sports and racing simulations, to classic platform games, and to game spin-offs from toys.

Meanwhile, the girls' responses to the question about uses of media mentioned no specific game titles. Both boys and girls, however, make ambiguous or general references to elements of action, imaginary worlds, objects or weapons, and character types which might be associated with computer games. For boys, these include avatars, wizards, ninjas, pistols, bazookas, war, SAS, and zombies; while for girls they include avatars, wizards, fighting guns, princesses, witches, fairies, monsters, robots, ghosts, superheroes, and fairytale characters. However, as Willett suggests (Chapter Two, this volume), these represent hybrid influences which might include computer games, but might also include film, fairytale and folktale.

The survey shows, then, that computer game culture forms a significant part of children's media cultures more generally, that this culture feeds into playground discourse and play, and that it mixes easily, not only with other media forms but also with cultural influences we often consider more traditional, even folkloric. The next section will focus specifically on what appeared to be the most popular game reported by boys.

3. Modern Warfare on the playground

The fieldnotes from the Monteney playground include a reference to a Year Two boy, Martin, who approaches the researcher to tell her about his game:

Martin Field approached to tell me that he and a friend were playing a game which they didn't have a name for yet. I filmed it. Martin has told me that in the game he is the Germans, the German army, and his friend is the British. The friend has some orange paper slips sellotaped together and this is his aeroplane. They chase round, mainly round the canopy. They explain more about the game on the film. Martin tells me off-camera that he has lots of guns at home which he and his brother, Sam (in Year Six), play with. They play fighting games. He doesn't particularly watch war films though.¹

What the relationship might be with computer games here is unclear. The reference to the Germans and British may relate to earlier games in the *Call of Duty* (eg *Call of Duty*, Infinity Ward/Activision, 2003) series, which are, unlike *Modern Warfare 2*, set in World War II. This seems a possible media source if, as Martin suggests, he does not watch war films. Whatever the case, some central themes appear here: games of combat, enacting narratives of global warfare; and the objects and locations used in such games.

A year later, he is interviewed specifically about computer games.

Andrew Burn: Yeah, game consoles, I've got Wii's, I got a Wii, a Playstation and an X-Box all in my house.

Andrew Burn: So what's your favourite game on each of those?

Martin: On X-Box, it's Modern Warfare 2, erm, on Playstation it's, erm,

Spiderman 3, and on Wii it's Wii Sports.

Andrew Burn: Alright. Tell me a bit about each one of those games. So Modern

Warfare and Spiderman 3, tell me a bit about those.

Martin: Well, Modern Warfare's like a gun game.

Andrew Burn: Yeah? What do you do?

Martin: Erm, well, you're like, you're in army, and you have to shoot, you have to go round and you have to shoot the other people. And sometimes you can miss.

¹ i-phone video: no filename

Desert, desert troopers that has to go round, that has to go round this dry sandy place, and erm, er, you have to fight, if you were going on two-player, you, you've got two sides, like split on the screen, and then like you've each got a side on two-player, so then you can, so then after that, erm, you have to run each other round and you have to shoot each other [makes shooting gesture]. (no file-name)

As in much of our interview material about computer games, it is very difficult to tell whether these young boys have actually played this 18-rated game, or whether they are drawing on a pervasive discourse about it, including television adverts and Youtube videos with edited sequences of gameplay and cut scenes. Nevertheless, Martin correctly identifies the desert setting in which part of *Modern Warfare 2* takes place, and he gives a clear picture of a multiplayer mode of play.

This section will develop the particular interest of *Modern Warfare 2*, through analysis of three interviews. To clarify this focus, it is worth providing a little background information on the game. *Modern Warfare 2* is the sixth game in the *Call of Duty* series, developed by Infinity Ward and published by Activision in November 2009. It is reportedly one of the most popular computer games ever made, selling 4.7 million copies in the first day of release (Johnson, 2009). It enjoys widespread fan activity online, and demonstrable appeal to a male demographic supposedly between 18 (its age-rating by the British Board of Film Classification) and 37 (the average age of computer game players:

ESA, 20011). However, as our surveys show, its kudos among much younger boys make it a pervasive influence in media-related discourse.

