From above, from below: navigating the videogame

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ABSTRACT

The study of videogames is still evolving. While many theorists have accurately described aspects of the medium, this thesis seeks to move the study of videogames away from previously formal approaches and towards a holistic method of engagement with the experience of playing videogames. Therefore, I propose that videogames are best conceptualised as navigable, spatial texts. This approach, based on Michel de Certeau’s concept of strategies and tactics, illuminates both the textual structure of videogames and the immediate experience of playing them. I also regard videogame space as paramount. My close analysis of Portal (Valve Corporation, 2007) demonstrates that a designer can choose to communicate rules and fiction, and attempt to influence the behaviour of players through strategies of space. Therefore, I aim to plot the relationship between designer and player through the power structures of the videogame, as conceived through this new lens.
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CHAPTER ONE:

Introduction

Several theoretical lenses have been applied to the medium of the videogame, with varied success. While many have accurately described aspects of the videogame, few have managed to achieve a holistic theory. This is not surprising: videogames contain many disparate elements from other unconnected media: games, films, sports, novels, even theatre. In this thesis, I do not aim for an all-encompassing theory of videogames, but rather, I aim for a theory that will fuse the many disparate aspects into one understandable whole. I propose that videogames are best conceptualised as navigable, spatial texts.

A spatial approach to videogames illuminates both the textual structure of videogames and the immediate experience of playing them. From a textual perspective, videogames may be likened to Michel de Certeau’s conception of the city, as a universal text navigated by walkers. We can draw a distinction between viewing a videogame from above, as a designer, and from below, as a player. Both perspectives are integral to my conception of the videogame, and are the basis of Chapters Two and Three, respectively. Secondly, the played experience of a videogame can also be regarded spatially. In my close analyses of the medium, game space is treated as paramount. Therefore, I consciously choose to focus on the practised aspect of videogames. As videogame designer Michaël Samyn notes, “It’s about being rather than seeing, and that’s why games are more closely related to architecture than film.” Spatial strategies are vital to the videogame: a designer can chose to communicate rules and fiction through the space to powerful effect, as illustrated in my analysis of Portal (Valve Corporation, 2007) in Chapter Two. Furthermore, a designer may attempt to influence the behaviour of players through strategies of space.
Much of this thesis involves plotting the relationship between designer and player through the text, and as a result, I explore issues of power, and power structures within the videogame. In the Third Chapter, while examining the videogame from below, I investigate the structures of power inherent in a videogame, and the possibilities – and the need – for subversive play.

**An evolving field**

The study of videogames is still a young and dramatically evolving field. A literature review therefore clarifies the definitions and theoretical foundations that will be used in this thesis. Even to define the boundaries of the field is, at this stage, a statement of sorts (indeed, even the usage of the single word ‘videogame’ represents a conscious decision in this young field). Though some have pointed to earlier studies of traditional games and play as antecedents for the study of videogames, the field in fact represents the marriage of numerous disciplines, from literary theory to cinema studies.

Although videogames were first introduced in a commercial setting in 1971, serious academic interrogation of the medium began a little more than a decade ago. While there were scattered attempts during the 1980s to analyse and theorise the medium, such as Chris Crawford’s *The Art of Computer Game Design*, it was not until videogames excited mass popularity and cultural influence in the 1990s that rigorous academic attention became focused. By that decade, videogames had become the source of major Hollywood films, such as *Super Mario Bros.* (Jankel and Morton, 1993), and had also generated widespread controversy, such as the debates over violence in *Mortal Kombat* (Midway, 1993) or *Doom* (id Software, 1993). The publication, in 1997, of two major academic works on new media represented the culmination of two strands of prior theorising and foreshadowed the debate that would dominate academic work on videogames around the turn of the century. Janet Murray, in her now-famous
*Hamlet on the Holodeck* suggested that the computer (games included) would provide the basis for a new and unprecedented narrative form, where “at some point we will find ourselves looking through the medium instead of at it.”

By contrast, Espen Aarseth in *Cybertext: Perspectives on Ergodic Literature* argued that “to claim there is no difference between games and narratives is to ignore essential qualities of both categories.”

These conflicting positions reasonably (though admittedly reductively) represent the basic differences between the two major schools of thought in early videogame studies – ludology and narratology.

**Ludology and Narratology**

The history of game studies might well be considered by some to approximate the history of the conflict between ludology and narratology. ‘Conflict’ is a well-chosen word, such is the nature of the disagreement; Henry Jenkins has less diplomatically described it as a “blood feud”.

Nonetheless, engagement in the debate helps clarify the definition of many key terms for this thesis.

What are ludology and narratology? Broadly speaking, they are oppositional terms representing different schools of videogame studies. Narratology supposedly places emphasis on videogames as a new narrative form, as in Murray’s claim that we will eventually look “through a medium instead of at it.”

Ludology instead claims that the strongest element of videogames are those common in physical games: rules and play. The debate, however, is already problematised by any attempt to define either term more specifically. ‘Narratology’ is particularly problematic, as it usually refers to a more traditional scholarly discipline, many members of which, as Gonzalo Frasca points out, have never studied videogames (a point which leads some writers to helpfully distinguish videogame narratologists as ‘narrativists’). Additionally, and perhaps more crucially, it is difficult to locate a single videogame scholar claiming to be a narrativist. As already noted, Murray is often cited as a
pioneering narrativist, yet Frasca (supposedly a ludologist) will not classify any of Murray’s writing as such, and denies that she ever expressed such a position while supervising his “ludological” dissertation. Similarly, Henry Jenkins is often claimed to be a narrativist, yet himself denies the title:

…I don’t consider myself to be a narratologist at all. I certainly draw on narrative theory as one conceptual model among many for understanding computer and video games; I have written other essays which make little or no use of narrative theory, focusing on the fit between game play and more traditional backyard play cultures.

Narratology, then, could perhaps best be described as one of a set of approaches rather than a well-defined school. Indeed, if we take narratology to simply connote an emphasis on story, or even a comparison between videogames and literary theory then we may find many more authors in the field. Barry Atkins, for example, claims that “the computer game … is still a fictional form,” and primarily analyses the narrativistic elements of videogames, while Lev Manovich goes so far as to call narratology’s approach “useful” for engaging with videogames. Additionally, though both Murray and Jenkins use multiple conceptual models, it is important to acknowledge that they have made fundamental contributions to discussing the narrative potential of videogames.

Ludology faces few of the same conceptual and definitional problems as narratology, and instead serves as host to a variety of separate issues. In contrast to narratology, there are a number of writers who openly accept, or even argue for the label of ludology. As a result there is a wealth of clear definitions of the term. However, these definitions can be diverse: from the simple claim that “a ludologist is simply a games scholar, whatever is his or her position on narrative and games,” to the conceptual claim that, “ludology, like the games it studies, is not about story and discourse at all but about actions and events, the relations of which are not completely fixed.” It is also true, as Jesper Juul suggests, that “ludology has often been perceived as … trying to carve out video game studies as a separate academic field.” Frasca, in the paper that is widely credited with popularising the use of ludology as a term, argued for the establishment of such a field precisely because the study of games had previously been “fragmented through different disciplines, and not very well
developed.” Ludology, then, may not have been established as an antithesis of narratology, but rather to encompass a unique field of game studies. The relationship between ludology and narratology is therefore complex; at once presenting a framework with potential to encompass narratological work, while being popularly portrayed as “against the common assumption that video games should be viewed as extensions of narrative.”

For the purposes of this thesis, however, perhaps the most important aspect of ludology and narratology is a shared one: formalism. Both schools represent highly structural approaches to analysing videogames. In particular, ludology is intentionally formalist in its desire to understand “structure and elements – particularly its rules – as well as creating typologies and models for explaining the mechanics of games.” Juul’s Half-Real, for example, provides a remarkably strong attempt to understand videogames by careful identification of their component parts. This formalist method is not limited to these two approaches – while Ian Bogost, one of the most successful new voices in games studies, challenges the previous concentration on “formal properties”, his own “unit operations” approach appears to be no less intent on analysing videogames through their component parts. Frasca acknowledges some limitations with these approaches:

Certainly, formal approaches are limited – and ludologists should always keep that in mind – but they are probably the easiest way to uncover the structural differences between stories and games. I personally see this structural approach as a first, necessary step in video game studies, which will definitively outgrow once it helps us to better grasp the basic characteristics of video games.