It tells the story of an international counter-terrorist unit, in pursuit of a shadowy Russian terrorist figure, Vladimir Makarov. The plot twists through different locations (Russia, Brazil, Afghanistan), through demonstrations of team loyalty and betrayal, and through plentiful graphically-violent shooting, stabbings and explosions. The game is a First-Person Shooter: that is, the player 'sees' through the eyes of the avatar, often over the barrel of a gun. The player-character changes through the game, but ends up as Captain John "Soap" MacTavish, a character referred to by some of the boys in our interviews.

The popular debates aroused by games of this kind frequently focus on violence and the supposed behavioural effects of violent media images, and *Call of Duty* may represent the kind of genre behind the negative claims made by Carpenter (2001), and her view that computer games are 'demeaning' for the boys who play them. One obvious response to this is that fictional representations of violent battle, largely consisting of repeated and graphic representations of death, and populated largely by warrior-like men, have a long, even ancient history. *The Iliad*, after all, is such a narrative, and is venerated as a definitive and seminal text in European art; yet the actions of its characters and the structure of its narrative in many ways resemble those of contemporary computer games (Murray, 1998; Burn and Schott, 2004). A second response might focus on the game, and on the nature of play-fighting, which has a long history of distinction from real

aggression in play theory, often beginning with animal play-fighting (e.g. Groos, 1896), and moving on to human forms of play-fighting.

Such arguments need not whitewash over the complexities of the debate. There may be moments when playfighting becomes harder to distinguish from real-world hostility, as Richards acknowledges (Richards, forthcoming). There may be ways in which the entire lack of female characters in the game is a problem, at least from a representational point of view. The Iliad, after all, had a good range of female characters: Helen, Briseis, Andromache, Hekuba. There may even be aspects of the game, if we break it down into the functions of specific semiotic modes, which let down its general quality: The *Guardian* columnist Charlie Brooker, who writes occasionally on computer games, laments the dismal dialogue of *Modern Warfare 3*, for example (Brooker, 2001). Nevertheless, these largely adult critiques cannot be assumed to mean anything particular to the boys who employ the cultural resources of such a game for the purposes of imaginative play in the playground. Many similar criticisms could be levelled at elements of children's culture about which adults are generally quite sanguine: the witless dialogue of Enid Blyton; violence and cruelty in the stories Hans Christian Andersen or Roald Dahl; the repetitive, formulaic narrative structure of fairytales. The following discussion, then, attempts to identify the detail of the boys' adaptations of *Modern Warfare 2*, without projecting adult debates or values on them.

To return to the interview with Martin, then, the focus on *Modern Warfare 2* shifts to how he would play the game on the playground:

Martin: Yeah I played Modern Warfare before.

Andrew: In the playground?

Martin: Yeah.

Andrew: What would that look like if you were doing it in the playground? Martin: Well you'd be running round like this (runs around with imaginary gun] cos then you'd have an invisible gun and you'd be running round like that and then going prrrrrt [makes shooting gesture] like that.

Andrew: And you'd have to do that with someone else, yeah?

Martin: Yeah, you'd have to do that with someone else.

Andrew: What would happen if you shot someone else and they got killed, then,

in that game, what would they do, would they fall over?

Martin: No, they'd have to bob down like that [crouches down] but none of my friends agree that they'd got shot, so you go round prrrtttt [mimes shooting again. Andrew: So no-one would agree to be dead?

Martin: No, but in the [computer] game, you fall down, the person falls down when they do it, and then has five seconds, and then gets back up.

2

This data contributes to some of the themes raised in the survey. For the purposes of this chapter, the most important point is that computer game culture forms an important part of Martin's play, and can be seen as a form of cultural capital, expressed through a knowledge of the *representational system* of the game (narratives, characters, locations,

² i-phone video: no filename

dialogue), and of the *ludic system* (chance, strategy, challenges and rewards, economies, rules and so on) (see Carr et al., 2006). Here, then, Martin both describes aspects of the representational system, such as the desert location and the mimetic pleasure of the shooting actions, and of the ludic system, such as the mechanism used to reproduce game-death and resurrection. In respect of the latter, Martin notes how he and his playmates attempt unsuccessfully to replicate the 're-spawn' system which operates in *Modern Warfare 2*, in which characters revive a matter of seconds after game-death (often in inconvenient places, vulnerable to immediate attack again, as aggrieved players' forums attest). Because physical play cannot reproduce the programmed certainty of this ludic system, it falls back on mimicry (bobbing the head), ineffectually supported by an agreement that this will be the consequence of being shot.

As we have seen, this interest in the *Call of Duty* franchise is shared with other boys in his peer group, both at Monteney and Christopher Hatton. An interview with two Year Six boys (aged ten to eleven) at Christopher Hatton, Marwan and Aakar, produce contradictory ideas. On the one hand, they are very specific about the game: they list the platforms it can be played on, they both claim to have played it, one in his own house on the X-Box, the other at his cousin's. They explain how *Modern Warfare 2* differs from the older games in the franchise: "in the new ones it's modern warfare, so you've got all the modern weapons, like the heartbeat sensor [an attachment allowing the player to track multiple targets]...". They explain how it would look in the playground:

Marwan: We hide behind the hills and we have machine-guns -

Aakar: It's sort of like form fighting but instead of with fists, you have guns. Marwan: And then with knives, and with knives you actually just do that [enacts knife killing] Aakar: Yeah, but you don't hit hard, you just –

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Even more specifically, they say that what makes it different from generic war games is the characters:

Rebekah: What's the difference between just a war game and Call of Duty?

Marwan: Call of Duty you have nice characters.

Rebekah: So you actually decide characters before you play?

Aakar: Yeah, you sort of get to know the characters.

Rebekah: And are you those characters? So what character do you play?

[they laugh]

Marwan: So - what kind of name is -

Aakar: So what kind of name is Captain Price!

Rebekah: So Captain Price is one of the characters?

Marwan: Captain Price, Sergeant Griggs, um, McTavish, Captain MacMillan, we know lots

Rebekah: OK. So do you decide who's who -

Marwan: Like, we just say, I'm McTavish, I'm "Soap", I'm Roach -

However, at this point a contradiction arises:

³ No filename

Aakar: I don't really say that, because, I don't really want to sound like a banger or an addict to Call of Duty.

Marwan: Sometimes we don't decide, we just play.

Aakar: It's just like, when you're doing the shooting games, it's not necessarily Call of Duty, it's just the easiest term to like tell everyone what we're playing.

It appears, then, that the *Call of Duty* franchise can be used in two ways: as a source of specific dramatic and ludic scenarios, and also as a more generic shooting game. As well as character types, the boys later refer to terrorist scenarios (explicitly associated with Al-Qaeda and Osama Bin-Laden), and to playground game behaviours derived from the stealth mode function to be found on many shooting and adventure games: they specifically refer to the Renaissance-themed game *Assassin's Creed* (Ubisoft, 2007), to the adventure game *Batman: Arkham Asylum* (Rocksteady/Eidos, 2009), to an unspecified James Bond game, and, again, to *Call of Duty*. While hiding is clearly a timeless form of playground game, there are specific features associated here with particular computer games: one of the boys mentions looking down, for example, referring to the shadowed face of the cowled player-character Altair in *Assassin's Creed*: "...if you don't want to be seen in the playground you just sort of blend in ... stealth mode. Look up, then look down – like *Assassin's Creed*."

Another example of specific playground adaptations is found in a London interview with Arben, a Kosovan Albanian boy in Year Five. Again, it reveals a mix of vagueness and specificity (he is not sure of the character's names, and can only name "Soap"). He is clear about roles: he plays the 'Captain' (presumably the Captain "Soap" McTavish character from *Modern Warfare 2*); he uses specific weapons including "flashbangs"; and he goes into some detail about favourite scenarios, specifically a river boat chase against the baddie, involving a helicopter. This clearly refers to a sequence in *Modern Warfare 2* in which a confrontation between the player and the renegade General Shepherd involves a boat and a helicopter.