The time has come where we no longer need rely upon such approaches to tease out fundamental analysis of videogames. While formalist work serves as a strong foundation for this thesis, I also seek to move my study of videogames away from such strictly formal approaches and towards a holistic method of engagement with the experience of playing videogames.
**Definitions, and the navigable text**

What is a videogame? Though, like Bogost, I am not interested in a “hard and fast definition” and am content to “let the reader understand the term in its ‘loose and popular sense’,” there remains some interesting and helpful definitional work to be investigated. Juul’s formal analysis yields one important definitional point for the medium – videogames are made up of both fictional worlds and real rules. As Juul describes, when I win a game by slaying a dragon, the victory is a real event, given authority via interaction with the rules of the game; yet the dragon is entirely fictional.

Juul’s analysis neatly encapsulates the basic subdivisions of any videogame while sidestepping the narratology/ludology debate. ‘Fiction’ is an improved term from the previous emphasis on ‘narrative’, as it is more adaptive to different types of games and gameplay, and does not require development in the traditional narrative sense.

Though I do not wish to concentrate on the structural elements of videogames, it is nonetheless important to examine ways of regarding the videogame as a medium. There have been many exaggerated claims about the potential of videogames to change or even revolutionise the modern text, many of which are justifiably regarded with suspicion. However, just as Espen Aarseth challenged the “practice of applying the theories of literary criticism to a new empirical field, seemingly without any reassessment of the terms and concepts involved”, on a few points we must accept that videogames make for unusual texts. Indeed, Aarseth has suggested that “games are not ‘textual’ or at least not primarily textual: where is the text in chess?” This is because, as Juul has argued, rules are entirely themable – the king or queen of chess could be replaced by any other symbol without altering the rules of the game, and a gun could be replaced by a triangle and still have the same function in a first person shooter. While I do not necessarily agree with this assumption, it is important to flag that to read a game as text is challenging.
It is clear that videogames allow textual interaction on a different (though not necessarily greater) level than usual media. Though one line of thought in the last century has been to show that textual meaning is just as reliant, if not more so, on the reader than the creator of a text, videogames alter the equation. Temporarily sidestepping the ‘active audience’ argument, perhaps the most eloquent way to define the difference is to consider the user: the term ‘player’ is quite different from ‘watcher’, ‘reader’, or even ‘audience’. According to The Macquarie Dictionary, a player is “one who takes part or is skilled in some game.” This implies a different type of participation than that of traditional media: a videogame is a ‘doing thing’. One ‘does’ while using a videogame in a way one does not ‘do’ while at the cinema. To progress the text of the videogame, some skill is usually involved beyond simple language literacy. For instance, the Office of Film and Literature Classification (Australia) commonly classifies videogames via non-interactive experiences with the game, such as pre-recorded videos, written summaries of the plot and gameplay, and publisher demonstrations – it is assumed that members of the OFLC do not have the time or skill to play a videogame to the degree required for classification. Espen Aarseth has labelled this type of textual activity ‘extranoematic’ – non-trivial effort, occurring outside of the confines of human thought (it must be more than interpretation or eye movement, for example).

Similarly, David Buckingham and Andrew Burn have offered the notion of game literacy, suggesting that an understanding of ‘ludic convention’ is required to play videogames. This means that players may need to be aware of ways they are expected to play in order to successfully use a videogame. Some semiology is adaptable to this approach, and neatly illustrates the relationship in videogames between fictional representation and ludic functionality. In order to progress, players may have to correctly identify the function of certain signs within the videogame. For instance, in a first-person shooter, players must identify the function of the gun that usually obtrudes from the bottom of the screen. Using C.S. Peirce’s theory of semiotics, we can see this kind of sign as an instance of the iconic (directly represented). The frequency of use of this type of signifier in
videogames means that if the player possesses any familiarity with videogames, the function is unlikely to be overlooked. However, videogames often use more complex sets of signs, including the *indexical* and the *symbolic*. These may range from signifiers designed to draw attention to function, such as flashing areas of enemies to indicate a target area (*Metroid Prime* (Retro Studios, 2002)); to icons representing units of gameplay in strategy games (*Age of Empires* (Ensemble Studios, 1997)); to much more complex sets of signs, the likes of which Mia Consalvo and Nathan Dutton have attempted to classify. It may be possible to argue for a *langue* (in Ferdinand de Saussure’s sense) or *linguistic competence* (in Noam Chomsky’s usage) of ‘ludic convention’: that is, certain traits of play common to numerous videogames, or genres of videogames, that are understood through familiarity rather than explicit elucidation. However, this is outside the boundaries of this thesis. What is clear is that the player of a videogame must be able to correctly identify specific signs and use extranoematic skills to progress – uncommon textual traits.

Secondly, when regarding a videogame as a textual whole, several qualities can be seen as unusual. As Mark J.P. Wolf notes:

> Whereas someone can listen to a piece of music, read a novel, or sit and watch a film from beginning to end and be satisfied that he or she has seen all there is to see of it, this is usually not the case with a video game … Instead of fixed, linear sequences of text, image, or sound which remain unchanged when examined multiple times, a video game experience can vary widely from one playing to another. Even if a player has the right skills, there are often courses of action and areas of the game which are still left unexplored even after the game has been played several times.

These traits can be seen across all genres of the videogame. While the most obvious examples come from the long and labyrinthine plots of Role-Playing Games (RPGs) or Adventure titles such as *Knights of the Old Republic* (Bioware, 2003), where players can dramatically change the plot with each playing, it is also visible in almost all other genres. Such content may be broadly classified into two categories: ‘unlockable’ content revealed as a reward for player skill and progression, such as levels, characters, or items; or optional, choice-based content, which is present but not necessary to the completion of the game. Both categories raise issues in regarding the videogame as a text, but it is the second
category that has the greater ramifications. Optional content may range from the extraordinarily large, as in the plot-changing decisions of an RPG, to the inconsequential, as in a non-essential space in a first-person shooter. Aarseth and others have therefore taken to characterising the videogame as a configurative text. However, while technically, the term ‘configurative’ may reasonably represent the text of a videogame, it does not accurately describe the tangible act of playing a videogame. ‘To configure’ implies holistic knowledge of what one is configuring: the etymology of the word is from the Latin configurare, meaning to “shape after some pattern.” Players of a videogame usually have no knowledge of the ‘pattern’; they configure blindly.

However, there are alternate means of thinking about videogames as text. Michel de Certeau, in The Practice of Everyday Life, draws a critical distinction between strategies and tactics. This is illustrated in the difference between looking down on a city, “seeing the whole” and “walking in the city” from a street-level perspective. This effects our fundamental conception of the space of the city. On one hand, when looking at it from above, we are inclined to regard the city as a concept: “It transforms the bewitching world by which one was ‘possessed’ into a text that lies before one’s eyes.” This is to think of the city in terms of strategies – the strategies of urban planners, councils, and administrations. According to de Certeau, it transforms the city in to “‘The city’, like a proper name, thus [providing] a way of conceiving and constructing space on the basis of a finite number of stable, isolatable, and interconnected purposes.” On the other hand, by walking in the city, individuals encounter the city not as a concept, but as immediate experience. de Certeau likens the process of walking to enunciation of the acting out the practice of a system. Enunciation represents the practice of language, with selections and appropriations being made. For space, de Certeau suggests:

If it is true that a spatial order organizes an ensemble of possibilities (e.g., by a place in which one can move) and interdictions (e.g., by a wall that prevents one from going further), then the walker actualizes some of these possibilities.
It is difficult to think of a more apt analogy for videogames as text. It is possible to view a videogame “from above”, as a whole and united text (or, as de Certeau would put it, ‘concept’), as in the strategies of designers described in Chapter Two. However, it is crucial to remember that the played experience of a game is most often to actualise only some of the possibilities of the text. Just as walkers enact tactics in their navigation of a city space, players necessarily makes decisions, selections, and appropriations via their movement through the videogame. Using the language of de Certeau, players, while interacting with the medium, may not be lifted out of the videogame’s grasp.

To think of videogames as configurative is to think of videogames only from above, ‘after a pattern.’ If I am configuring a circuit board, I have a complete view of the possible outcomes. When playing a videogame, the potential outcomes are seldom so clearly known to the player.