Some of the playground practices described by these boys seem to derive from the ludic systems of games like Modern Warfare 2. One of these, as we have seen, is the attempted adaptation of game-death structures into the playground. Another is the gun: the mimicry of the machine-gun is clearly of central importance, and Martin demonstrates the hold, the vibration as it shoots, and the "prrrtttt" sound he makes. Marwan and Aakar also emphasise the importance of the machine-gun as a signifier of this specific game, or at least of this genre of games; they indicate some ambivalence about the name of the gun, Aakar referring to it as an AK47 while also claiming that it isn't important to know the name. The AK47 is indeed a weapon used by the player in *Modern Warfare 2*: it is the final weapon the player can earn, being first equipped with pistols and the 'tactical knife' (both of which Marwan and Aakar also refer to). However, it is clear that there is no way in the playground version to replicate the game mechanics of shooting: the programmed economy of ammunition, and the causal certainty of the use of the weapon on an opponent, cannot be replicated. The effect of the weapons becomes dependent then on a shared system of mimicry, in which the victim agrees to die (or not,

in the case of Martin's friends). Like other elements in the game's mechanics, then (the boys also mention the "heartbeat sensor" which finds hidden enemies, for example) the ludic properties of the object in the game cannot be easily produced in the playground, so that they are abandoned (as the heartbeat sensor seems to be) or transformed into dramatic functions through mime, as the Tactical Knife and the machine-guns are. The one exception is Arben's account, in which the (weak) enforcement of killing by the claim of the player shooting is strengthened by a witness's confirmation.

Yet another ludic feature is the stealth mode described by Marwan and Aakar. A feature of *Modern Warfare 2*, in which players can increase stealth by crouching or lying prone, and of *Assassin's Creed*, and indeed of most shooting games and many adventure and role-playing games, this is also a component of gameplay which operates as a programmed economy in the game. On the playground, however, it can only be realised as a form of dramatic mimicry, dependent on assent by others, or operating entirely in the child's imagination: Aakar and Marwan suggest it can make them invisible to teachers, for example.

It seems problematic, then, for highly-determined, programmed ludic elements to be adapted for the playground. Rather, they retain a weakened ludic power, dependent on mutual agreement, or rest for their effect on their representational (narrative and dramatic) qualities. To move to the representational system of the game, this seems to feature to some extent in the children's play, though how well developed it is remains unclear. The character names which Marwan reels off, for example, are clearly part of the representational system of the game, populating this scenario of Western troops against a shadowy East European enemy with a set of dramatis personae. However, as we have seen, Aakar disavows the characters, and Martin makes no mention of them, so it may be that this aspect of the drama remains relatively weakly developed, compared to, for instance, the family and superhero dramas observed in the same playgrounds (see Chapter Seven).

In Arben's account, though the names of the characters appear unimportant, the roles, especially of the team leader (who determines the routes and actions) and the baddie are clearly defined. He also adds an element of dialogue, which seems to have both ludic and representational function. The example he gives is a catchphrase used by the different groups of NPCs (Non-Player Characters) in *Modern Warfare 2*:

There's one word, it's basically in Afghanistan language, it's 'Makhme imani makhmed' [rough phonetic transcription] which means 'I will take cover, I'm reloading'.

The catchphrase in the computer game is "Cover me, I'm re-loading." It appears in different languages, representing the different nationalities of the characters: Russian, Portuguese (the game is partly located in Brazil), and Arabic (representing the section set in Afghanistan). A number of fan message boards attempt translations of these sections of dialogue. An extract from a typical one, showing this particular catchphrase, is:

EDIT 1.8.09 - Thanks to Cam_79, we can confirm that OpFor [the enemy group in Afghanistan] is indeed speaking Arabic. Below are the translations we've gained to our dictionary thanks to Cam!

Ihmeeni ba'abi makhzan = Cover me, "refilling" magazine.

(http://community.us.playstation.com/message/1556096#1556096, accessed 13.11.11)

While this rendition doesn't quite match Arben's version, it clearly has some features in common. Quite how Arben and his friends have acquired or adapted this fragment is unclear. What is clear is that it serves both a dramatic and ludic purpose in their play, as a rich and suggestive fragment of cultural capital, and as the kind of improvisatory, malleable use of cultural resources typical of oral transmission. It also seems significant that the children have chosen an Arabic fragment rather than its English equivalent. The playable characters in the game, whose roles they seem to be adopting here, are, after all, a mix of English and American. To choose an Arabic, or quasi-Arabic phrase suggests that its value may be in shifting the representational texture a little away from the resolutely Western protagonists the game supplies.

To summarise, then, *Modern Warfare 2* provides two kinds of resource, though they overlap and are sometimes hard to separate out in practice, partly because they are wellintegrated in the game. One kind is the *ludic structure*, analogous to rule-books, counters, dice, boards, chess pieces. This category might include the rules governing game-death, the function of specific weapons, and the economies of vulnerability and strength. The other is the *representational content*, such as characters, narratives, locations, dialogue and so on. The representational aspect is specifically dramatic, an aspect of computer games which has been extensively commented on, drawing attention to their conformity to (and departure from) Aristotelian form (Laurel, 1991); or their reversal of roles so that audiences can become actors, and actors directors, in the manner of Boal's 'Theatre of the Oppressed' (Frasca, 1999; Boal, 1992). More recently, researchers in Australia have explored their similarity to educational drama: the possibilities for role-play, imaginary roles, improvised progress through situations and problems, and identity play (Carroll, 2002; Carroll and Cameron, 2005).

In the case of these playground adaptations of *Modern Warfare 2*, the integration of the ludic and dramatic seems to have been largely preserved. Furthermore, the import of ludic structures from computer games looks entirely appropriate, since these are close analogues of much older forms of play and game. Chasing, shooting, playfighting, hiding, role-play, goodies against baddies, and temporary death are all features of many other games. It is this which supports the claim made at the beginning of this chapter: that of all media forms, it may be that computer games most resemble, structurally and culturally, what we like to think of as the 'traditional' repertoire of the playground.

To broaden the picture a little, the *Call of Duty*-styled games clearly play into a more general set of play-fighting practices, explored by Richards (Chapter Eight). In these more general practices, the use of imaginary weapons (guns, knives, light sabres, martial arts moves) at times indicates the influence of film and animation, and at other times the recruitment of generic features of computer game play: magic consoles (children miming typing on a tree-stump); team-based play (resembling the teams of games like *Modern Warfare 2*); game-death/revival, and stealth modes.

A final point to note is Aakar's awareness of the adult disapproval such forms of play invites. His efforts to distance himself from the suspicion of addiction ("I don't want to sound like a banger or addict of *Call of Duty*") suggest a sensitivity to adult discourses of the negative effects of computer games, while his and Marwan's careful elaboration of the idea of "form fighting", presented as a kind of mimicry in which no-one gets hurt, operates as a rebuttal of adult assumptions about the dangers of play-fighting in general, and perhaps of computer game violence in particular, discussed earlier in this chapter.

This sensitivity to adult disapproval reminds us that part of the appeal of shooting games is precisely their transgressive nature. The pleasure of garnishing play-fighting with the colourfully gory animations of *Modern Warfare 2*, of role-playing combative adults, of the gleeful mimicry of explosions, team-battles and exotic landscapes, lies in the kind of phantasmagoric processes Sutton-Smith describes, subject to the logic of children's fantasy, utterly remote from adult developmental rhetorics of progress. This kind of play

abounds in forbidden fruit, and Chapter Eight of this book describes how simulations of fighting in general, and representations of guns and knives in particular, are outlawed on one of these playgrounds (see also Richards, forthcoming). The debate about the nature and social purposes of play-fighting is explored more fully in that chapter. Here, the recognition that play-fighting is both one of the most ancient forms of play, and at the same time reconfigured through the resources of computer game culture, is sufficient.

One question not addressed so far is the embodied nature of the playground games here. What differences or similarities are there between the virtual embodiment of game avatars and the physical embodiment of the playground version, between the 'virtual' imaginary world and the physical one? This question applies to all the examples explored in this chapter, and will be returned to in the conclusion.

4. The Hoops game: Proto game literacy?

One video from the London playground shows a game played by a group of girls (all age five), consisting of stepping in and out of a series of plastic hoops lying on the playground. Two of the girls, excitedly moving in and out of the game, are interviewed in bursts in between game sessions.

Rebekah: What are the rules of the game you're playing?

Lily: the rules are, the gaps in between, you have to go through them, and it's a maze where you have to go through. If you go in a hoop, then you're out for five minutes.