Therefore, I propose that it is helpful to think of videogames not as configurative, but as navigable texts. Navigators, like players, may often have knowledge of their surroundings and the direction in which they are headed, but will rely on skills and techniques in order to move. As a term, ‘navigate’ has its origins in seafaring exploration; the etymology is from the Latin navis, for ‘ship’ and agere, for ‘drive’. When playing a videogame for the first time, players may possess a certain literacy of the genre or of games in general which can be used to assist progress, much like the navigators’ compass or skills of Pilotage (navigation relative to geographic features). However, just like navigators traversing an unknown area, players do not have knowledge of the whole: players will not always be aware when an alternate path has been missed, or even when they have made a decision effecting the entire videogame. For example, according to journalist Leigh Alexander, Silent Hill 2 (Konami, 2001):

will penalize you for choices you aren’t even aware of making; the story’s outcome is affected by player behavior that indicates a certain preference or state of mind, rather than a single decisive path taken or action chosen ... You’re never told this, either; if not for GameFAQs, fan forums and strategy guides, nobody would even know.
This might be an extreme example, but it is nonetheless representative of the way many navigate videogames. It can be seen in a more obvious example of choice within a videogame, such as the ‘good’ and ‘bad’ journeys through Bioshock (2K Boston/2K Australia, 2007), where even one lapse from the ‘good’ path will result in the ‘bad’ ending for the game. Even more simply, we can see this form of navigation even in the simplest of videogames: Tetris (Alexey Pajitnov, 1985). Though the mechanic of dropping shapes into a best possible arrangement may seem like the ideal representation of the act of configuration, players are only ever aware of the very next piece, and can therefore only ever plot one step in advance. Therefore, players may only use their knowledge and prior experience with the game to plan ahead; they may not look at the game ‘from above’ in order to progress. Thus, to play is to navigate, not configure.

**Player experience and videogame space**

In treating a navigational, ‘from below’ perspective as central, I necessarily analyse videogames through the lens of player experience. Henry Jenkins has argued, “The experience of playing games can never be simply reduced to the experience of a story.” To this, I add the criteria of rules and ludic elements; to consider games from these single viewpoints alone is to severely diminish the entire experience. Describing the experience of playing The Legend of Zelda: Ocarina of Time (Nintendo EAD, 1998) as a set of ruled interactions is as limiting as describing it as a narrative, for instance.

While condensing the experience of a videogame to one single aspect is to be deliberately reductive, if we were forced to choose just one aspect, I propose it should be that of space. Game space often represents a fundamental marriage between fiction and rules: as Juul suggests, “the level design of a game world can present a fictional world and determine what players can and cannot do at the same time.” Therefore, game space is a powerful tool for designers to apply
many aspects of a game through a single means: fiction, narrative, ludic concepts, rules, solutions, emotions and even meaning. To describe *Ocarina of Time* through spatial means is revealing: exploration illustrates much of the appeal of the game. In this thesis, I wish to present videogames as fundamentally spatial, as in my mode of textual analysis above, but also through a more practicable level of interaction, as we shall see.

Even in 1992, Jenkins suggested space as the primary aspect of videogame experience: “Once immersed in playing, we don’t really care whether we rescue Princess Toadstool or not; all that matters is staying alive long enough to move between levels, to see what spectacle awaits us on the next screen.” It is the desire for mastery of space – often led by related desires to master fiction and rules – that drives many videogames: from the spatial acrobatics of *Tomb Raider* (Core Design, 1996), to the cover-based gunplay of *Gears of War* (Epic Games, 2006), to the 3D puzzles of *Boom Blox* (EA Los Angeles, 2008), to bird’s eye view strategy games like *Age of Empires*. It is therefore possible, to borrow a phrase from Giuliana Bruno, to conceptualise videogames as a medium of “site-seeing”: of mobility, haptics, and voyageurs replacing immobility, optics and voyeurs. It is therefore not difficult to see why I have chosen to engage primarily with the internal space of videogames for analysis. In this experiential-spatial medium, spatial strategies and tactics serve to illustrate the relationship between designer and player.

It is impossible not to recognise that primarily, videogame space represents only an imagined part of real space. The videogame console is always used through a television or screen of some description, which in turn becomes what Anne Friedberg identifies as a window, or a frame: “the screen as architecture, as an expansion of material built through the ‘virtual window’ of the film, television, or computer screen.” While playing a videogame, players may be very aware of their surrounding real space: from the position of the screen, to the whir of the
disk drive of their console and real life interruptions, making gaming an architectured experience (as elaborated on in Chapter Three).

Additionally, several theorists\textsuperscript{53} have suggested that that videogame play takes place within a \textit{magic circle}, a subset of space which is subject to the rules of the game. This magic circle may be more apparent in physical games – the lines of a soccer pitch, for instance – but in videogames, it neatly encapsulates the conceptualisation of a virtual space within a television set or computer monitor. Certain videogames may even have a virtual space within a virtual space, such as the “invisible walls” discussed by Adam Davies,\textsuperscript{54} while T.L. Taylor suggests players may blend game and non-game space, creating their own “frames of play.”\textsuperscript{55} Here, the architectural and the ludic intersect. Both Friedberg’s window and the magic circle delineate spaces that form extensions of the real, which can be used to conceptualise the ‘space’ of videogame play. Thus, we can see another sense in which videogames are spatial and \textit{half-real} – they comprise imagined space within real space.

\textbf{Margins of discussion}

Because I am primarily discussing space, rather than fictive or ludic elements, the limits of my argument lie more in perspective, movement and interactions than genre. Wolf’s eleven types of videogame space are useful here: what I am primarily referring to in this thesis is videogames of interactive, three-dimensional environments.\textsuperscript{56} Therefore, the argument I make in Chapter Two regarding game space can be easily transposed to most games of first or third person perspective, for example, regardless of gameplay genre. I also believe it is possible to apply many of the same principles of this thesis to games of other perspectives, such as top-down, birds-eye-view (or “God”) games like \textit{Civilization} (MicroProse, 1991), however, to do so would be to stretch the boundaries of this thesis. For brevity, I have chosen to limit my textual analysis solely to games of
the first-person perspective, which Atkins has referred to as the “I am a camera” genre;\textsuperscript{57} debatably, it enables a more direct interaction with videogame space.
A word on terminology: though the medium can be, and is correctly referred to as ‘video game’, ‘computer game’, or even ‘interactive entertainment’, I have chosen the single word ‘videogame’. This is for three reasons: first, ‘game’ draws attention to the medium as rule and play-based; second, though ‘video’ may now be technically incorrect (as a raster-based display is presently rarely used) it emphasises the wide variety of visual platforms on which games are played; and finally, the single noun is used in order to denote videogame’s significance as a new medium, rather than simply a new (‘video’) form of an old phenomenon (‘game’). However, on occasion throughout this thesis I shall abbreviate the term to the simpler, and perhaps more informal, ‘game’.


There remains extensive debate over the first videogame. Some argue that the creation of an electronic ‘missile simulator’ in 1947 can be seen as the first videogame, while others suggest that Ralph Baer’s invention of a raster-scan based ‘Brown Box’ in 1967 marks their original appearance. For a discussion of the contested history of videogames, see Ralph H. Baer, “Foreword,” The Medium of the Videogame, ed. Mark P. Wolf (Austin: University of Texas Press, 2001) ix-xvi.


Murray, Hamlet on the Holodeck, 271.


Frasca, “Ludologists Love Stories, Too: Notes from a Debate that Never Took Place,” 94.


Frasca, “Ludologists Love Stories, Too: Notes from a Debate that Never Took Place,” 94.


Ibid, 222.

Juul, *Half-Real*.


Bogost, *Unit Operations*, xiii. Additionally, it is worth noting that no ‘hard and fast’ definition of the term ‘videogame’ would be particularly helpful at this point, as the medium is travelling in exponentially divergent directions. Finding, for instance, a definition that could include *Wii Fit* (Nintendo 2008), the personal fitness development game; *Spore* (EA, 2008), the simulator which recreates the known history of time, from primordial soup to intergalactic trade; or a regular first person shooter, such as *Halo 3* (Bungie, 2007), would be near impossible, and certainly unhelpful.


However, I must note a pointed difference between my conception of the videogame and de Certeau's conception of the city. de Certeau saw the walker as possessing a political, liberating force: "I fill this great empty space with a beautiful name." The player of a videogame does not function in the same manner. Instead, I have used de Certeau's city as an analogy for the unusual textual structure of the videogame.

44 “Navigate”, *The Macquarie Dictionary*.


48 Henry Jenkins, "Game Design as Narrative Architecture," *First Person: New Media as Story, Performance and Game*.

49 Ibid, 163.


CHAPTER TWO:
The videogame from above: the designer as strategist

In this chapter, I examine videogames from above, as if “from the 110th floor of the World Trade Center.”1 More specifically, I examine how the videogame designer attempts to influence players and shape behaviour through spatial strategies. I will discuss this through a number of directions – gameplay, fiction, emotion and meaning, and their spatial relations, using illustrations from Portal (Valve Corporation, 2007), and briefly, BioShock (2K Boston/2K Australia, 2007). Ultimately, the strengths of the strategist are linked to issues of power in the videogame. This is briefly discussed, serving to foreground the major questions of Chapter Three.

Psychogeography

By way of brief outline, the idea that space and architecture could influence human behaviour has a long history. Even in the earliest known work on architecture, Vitruvius’ ancient De Architectura, there is the suggestion that a good building should satisfy the principle of venustatis; a combination of beauty and delight, derived from Venus, the Roman goddess.2 More recently, this general idea has underpinned many movements in urban planning and development. Le Corbusier, along with many Modernist architects, was convinced of the effect that architecture could have on human behaviour and life: “It is the question of building which lies at the root of the social unrest of today; architecture or revolution.”3 On the one hand, Le Corbusier felt that efficient architectural solutions were the simplest and most effective answer to the housing crises and the slums of his era (eventually resulting in mass housing, such as his famous Unités d’Habitation).4 On the other hand, as Fredric Jameson has argued, Le Corbusier “saw the construction and the constitution of new
spaces as the most revolutionary act, one that could ‘replace’ the narrowly political revolution of the mere seizure of power.”

However, this does not necessarily confer truth on the idea that space affects behaviour. Although Foucault’s analysis of Jeremy Bentham’s Panopticon is a striking illustration of the behavioural influence of architecture, Foucault remained sceptical about the extent of architecture’s power. According to Foucault, spatial distributions are indelibly linked to social practices; like de Certeau, Foucault argued that the intentions of the architect will only produce effects if they are in concert with real practice of the space.

Though the Letterist International’s use of the term ‘psychogeography’ has now come to be regarded with some humour, Debord’s own definition of the term best describes the trend briefly tracked above:

\[
\text{Psychogeography could set for itself the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.}
\]

While ‘precise laws’ may be an overstatement of the nature of my examination, Debord’s explanation is neatly comparable to my approach. I argue that videogame designers employ a similar style of psychogeography. The space of videogames is often consciously organised in order to convey game rules and strategies as well as fiction in an organic fashion. Additionally, designers may seek to influence gameplay and player behaviour through the design of space. Using Valve Corporation’s Portal and 2K Boston/2K Australia’s BioShock, I aim to illustrate how designers use in-game architecture and level design in an attempt to communicate with players and influence their gameplay behaviour.
**Portal and the strategies of design**

*Portal* presents a compelling illustration of the spatial strategies of the videogame designer, of environment consciously organised to affect the player. The game, based on the DigiPen Institute of Technology student project, *Narbacular Drop* (Nuclear Monkey Software, 2005), was critically praised, and is best described as a first-person puzzle game. The basic gameplay element is the Portal Gun (or, as humorously referred to during the game, the “Aperture Science Handheld Portal Device”), a tool that creates linked inter-spatial portals between flat surfaces. Only two portals may ever be active at once, and act as a passageway. Therefore, spatial puzzles, such as reaching the other side of a large gap, may be overcome by travelling between the two portals. Portals also retain momentum; as the game explains, “speedy thing goes in, speedy thing comes out.” This adds complexity to the variety of *Portal’s* puzzles, the likes of which are perhaps best experienced rather than described. However, *Portal* is well suited to our analysis, as at fundamentals it is an exercise in spatial gameplay.

It is also a useful window on to the process, and strategies of design. Importantly, Valve’s design process invariably involves significant amounts of playtesting.\(^{11}\) This process differs between design companies; however, with Valve it is notoriously involved and iterative, and a crucial element of development. Valve Software Developer Ken Birdwell describes playtesting during development of *Half-Life* as “critical … nothing is quite so humbling as being forced to watch in silence as some poor play-tester [*sic*] stumbles around your level for 20 minutes, unable to figure out the ‘obvious’ answer that you now realize is completely arbitrary and impossible to figure out.”\(^ {12}\) *Portal* designer Kim Swift agrees: “playtesting is probably the most important thing we did on *Portal*.”\(^ {13}\) Playtesting began on *Portal* from the very first week of development, and continued “every single week … we definitely had our players … in mind when we were making the game.”\(^ {14}\) Playtesting is important for my discussion because it marks an attempt by the designers to observe how players will
respond to their design. It is strategists gathering empirical data on tacticians, and responding to streamline the practice of their system. It is an attempt to test and pre-empt tactics “from the 110th floor of the World Trade Center,” and is therefore a fundamental design strategy.

Portal meticulously teaches players its concepts and rules logically, and in a set order. According to designer Robin Walker, “Portal is effectively an extended player training exercise. We spend a huge portion of the game introducing a series of gameplay tools, then layering these tools into increasingly difficult puzzles.” It’s also important to note that the early stages of Portal limit solutions: “Early versions of Portal let players stumble through the beginning of the game without always understanding what was going on, which really compromised teaching new concepts.” Portal’s designers therefore decided there would be “generally just one solution to these early puzzles,” as multiple solutions often failed to teach players the desired technique. One early puzzle, for example, can only be completed by walking through a minimum of five portals in a specific order, rendering it highly unlikely that players could complete it without understanding how (and by implication, how portals function). However, Portal’s pedagogical role is never overt. As one reviewer noted:

One of the game’s great strengths, if not its greatest, is that concepts are introduced in such a way that players are entertained and informed without exception or confusion, guided by subtle design decisions that emphasise particular elements and concepts by constraining your actions without ever actually seeming to.

This is rendered possible through Portal’s spatial strategies. Most often, spatial design is used to covertly illuminate gameplay techniques: be it drawing player attention to an object, area, or action, or limiting the possible solutions to puzzles. The most obvious of these techniques is the recurring use of timed barriers – which the design team call “gates” – to stall players and encourage them to observe their surroundings before moving. There are, however, many other complex spatial strategies employed in Portal, and through close scrutiny of several sections of the game I shall illustrate a number of them.
Like Valve’s earlier and widely influential *Half-Life* (Valve Corporation, 1998), players are thrust into *Portal* without any prior information, and ‘awake’ to find themselves in what a monotone, computerised announcement describes as a “relaxation vault”. This “relaxation vault” is completely sealed for the first minute of the game, and it is not until twenty seconds into the game that the Artificial Intelligence announcement begins. This delay encourages players to move around in this basic, sealed and harmless environment before the game’s central concepts are introduced. There are several items – a radio, a clipboard – that may be picked up and dropped, which may familiarise players with the most basic controls, and importantly, the experimentation ethic that the game rewards. This room has an additional function: as designer Kim Swift notes in *Portal*’s developer commentary:

> Players often thought that portals took them into other spaces, or even other dimensions. To help fight that notion, we start players in a visually unique room with memorable objects, so that when they walk through a portal for the first time, they have a clear point of reference, which communicates the idea that they are still in the same basic location.\(^{21}\)

*Already, Portal* starts to communicate concepts through spatial strategies. The first portal, activated automatically at one minute into the game, also serves an instructive purpose:

> It’s absolutely critical that players quickly wrap their heads around what a portal is. We noticed early playtesters grasped the concept much more quickly when they caught a glimpse of themselves through a portal, so we deliberately positioned this first portal to ensure that players will invariably see themselves.\(^{22}\)

In other early stages of *Portal*, we see numerous instances of puzzles designed to convey concepts to players. According to designer Kerry Davis, Chamber Three was “designed to make players understand that entrance and exit portals aren’t tied to the color of that portal.”\(^{23}\) Therefore, Chamber Three is physically solvable only by entering and exiting the same orange portal.

Perhaps the clearest example of the manipulation of space to impact on experience comes in Chamber Four. A button on the floor of the close end of the room opens the exit door at the far end. Next to the button is an orange portal,
and between the button and the exit is a box down a deep gap in the floor, which can be moved near to the button by use of portals. According to designer Chet Faliszek, the desired effect of the room was to show players the relationship between boxes and buttons (placing the box on the button to activate the door allows players to move through), but “playtesters would often stand on the button to open the door, and then shoot a blue portal through the opening, bypassing the box entirely.” To eliminate this solution, a glass panel was placed between the button and the door – thus, players still see the effects of standing on the button (the door opens) but cannot open a portal as the glass acts as a barrier. The only solution, therefore, is to use the box. These examples illustrate the organisation of space to streamline gameplay; they are strategies designed to influence player behaviour and convey concepts.

As well as streamlining gameplay, spatial design is also used to draw player attention to pathways for solutions: in another early puzzle, players must place a portal on a panel above them to succeed. However, designer Bill Van Buren notes that playtesters often failed to look up and see the panel and therefore missed the solution – “a classic game-design problem.” The strategy for the designers was to place the panel on pistons to allow movement and sound: the panel then begins in a highly visible position and then moves to the location required to solve the puzzle.

Aesthetics are also used to draw attention and communicate goals and mechanics. According to designer Paul Graham, “the [visual] design is essentially a balance between round objects and sharp objects, the sharp objects representing background elements and the round objects [are points of interest like] doors and moveable props.” Visual indicators are also associated with particular techniques. The concept of ‘flinging’ (using gravity to fall into one portal, in order to maintain velocity and fly speedily out the other) is always associated with “a pushed out concrete block above a pit with checkerboard concrete tile.”
In these simple examples, the designers of Portal consciously organise the videogame’s space to attempt to ensure that a particular type of player behaviour would eventually occur. Tellingly, Portal’s designers claim they are at fault if players are unaware of a solution or gameplay mechanic: “It’s playtesting,” remarks Wolpal, “we failed you.”