Rebekah: If you go in a hoop –

Sophia : - you're out for five minutes -

Rebekah: What do you mean, go in a hoop, 'cuz it looks to me as if everyone was stepping inside the hoops.

Sophia : But first we were allowed to step in the hoops, and now we're not. Lily: and in Level Two, we have to go through a sort of maze, you see [points over wall at players]

Rebekah: Oh, there are different *levels* of the game!

Sophia : After you have to go in the gaps, then you have to go in the hoops, then gaps, then hoops again –

Rebekah: Oh, ok.

Here, it is clear that the girls are constructing a ludic system by defining rules, and then adapting them. They are also aware of specific game structures such as the maze, a structure common to ancient forms of play and to certain genres of computer games. Furthermore, the girls' discourse is clearly indebted to computer games in its reference to levels, which occurs three times in the interview.

In the next extract, the rapid development of the game's structure is evident:

Lily: [excitedly] There's a ghost! There's a ghost on Level Three!
Rebekah: On Level Three there's a ghost? So now how did you find the ghost?
Lily: The thing is, there's a ghost, and we have to catch it –
Sophia: And then they're dead!
Lily: Yeah, but then more ghosts joined, so whoever gets caught by a ghost is a ghost.
Rebekah: Oh I see, and then what happens, if you're as ghost?
Lily: If you get caught as a ghost, then you turn into a zombie.

•••

Sophia: The hula-hoops is ice, and the gaps are, is the world.

The design of the game acquiring, then, a degree of representational clothing, with ghost and zombie characters assigned, and imaginary spaces delineated. Meanwhile, the ludic structure is expanding into Level Three. The final extract shows, amid even greater excitement, the satisfying mix of ludic structure and suitably horror-themed content:

Rebekah: How was Level Three?

Sophia: Really scary!

Lily: We're on Level Four now with a zombie!

Unlike the *Call of Duty*-styled games, this game seems to have no specific source in a single recognisable title. Rather, it is an entirely new construct, adapting elements from a range of different sources, displaying the kind of hybridity which Willett notes in

chapters Two and Seven of this book. Her analysis suggests that part of this hybridity is a mix between sedimented forms of play (such as the structures of Tig) and other resources, including those from contemporary media. This seems to be true here: the basic maze structure and the rules about being in or out seem to qualify as sedimented forms; while other ludic structures such as levels are clearly derived from computer games. Meanwhile, the representational content such as zombies and ghosts appear to be pleasurably transgressive components whose origins could be variously ascribed to books, films or games. In respect of this distance from original sources, the game accords with the finding from the survey that girls made less reference to specific media texts than boys; indeed, no reference to computer games at all, although their influence here is clear.

The kind of creative process involved here raises some important questions. Children's play is often seen as creative (the Opies also subscribed to this view), but it is not entirely clear what this might mean, and the word 'creativity' generally risks a lapse into celebratory vagueness. Vygotsky's essays on creativity in childhood and adolescence (1931/1998) propose that creativity grows out of play, which Vygotsky presents as an imaginative process effecting transformations of cultural resources using semiotic tools in social settings. His well-known example is of children using a broomstick as a horse. For such acts of imaginative substitution to become truly creative, however, he argued that subordination to some kind of rational thought was necessary.

What, then, is happening in the hoops game? Is this an extended example of play, involving the imaginative creation of a virtual world, with ice, mazes, zombies and ghosts? Or is it closer to Vygotsky's definition of creativity, with some kind of rational decision-making about what rules apply, how they might be modified to achieve the satisfying balance of challenge and achievability central to good game design?

In some ways, the awareness of the children of elements of game design such as rules and levels resembles the kind of 'game-literacy' we have observed among older children, in a project developing an authoring software for secondary school students to make their own 3-D adventure games (Buckingham and Burn, 2007). The students there had to acquire concepts of rule and economy, for example, to design effective games. Perhaps, then, we can see the hoops game as evidence of a kind of proto-game literacy, with all the central conceptual elements in place. However, 'design' seems the wrong kind of word for what the children here are doing. While there is certainly a conceptual grasp of rules, levels and imaginary worlds, the imaginative process is almost happening as part of the game, a kind of design-within-play. It has the hallmarks of rapid, fluid improvisation typical of children's play more generally, and of the processes of adaptation, transformation and innovation seen in relation to other genres such as clapping games (see Chapter Five, this book). In relation to Vygotsky's model, then, perhaps it is a halfway house, caught between the immediate pleasures of make-believe and ludic effort, and the more distanced reflection of iterative design.