Spatial strategies are also designed for emotional impact in Portal. Videogame designers increasingly view themselves as creating emotion through design and gameplay, and we can see instances of this in Portal. In the eleventh test chamber, players gain the fully powered portal gun. In order to build up anticipation for the moment of receiving this upgrade, two strategies are employed. First, as designer Lars Jensvold notes, the room is designed so that it brings players “in a circle around the device, so that it’s virtually always in sight” until the puzzle is solved and the portal gun is received. Secondly, once the puzzle has been solved, players may only access the upgraded gun via a slow-moving platform. The movement of players is spatially limited to a slow, anticipation-building speed. Additionally, one of the only long, straight corridors in the game is directly before the final confrontation, lending a feeling of inevitability and finality through spatial means.

As we can already see through these examples, Portal consciously organises environment through spatial strategies in order to influence player behaviour and emotion. Game space, in these instances, is crucial in cuing players into learning and performing key game concepts. In this sense, we can already see Portal’s game space as attempting to streamline player behaviour, performance and even emotion. These are strategies enacted from above: they are implemented in the hope (or perhaps an ‘educated’ hope, with regards to playtesting) that players will respond to these strategies in the preferred manner. In short, the game is designed to be navigable.
Additionally, Portal’s spatial strategies are linked to the videogame’s fiction, and meaning. Portal’s story can be summarized simply: players assume the role of a female individual (the credits reveal that this individual is named Chell; throughout the game, she is referred to as “subject”) placed within a series of test chambers, and are guided by the voice of an unseen Artificial Intelligence (again, the credits reveal the name to be GLaDOS, a play on the DOS operating system and the name Gladys) who claims to be working for a company named Aperture Science. The figure of GLaDOS is key to the experience of Portal. Through euphemistic black humour and clever plays on bureaucratic language, GLaDOS becomes the defining feature of the game, serving both to narrate progress and as the antagonist. It gradually becomes clear that GLaDOS (like 2001: A Space Odyssey’s HAL) has in fact murdered all human occupants of the testing facility, and is continuing to run tests on remaining humans (of which Chell appears to be the last), out of an automated, or otherwise meaningless desire to do so. GLaDOS is made to appear increasingly treacherous and unhinged, until she eventually tries to murder the player who escapes and instead destroys GLaDOS and the facility.

Portal writer Erik Wolpaw emphasises the distinction between rules and fiction by suggesting that videogames tell two stories: a “story-story” and a “gameplay-story”. He further argues that lowering the distance between the two “makes the game more satisfying.” GLaDOS’ dialogue aside, Portal’s fiction is conveyed almost exclusively through the game space. This design strategy is what Henry Jenkins calls embedded narrative: the distribution of narrative information across game space, awaiting discovery. After escaping GLaDOS’ clutches, players, like the protagonists of Jules Verne’s Journey To The Centre of the Earth (1864), “follow Saknussemm” through the bowels of the facility, discovering clues left by an unknown, earlier escapee. These clues largely consist of graffitied signs directing players, or warning of danger; however, on occasion, there are written slogans, such as the repeated “the cake is a lie” statement, and
pastiches of poems by Dickinson and Longfellow. In *Portal*, most instances of embedded narrative are almost unavoidable in terms of their spatial placement throughout the level design. It could even be argued that the embedded narrative resumes GLaDOS’ instructive role once GLaDOS has turned antagonist, such is its visibility.

The mood of the game is also conveyed through space, as fiction and gameplay intersect via spatial strategies. One of the first puzzles confronted by players after evading GLaDOS’ trap is an old test chamber which can now be solved in a new way. Designer Realm Lovejoy emphasises “This reintroduction of a familiar space which can now be solved in an incorrect way helps convey the sense that players are cheating the system, while forging in their own path through the facility.”38 This is fiction enhancing design through spatial strategies: because of the laboratory, test-focused setting of the game, players are perhaps more willing to accept the linear nature of the earlier puzzles, while later ones are designed to engender a rebellious mood. These examples represent another spatial strategy: the conscious organisation of space to convey fiction. It is a navigable story.

With this, and playtesting in mind, it is possible to view GLaDOS as a conscious doubling of the role of *Portal’s* designers. As a programmed Artificial Intelligence, GLaDOS serves only to test; the majority of her early remarks to players revolve around the testing process (“Any contact with the testing floor will result in an unsatisfactory mark on your testing sheet, followed by death”), while others are specific hints or indicators for game/testing rules (GLaDOS is used to prompt players with both the ‘flinging’ and companion cube sections, for example39). In this sense, GLaDOS shares a similar relationship with her test subjects as *Portal’s* designers with their playtesters – and by implication, players. Many comments by *Portal’s* designers, as we have seen, indicate that a major focus of the design process was to pre-empt and plan for a variety of player behaviour in order to train concepts. Many comments suggest a similar
laboratory-style approach to their playtesters, such as this statement by Paul Graham (regarding test chamber fifteen): “Multiple steps often caused many early playtesters to panic and accidentally redirect the ball right into themselves, with deadly results.” Just as GLaDOS performs experiments on Chell and her other test subjects, Valve performed experiments of sorts on their playtesters. This link can be seen more directly through GLaDOS’ use of designer jargon during in-game dialogue (during one test, GLaDOS apologises as the chamber is “broken” and advises players to “quit now”) and the closing credits (the lyrics, sung by GLaDOS, “we’re out of beta/we’re releasing on time”).

In this sense, GLaDOS’ strategies are also the designer’s. The attempts to shape and streamline player behaviour through spatial organisation in Portal are clear. The strengths and outcomes of these strategies are less so; players may vary in the speeds that solutions are found, and the depth of emotion felt. It is difficult to quantify the successes or failures of these strategies, and also outside the boundaries of this thesis. Instead, I will deal with these issues through structures of power.

**Structures of power**

If designers may confidently utilise the organisation of game space to attempt to shape the played experience and influence player behaviour as above, then it is reasonable to question the relations of power in this so-called interactive medium. A sub-genre of videogaming is illustrative: the ‘on-rails’ shooter, a somewhat outdated style of videogame most popular in videogame arcades, named so because of the predetermined, train-like way in which the character moves through the level. Players, in these games, generally have direct control only over the aim and firing of the gun. Though the level of interactivity is much higher in a game like Portal, we may still view the level design as a ‘rail’ of sorts. To return to de Certeau, the design acts as a strategy, while the player’s
interactivity stretches to tactics. ‘Rails’ are in all types of videogames, even ‘sandbox’ style games like *Grand Theft Auto IV* (Rockstar North, 2008), routinely lauded for their ‘open’ virtual worlds: it is the limits of the text itself that provides rails in these instances.

*BioShock* (2K Boston/2K Australia, 2007) provides an interesting and reflexive example of this. Like *Portal, BioShock* is in first-person perspective, but is perhaps a more standard shooter in gameplay. Players are thrust into the role of Jack, the lone survivor of a plane crash in the Atlantic Ocean in 1960, who discovers a dystopian, decaying underwater city called Rapture. Like *Portal,* much of *BioShock’s* fiction and narrative is conveyed through embedded narrative. The history of Rapture is communicated through its spaces: the general decay of the environment signal what has occurred, while the grandiose art deco design indicates what it once was. Players are able to find and listen to voice-recorded diaries of prior inhabitants of Rapture, many of which form subplots, and announcements are made on occasion over the public address system throughout the city. The environment is paramount to the experience of the game: it could only effectively be described through spatial terms, rather than narrative or ludic means.

Thematically, *BioShock* is a critical response to Ayn Rand’s philosophy of Objectivism. Rapture has been founded on reminiscent ideals, and there are many links to Rand: the founder of Rapture, and antagonist of the game, Andrew Ryan, is an obvious reference to Rand, while a supporting character, Atlas, is an allusion to Rand’s most famous novel, *Atlas Shrugged* (1957). However, these themes neatly link back to the question of power in videogames. As one public service announcement reminds us: “Andrew Ryan asks you a simple question: are you a man or a slave?” This theme comes to a peak late in the game, when the player confronts Ryan. Ryan reveals that the player has been used by Atlas and has been genetically programmed (another theme of the game) to respond to a trigger phrase in order to be controlled. Using this trigger phrase, Ryan then
orders the player to murder him, which the player then does during a non-interactive cut scene, marking one of the few non-interactive moments of the game: “a man chooses, a slave obeys.”

_BioShock_ here consciously draws attention to the way the player has been forcefully lead through the game by Atlas (or rather, the designer) without the freedom to refuse his requests. Even if the player had decided not to complete one of Atlas’ requests, or knew of his deception, there is simply no way to progress through the game without ‘obeying’. The game is designed solely for the player to aid Atlas in these earlier stages; there is no other solution. _BioShock_ lead designer, Ken Levine, argues that this moment “rubbed your lack of freedom in your face – not just in _BioShock_, but in all games.”

**Rails**

Following _BioShock’s_ example, it is tempting to conclude that to play a game is to merely attempt to discover and navigate the path marked by the designer’s strategies, suggesting that strategies are the overriding factor in the practice of videogames. This conclusion would be interesting for the commonly assumed interactivity of videogames (as discussed in Chapter One). If we are to conclude that videogames represent interactivity only insofar as establishing and following a predetermined route, then it may be argued that videogame interactivity is in practice no more a revelation than the noematic activity of books and film.

It could also be suggested that to navigate a videogame is to be trained to think after the designer. Instances of this may be seen in _Portal_: in order to overcome any of the test chambers, players must almost always uncover the correct, designed process. On one level, players must be thinking like the designer, or at
least how the designer intended them to think. As GLaDOS suggests: “Now you’re thinking with Portals.” This idea is not necessarily new, or limited to videogames. Sergei Eisenstein theorised that film – specifically, his planned adaptation of Marx’s Capital – could “teach the worker to think dialectically.” Closer to my topic, Lev Manovich suggests that interactive computer media, “in what can be read as an updated version of ... Althusser’s concept of ‘interpellation,’ [asks us] to mistake the structure of somebody else’s mind for our own.”

While this line of argument is tempting, especially given the approach of videogame designers outlined in this chapter, to assume such a rigid structure of interactions is to grossly misjudge the role of the player, and to think solely ‘from above’. Though we have seen in this chapter the strengths and influence strategies may have in Portal and BioShock, the relations of power in a videogame are never so completely unidirectional. Just as walkers enact tactics in their navigation of the city, players enact tactics in their navigation of the videogame. In the next chapter, I will examine the tactics of the videogame player, and consider a number of ways from which we may view player-text-designer interactions.
9 Though admittedly, much of Debord and the Letterist International’s interest in psychogeography revolved around ‘fighting’ geography through the technique of the dérive. I will elaborate on this idea in Chapter Three.
11 Playtesting entails observing and receiving written or verbal feedback from individuals not involved in the design process.
13 Kumar, “Best of GDC: The Secrets of Portal’s Huge Success,”
15 This and subsequent comments are from the *Portal* developer commentary. The presence of a commentary is unusual for a videogame, and, like a DVD equivalent, may be turned on and off. The key difference, however, is that each comment is spatially embodied within the text, rather than having a traditional commentary that plays from beginning to end in one block. Players must therefore aim at a three-dimensional comment symbol within the game and activate it to hear each comment, which are often located near points of interest. Comments are from a large number of contributors to *Portal*, with few individuals delivering more than three or four remarks each. Therefore, I have referenced each quote by individual commentator.

31
22 Ibid.
31 Noah Falstein notes, “You can play through the game with absolutely minimal attention to the story elements ... if you played with the sound off you'd still have an excellent chance of being able to figure out what you are supposed to do and could enjoy the gameplay alone.” See Noah Falstein, “Design Language: The Portal Paradoxes,” *Gamasutra* 10 April 2008: accessed July 31 2008 <http://www.gamasutra.com/view/feature/3616/design_language_the_portal_.php>.
32 The characterisation of GLaDOS is also integral to the played experience of *Portal*. GLaDOS is shown to be deceptive (“As part of the required test protocol, our previous statement suggesting we would not monitor the test chamber was an outright fabrication ... we will stop enhancing the truth in three, two, [static]”), manipulative (“despite your violent behaviour, the only thing you’ve managed to break so far is my heart”), euphemistic (unavoidably approaching a pit of fire, GLaDOS tells the player to embrace “your victory candescence”) and completely disconnected with reality (such as her fascination with cake, and her insistence that the Weighted Companion Cube, an inanimate box, “will never threaten to stab you, and in fact, cannot speak.”).
33 Or perhaps the recurring ‘last’ – as at the beginning of the game, GLaDOS welcomes Chell “again” to the testing facility.
35 Ibid.
38 Realm Lovejoy, *Portal* developer commentary.
39 Ibid.
40 Jenkins, “Game Design as Narrative Architecture”, 126.
A cut scene is a non-interactive, cinematic-style clip, occasionally pre-rendered, and very occasionally shot in live-action. The original Half-Life was notable at the time for going against the trend of increasingly lavish cut scenes and instead conveying its narrative solely through the use of in-game, interactive mechanics.


44 Ibid., 61.
CHAPTER THREE:

The videogame from below: the player as tactician

In viewing the videogame from below, at ‘street level’, this chapter has two aims. First, I examine the practises of navigation, the tactics of players. Therefore, I will propose several modes, or positions, for thinking about player tactics and interaction with the text. Second, I am concerned with the limits of textual interaction, and the power structures of the videogame as outlined in Chapter Two from the perspective of the player. Through the positions I outline, I will consider how the structures of power within a videogame are affected by and affect the player.

Stuart Hall once postulated that culture does not act “like a behavioural input, like a tap on the kneecap.”¹ It is worth remembering this when discussing the role of the player in videogames. Though we have shown in Chapter Two that many videogame designers aim to pre-empt and shape player behaviour, the extent of their success is yet to be assessed. Despite the argument mounted in the previous chapter as to the pervasiveness of designer intentions, it is still problematical to regard videogames as predetermining player reaction: though a spatial strategy may shape player behaviour, it is not a behavioural input. Hall’s three hypothetical positions – dominant-hegemonic, negotiated, and oppositional – from which “decodings of a televisual discourse may be constructed,”² may also effectively be applied to videogames. Meaning in videogames is no more fixed or able to be universally communicated than in any other medium.

These questions relate to the issue of power. It has often been assumed that the interactivity of videogames allows some sort of unusual textual power. As Barry Atkins suggests:
The text I construct as I read Tomb Raider or Half-Life belongs only to me, and to me alone. In effect, ‘I wrought the urn’. No other player or reader reads or writes the same text. It is unique. It is an original. Every one of us is author, every one of us is artist.3

This has also been seen as a problem for the status of videogames. When film critic Roger Ebert became involved in a long and heated debate about videogames4, he claimed that videogames were inherently inferior to other media because “by their nature [they] require player choices, which is the opposite of the strategy of serious film and literature, which requires authorial control.”5 Implicit in this assumption is the suggestion that videogames may allow for a vastly different experience from player to player (and that other media do not). To get to the heart of this question, a distinction must be drawn between different types of power: textual power and interpretation of meaning. Elasticity of meaning between audiences is now usually assumed for most texts in all media, and this should include videogames. Hall’s three positions are now quite basic means of engaging with culture; to look at videogames through this prism is to reiterate what has been confirmed for other media and disciplines since the 1970s.

Instead, it is helpful to consider the textual power of players through a variety of different frames. Do players have the freedom to navigate the text through their own tactics, despite the strategies of designers? I propose a number of hypothetical positions – or tactics – that are part of a necessarily integrated means of regarding players through structures of power. This is by no means an exhaustive list, or a list of discrete positions to choose from: a player can be many of them at once, or none of them. There is no single way of conceptualising the player that can effectively cover all experiences of playing; another reason to offer multiple lenses. Finally, because my own experience was crucial in moulding these positions, and as experience is crucial to my prior conceptions of the videogame as a text, I have built my own experience into the text both as points for discussion and as a means of forming a way of theorising in line with de Certeau’s tactics.
The player as navigator

I live in a small, rented apartment roughly ten minutes walk from the University of Melbourne. It has no curtains, yet has large, double glass doors opening on to a balcony above a laneway commonly used by pedestrians. My lounge room, where my television and videogame consoles are kept, is located just behind these double glass doors. In this sense, gaming can be a performative act in more ways than one: it is not difficult for passing pedestrians to observe my playing, especially at night when my lights are on. I am always aware that I may be watched.

I turn on my television, and set the input to ‘Component 2: XBOX’. Hitting the centre button on the face of my Xbox 360 turns the console on. Opening The Orange Box, Valve’s collection of Half-Life related videogames; I take out the disk and insert it into my 360. A moment later, and after the introductory logos (Valve Corporation; the Source Engine), I am able to choose which game of the collection I wish to play: Half-Life 2, Half-Life 2: Episode One, Half-Life 2: Episode Two, Portal, or Team Fortress 2. Some time ago, I began playing Half-Life 2, but became frustrated after I had completed a lengthy passage of the game and accidentally deleted my save file. My strong desire to unravel the plot of the Half-Life series in linear fashion prevents me from simply skipping ahead to the other Half-Life games in the package; they remain untried and untested, and likely will remain so until I force myself to work again through the sections of the game I have already completed. Team Fortress 2 is largely an online game, and I rarely play online, as I prefer single-player games. I tried it once but haven’t returned to it.