Finally, like the boys' *Call of Duty*-styled games, the processes of both inventing the game and of playing it are, above all, embodied processes. Unlike design through language or on paper, the game is made up by experimental, exploratory movement and minimal linguistic cues. Again, the question arises about the meaning of embodiment here, and its relation to virtual forms of embodiment which the girls' references to levels and imaginary worlds suggest. The video gives a strong sense of the physicality of play: of stepping in and out of the hoops (themselves an obvious physical component), of excited calling, of laughter and faces flushed with the physical effort involved.

5. Conclusion: playground utopias and heterotopias

Two kinds of imaginary world appear in the examples explored above: a world loosely modelled around *Modern Warfare 2??*; and a world of ice, hoops, zombies and ghosts. In both cases, because of the relationship with computer games, we are looking at something which has an additional articulation to the two-way dialectic between virtual and mundane proposed by Sutton-Smith, discussed in Section 1 above. In the case of the *Call of Duty* games, the computer game has a referential relationship with the 'real' world of global warfare; so does the playground version; and the two virtual worlds have a relationship with computer games (and the real world) is sketchier. In both cases, the experience of one kind of screen-based virtual world is recuperated through physical play to construct another. What are the differences?

Firstly, there is a clearer perceptual distinction between the virtual and the real in computer games: the children are on one side, the screen representations on the other, and the division is marked by a screen, recalling the divisions of Alice's looking-glass, or the mirror of Foucault's heterotopia, which divides his reflected self from his real self (Foucault, 1984). No such division exists on the playground: the real bodies, objects, terrains, fuse with the imagined ones. The mundane world of the playground is transformed into the virtual world of the game, planks into guns, stumps into consoles, hoops into ice-floes, children's bodies into commandos, zombies and ghosts. These signs in turn refer to some other realm of reality, even if this 'reality' is fictional.

Secondly, the experience of embodied action is clearly different. The virtual body of the avatar in *Modern Warfare 2* is replete in terms of representational detail (clothing, weapons, blood, hair and so on); but restricted in terms of ludic function (shoot, get, crouch, lie and so on). This restricted set of actions is not necessarily limiting: the player's experience, *semiotically amplified* by other cues and by imaginative investment in the game, may be of a fully active human agent (Burn and Parker, 2003). Finally, the body of the avatar, as well as being made of pixels, is also remote from the body of the player's experience. The well-documented psychological states of flow (Csikszentmihalyi, 1990), immersion and engagement (see Carr, 2006, for distinctions between the three) partly explain how a remote two-dimensional animated image can feel to players as if they are inhabiting that body.

At first view, it may seem that the bodies of the children at play are complete and 'real' in a way the avatar body can never be. In fact, there is a trade-off. The children's bodies enjoy an unrestricted physical and gestural semiotic repertoire. A video of one boy conducting an elaborate 'stealth' game, for example, demonstrates subtleties of movement well beyond the formulaic crouch mode of the avatars he may be imitating. However, what virtual world enthusiasts refer to as 'meat life' also has its restrictions. The children's bodies remain children's bodies, however much they aspire to be adult commandos, witches, zombies or ghosts; while the elaborate representational detail of the computer game and its objects is unavailable to them, only presentable as mime, or imaginative transformation of found objects and landscapes. Nevertheless, the same arguments of flow, immersion and engagement that have been applied to the psychological states of play in computer games can be applied here too. The Year Two girls playing the hoops game seem as excited by the imagined ghosts and zombies as if a fully-costumed and made-up actor had appeared to play the role in their game. By the same token, while found objects cannot replicate the semiotic detail of a game gun, they have the versatility of their indeterminate appearance. A good example is found in a video from the London playground of a boy with a plank of wood:

The most prolonged and recurrent feature of the play performance in this video is [Ahmed]'s playing of the wooden plank as an electric guitar, somewhat in the style of a heavy metal guitar hero ... At various moments, this mode of playing ambiguously resembles shooting a machine gun/automatic rifle from the hip. The direction of fire is not clear but might be for, or at, [Dan], his companion in this

play setting. Playing/shooting the plank as guitar is also 'interrupted by' or 'flows into' throwing it on the ground and standing on it as if it is a skateboard.