Portal, on the other hand, I know to be a short game playable in small bursts. I select it, and a short load later, I move forward to the next menu. The starkly clean appearance of Portal is the first point I notice; it is so uncluttered compared to most other videogames I have played. I select ‘New Game,’ and blackness takes the screen. Next, a slow fade puts me in control. I am in a small test chamber. Elevator music plays from a radio within this locked room. I am surprised that I don’t begin with the Portal gun. The game’s trailer made the gun look so appealing that I assumed I would begin with it. A computerised voice makes an announcement. I immediately distrust the voice; years of interest in science fiction have taught me that a benevolent Artificial Intelligence figure is often treacherous. I pick up a few objects and move around in the cell, experimenting. The mechanics seem very similar to Half-Life 2 – no hand is visible when I pick objects up, for example.

A portal opens, and I am told to go through it. I catch sight of a woman in an orange jumpsuit doing the same thing in a similar test chamber on the other side. There must be many rats in the lab; maybe it is a competition to see who completes the tests first? I move quickly on.
In Chapter One, I discussed the strengths of regarding videogames as a navigable medium. This inherently reflects on players as crucial to the performance of a videogame; a space may not be rendered navigable without people to navigate it. In regarding players as navigators of space, then, I assume several points of information about them. First, I assume that they are able to navigate. This recalls the discussion in Chapter One of game literacy; in order to navigate the text of the videogame, players may require both skill and familiarity with videogames.\(^6\) However, we can see here the practical outcomes of such a textual structure: although I began *Half-Life 2*, I made a non-gameplay related mistake (deleting the save file) and have no desire to replay. Additionally, even though my own videogame literacy is extensive, I still fail to recognise my own *Portal* character as ‘me’ the first time I see her: instead, I assume she is a competing character and rush to beat her.

Of course, however, the player is navigating not only a text but also the screen. On one level, my basic navigation through *The Orange Box*’s menus shows the choices I am already making; I do not, for instance, know very much about *Half Life 2: Episode 2*, however, I am making a conscious decision to play *Portal* instead. On another level, my brief time within the first, locked room of *Portal* indicates my skills and history as a videogame player: I am aware how the basic *Half-Life* and first-person universes work, and am immediately able to experiment with what I can and cannot do; another form of navigation.

On a third level, players are navigators of real space as well. For example, I am constantly aware that I may be viewed at any time by passing pedestrians while playing. Therefore, my position as navigator, as a participant in, and constituted through space, must also be extended to reality. I am architectured within real space as well as engaging in virtual space.
The player as subject

The first puzzle is simple. I need to put a block on a button to open a door. Years of playing videogames has taught me this principle already; I quickly move on. The next puzzle uses a portal that keeps changing destinations. I am confused at first, thinking that I have missed my chance to go through the portal into the first room it was linked to, but soon realise it rotates in a pattern. I enter the portal and immediately become stuck in another room as the exit portal disappears. Through glass I see the portal I entered, and the woman in the orange jumpsuit. I move instinctively, wanting to win the race. The woman moves also. I realise that the woman in the orange jumpsuit is me.

Repeating my past action, I move the box through the rotating portal to the button in the correct room. The computerised voice congratulates me, but requests that I move quickly, as “prolonged exposure to the effects of the button are not part of this test.” I laugh – I didn’t expect such reflexive humour. My laughter draws the attention of my girlfriend, who is writing an essay. I’ve distracted her; time to put my headphones on. While attaching my headphones to the television, I notice workers from the local telemarketing centre walking down the laneway. I wonder whether they see me too.

So far, Portal has been quite easy. The game’s mechanics, however, are quite unlike any I’ve used before and I’m still amazed by the portal system. It feels like my brain is thinking in ways I’ve never used before, and I feel very pleased with my quick progress. The computerised voice continues to congratulate me after each success, but I am still wary of it.

Chamber fourteen is the most difficult so far. It uses all of the techniques I have so far learnt, and the distance required to travel for one part of the puzzle is especially challenging. When I successfully solve it on the first attempt, I am elated. I am later told by the developer commentary that there is another, much easier way of solving it. I feel deflated that I didn’t figure this out of the first attempt, and go back several days later to try it out. It works, and I solve the chamber in record time. Somehow, though, this ‘ninja’ solution, as the commentary brands it, is less satisfying than the ‘correct’ solution.

If we assume that the designer does indeed wield a certain amount of power over the behaviour of the player, as suggested in Chapter Two, then it is also possible to regard this power as enabling, rather than simply limiting gameplay. Michel Foucault argues that regimes of power function productively as well as repressively:
What makes power hold good, what makes it accepted, is simply the fact that it doesn’t only weigh on us as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. It is instructive to view videogames through this same prism. In viewing videogame rules as regimes of power, it is possible to see similar sorts of pleasure produced. To take Portal as an example: I am induced by the game to play correctly, to overcome the test chambers, to learn the concepts of the game, to “think in portals”. This power functions repressively, as I am punished by in-game death if I do not succeed (GLaDOS: “Any contact with the testing floor will result in an unsatisfactory mark on your testing sheet, followed by death.”) and must begin again at the most recent save-point. But Portal’s power also functions by creating pleasure: I feel pleasure at overcoming the test chamber, of succeeding; I feel pleasure at discovering the ‘correct path’; and I feel pleasure in my skills of navigation. This seems to serve as a counter to the trend in videogame design to believe that “the ideal game is the one that has everything … a game where players are constrained by nothing.” Juul agrees: Rules are the most consistent source of player enjoyment in games. We may associate rules with being barred from doing something we really want, but in games, we voluntarily submit to rules. Again, we can view game space as the prime example: at the simplest level, walls and similar barriers represent physical enactments of rules that players submit to: one cannot usually walk through walls. In some games, cheats can be activated that allow us to walk through walls (known as ‘no clipping’ modes). However, this negates the physical layout of the level design: a key factor in influencing pleasure through navigation. For example, the basic pleasure I found in the first puzzle (of placing a block on a button to open a door) would be negated if I could simply walk through the door from the beginning without penalty.

Portal does not entirely discount the possibility of forging my own path through sections of the game. In one test chamber, designer Jeep Barnett notes that there is another, extremely quick solution that was discovered by playtesters. However, unlike other alternative solutions, this one was not removed:
We’ll usually rework a level if playtesters discover a way to bypass chunks of the puzzle too easily. But in this, and a few other cases where skipping ahead arguably takes more skill than solving the puzzle properly, we let the ninja solution stand.

Surprisingly enough, we can see similarities between the design motivations of this section and the escape from GLaDOS’ clutches later in the game. *Portal* has two regimes of power, often doubled, but never wholly the same. There is the fictional regime of power (GLaDOS’), and the designed regime of power (that of the game designers). Therefore, if the latter section of the game is to “convey the sense that players are cheating the [fictional] system,” then these infrequent ‘ninja’ solutions serve a similar function, except this time, the system that is cheated is the designed regime of power. Ultimately, both ‘cheats’ serve to create a particular type of pleasure within this ruled environment.

**The player as bricoleur**

Jacques Derrida notes:

The bricoleur, says Lévi-Strauss, is someone who uses ‘the means at hand’ that is, the instruments he finds at his disposition around him, those which are already there, which had not been especially conceived with an eye to the operation for which they are to be used and to which one tries by trial and error to adapt them, not hesitating to change them whenever it appears necessary, or to try several of them at once, even if their form and their origin are heterogeneous.

Taking this as a foundation, there are at least two senses in which a player may be considered a bricoleur. The first is as a form of navigation. A player may approach gameplay in the style of the bricoleur, by trial and error. This allows a player to establish rules and functions by testing the limits of the game, reflecting the experiential nature of the medium. Additionally, some players may apply techniques from previous gameplay experience to test their new environment. In the case of *Portal*, I immediately understand the basic control system through my experiences with *Half-Life 2* and other first-person games. I do not need *Portal* to instruct me in manoeuvring my character, and I realise
through trial and error that picking up and manipulating objects is identical to the system used in the *Half-Life* series.

There remains an important difference between playing in this manner and the taken definition of a bricoleur – as a method of navigation, this trial-and-error approach does not necessarily seek out actions, solutions or instruments “which had not been especially conceived with an eye to the operation for which they are to be used.” It is more often the case, as I have previously argued, that players will establish the designed usage. Therefore, though I may approach one of *Portal*’s early puzzles with a conceptually similar approach to the bricoleur, adapting and changing various solutions and instruments at my disposal, the final key to the problem, invariably, is designed.