(Richards, research diary)

The plasticity of the plank allows for games whose social significance seem almost polarised – music and shooting – though the heavy metal reference provides a common gendered cultural grounding, perhaps. The computer game references, if they exist, remain unknown; though given the contextual data of the survey and the mimicry involved, it would not be unreasonable to speculate that *Call of Duty* and *Guitar Hero* could be references.

The relationship, then, between virtual bodies and worlds and (playing) physical bodies and worlds is far from simple. Both are a kind of virtual world; both have their restrictions and affordances; both can be imaginatively inhabited by the children, animated by their actions (whether physical or console-mediated); both are capable of loose, improvisatory, paideic play or tight, rule-governed ludic play (Caillois, 2001). The evidence seems to contradict commonsense oppositions of 'real' and 'virtual': as Marsh argues, "This merging of the 'real' and virtual, the online and offline worlds, is creating interesting hybrid practices as children move fluidly across boundaries." (Marsh, 2011: 41). I want to return, finally, to Foucault's image of the heterotopia. He opposes it to the utopia, which he defines as an unreal, ideal place, while the heterotopia is, he says, a liminal, transgressive, real space in every culture. In some ways, the utopia fits the adult conception of and design of the playground. It represents an idealisation of play, and of the society of children which inhabit it. Its rules, codes, politics, enforcement of civility and equity, resemble a micro-version of Thomas More's ideal city. Of course, it is real: although the adult conception of it is to some extent a fantasy, and is this sense, also unreal (literally, in its original sense, no-place).

By contrast, while the imaginary worlds of the children's games (both computer games and playground games) are clearly not real in the usual sense, they may be more real for the life-world of the child than the adult utopia, at least at times. There may be times when the imaginative power of zombies and SAS troopers has more of a density, colour, and certainly cultural salience than the progress rhetoric which dominates the utopian playground. And while some of Foucault's examples of transgressive, liminal spaces of ritual and taboo clearly cannot apply here (brothels being the obvious example), others fit very well: ships, colonies (*Modern Warfare 2*), and cemeteries (zombies).

It is the figure of the mirror which is most puzzling in Foucault's essay:

From the standpoint of the mirror I discover my absence from the place where I am since I see myself over there. Starting from this gaze that is, as it were, directed toward me, from the ground of this virtual space that is on the other side of the glass, I come back toward myself; I begin again to direct my eyes toward myself and to reconstitute myself there where I am.

(1984: 47)

This metaphor of split presence, self-projection from a real to a virtual space, portal between the two, interstitial object between utopia and heterotopia, perhaps captures something of the ambiguity and paradox of the virtual worlds and bodies in children's computer game and playground game play, and its uneasy relationship with the 'real' world of the physical playground and their 'real' bodies, identities, voices.

More prosaically, the data the project has provided, through survey, visual ethnography and interview, strongly suggests a dynamic relationship between the cultures and practices of playground games and those of that most ludic of media, the computer game. These cultures and practices interpenetrate and inform each other, exchanging dramatic tropes of ritual combat, superhero play and technological fantasy which are legitimate, perennial elements of children's imaginary landscapes. Meanwhile, the virtual worlds in which they are conducted certainly allow, as Sutton-Smith argues, for internal imaginative fantasy play. However, they also allow for the externalization of that play, whether in the online spaces of shooting games and role-playing games, where players confer, collaborate, compete and perform, or in the playground, where they do much the same. The virtual world of the computer game functions as a kind of palimpsest, echoes of its narratives, dialogue, avatars and rules showing through the bodies of children at play and the landscape of the playground, disrupting its pro-social intentions, offering resources for transgressive play, but subject to the orderly logic of rule and narrative.

This migration of play across and between virtual and physical spaces we will term

*heterotopic play.*⁴

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⁴ See Chapter 10

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