*Months after finishing Portal, I found a YouTube video of another player defeating GLaDOS in the final confrontation before her first monologue has finished. It is done without cheats; the player simply uses strategies and items (such as a turret he carried through the level) available to all players to his advantage. The whole battle is over in less than one minute; on my first time it took ten. Despite having now finished Portal more than once, I still am not entirely sure how the player succeeded.*

The second, and perhaps more technically true, sense of considering the player as bricoleur is when the game is used in ways unintended by the designer. This is sometimes called *emergent gameplay*, though it remains a somewhat problematic term. There are numerous instances when emergent gameplay is visible, from basic sub-games invented by players within the worlds of certain videogames (such as the ‘rocket baseball’ developed by *Halo 3* (Bungie, 2007) playtesters) to more complex attempts at bricolage. The above *Portal* video description is of a phenomenon often labelled ‘sequence breaking’, where a player reaches a particular point more quickly, or in a more direct route than the designer thought possible, hence ‘breaking’ a ‘sequence’ (in this case, dialogue,
but it may also apply to item collection or objective completion). This is often done through exploits, glitches and great skill; using cheats to speed through a game is usually frowned upon in the gaming community. Thus, the player is using designed aspects of the game (“instruments he finds at his disposition around him”) in an unforeseen manner. This can apply to a wide range of activities, most obviously the production of Machinima (such as the short film using Portal, A Day In The Life of a Turret) and Mods (the code-level modification of videogames; such as the unofficial Portal prequel, Portal: Prelude).

Here, the issue of power surfaces again. While traditionally, emergent gameplay has occurred without deliberate aid of designers, more recent videogames specifically encourage it. Halo 3 features an inbuilt level creation mode (‘Forge’), while the upcoming LittleBigPlanet’s (Media Molecule, 2008) gameplay is largely focussed on creating and sharing content. So runs the marketing material: “LittleBigPlanet is the first game to give you a fantastic adventure AND the tools which we used to make it.” While these instances of planned emergent play are a more recent phenomenon, general support for modding communities is not, and the lines between user-creation and designer-creation have never been completely clear. For instance, Counter-Strike (The Counter-Strike Team, 1999), one of the most popular eSports videogames, began as a user-created mod and was only later turned into a full retail release (Valve Software, 2000). Valve now host select user-made mods on their digital distribution service, Steam, and mod-making experience is generally seen as an advantage, if not a requirement, in seeking employment in the design industry. This further cements the intersections between players and designers: after all, through the mod-making process, players become designers. Tacticians become strategists.

This is not to suggest that these player-as-bricoleur instances are somehow invalid because of developer support or overlap. Indeed, there is nothing in the
definition that suggests bricolage must be an independent, from-below, or rebellious act. This leads me to the next position.

The player as guerrilla

So far, I have only considered positions where the player is working within the boundaries set by a designer, or at least is not inherently working against them. The potential for working against the designer’s intentions, of using the space for the player’s own means, as a guerrilla, is an interesting concept to examine. The guerrilla is inherently a spatial position: as Ché Guevara argued: “With the help of his natural adaptability, [the guerrilla] becomes a part of the land itself where he fights.”

Admittedly, the possibilities for playing in opposition to the designer are few. On the one hand, this is because the notion of subversion presupposes a dominant force, and I have already shown that power in videogames does not necessarily function in such a simplistic dominant/oppressed dualism; it is also an enabling force. On the other hand, it must be admitted that the designer nonetheless generates the ‘rails’ of a videogame, and this constrains possibilities for subversive acts. For example, I may not play as any other character than Spider-Man in Spider-Man 2 (Treyarch, 2004) because that is how the designer has established the rules of the game. Additionally, despite Spider-Man 2’s accurate and open representation of Manhattan, I may not buy a bagel, a New York icon. This notion can be taken further – in the wartime shooter, Call of Duty 4 (Infinity Ward, 2007), I may not play as a pacifist, just as I cannot not murder Andrew Ryan in BioShock.

This is not to say that a game cannot be used for subversive purposes. The Half-Life mod Escape From Woomera (2003) caused widespread media controversy in
its depiction of the Woomera Detention Centre, and was probably using *Half-Life* in a way unintended by Valve. However, this sort of subversion is not the sort I am interested in; as outlined previously, through modding, the player becomes designer and a strategist, and it is tactics that interest me in this chapter. The most obvious method of tactics-level subversion, cheating, represents a mixed method as developers often intentionally program cheats. It is usually only with additional hardware devices such as mod chips and GameSharks that videogame console players may use cheats that are not programmed by designers, though PC players may have more freedom to devise their own.

More interestingly, there is a minor trend towards playing a videogame ‘incorrectly’, mostly for humorous effect. There is pleasure to be found in this approach, best illustrated in the popular series of online videos, *Mission: Illogical*. In these videos, the player performs actions that draw attention to the absurdity of the rules of multiple videogames: Link from *The Legend of Zelda: Ocarina of Time* continually rolls into a wall, Harry Mason from *Silent Hill* (Konami, 1999) jumps backwards over and over, while the player tries to shoot the hats off as many enemies as possible before dying in *GoldenEye 64* (Rareware, 1997). The pleasure here is in being intentionally oppositional: knowing what behaviour the game is supposed to generate and doing the exact opposite. It is as if I had played *Portal* and intentionally fallen into the fire pit every time GLaDOS tried to kill me, or had used the ‘flinging’ technique to fall inches short again and again. This is certainly one method of playing subversively within the rules set up by the designer. This recalls Debord’s tactics of psychogeography; more specifically, the *dérive*, which encourages walkers to move through cities in unconventional ways. Contemporary psychogeographers even use methods comparable to those of *Mission: Illogical*: attendees to the 2003 PsyGeoConflux festival used a pattern of repeating algorithms to navigate New York, or received directions based on emotional states.
However, it could be argued that this method, while certainly a guerrilla tactic, only serves to reinforce the strengths of the ‘correct’ way of playing. It is only pleasurable to play in such a manner because I am aware of the ‘correct’ way and its pleasures. This may highlight the relative unimportance of enacting subversive play, as the power structure of videogames is entered into voluntarily and is a crucial element in the medium’s pleasure. Therefore, it is important to remember that the power relationship I have been discussing is on a textual level only; it does not necessarily extend to players’ real practices. Hall’s maxim of culture not acting “like a tap on the kneecap,” still applies: I may be a pacifist in reality, yet still play *Call of Duty 4*. I may believe murder to be morally inexcusable, yet still play *BioShock*. If I disagree so vehemently with the power structure I have entered into, then one powerful solution is to switch the videogame off.

On reflection, players are peripatetic; only through movement within the text may they engage with it and enable gameplay. As Mark Wolf notes, “it is really the computer programmer, the person who wrote the program, that gamers are playing when they are ‘playing the computer’.” It is through the power structures of the text that the player and the designer interact. The designer, through strategies, creates a navigable text, one that may attempt to shape player behaviour and streamline gameplay. However, it is only through the practice of the videogame that these strategies can be realised. Players may derive pleasure from agreeing to work within the power structure set out by the designer, and it is in this sense that strategies and tactics work in concert within the videogame. Otherwise, players may choose to play the game on their own terms, such as the ‘incorrect’ method above. This complicates the relationship between designer and players – although players are certainly using their own frames for play, they have nonetheless recognised (and ignored) the designed strategy and preferred power.


6 For example, Michael Abbott discusses his frustration with being unable to share one of 2008’s most critically acclaimed videogames, *Braid* (Number None, Inc.), with his non-gaming friends because too high a skill level is required. See Michael Abbott, “Is this what we want?,” *The Brainy Gamer: Intelligent conversation about video games* 19 August 2008: accessed 30 August 2008 <http://www.brainygamer.com/the_brainy_gamer/2008/08/is-this-what-we.html>.


13 Commentary on the video can be found at Michael McWhertor, “Portal End Boss Sequence Break,” *Kotaku* 30 October 2007: accessed 3 August 2008 <http://kotaku.com/gaming/clips/portal-end-boss-sequence-break-317025.php>. However, the link to the video within the page is now dead; it may be found at <http://www.gametrailers.com/player/usermovies/127981.html>.


Che Guevara, *Guerrilla Warfare* (Lincoln: University of Nebraska Press, 1985), 44.


This multiple series of videos, created by an author known only by the pseudonym 'heisanevilgenius', is available predominantly through YouTube. They are best found through the creator's YouTube page, at: <http://www.youtube.com/profile_videos?user=heisanevilgenius&p=v>, accessed 2 October 2008.


CHAPTER FOUR:

Conclusion

In attempting to elucidate the practices and experience of the videogame as text, I have represented the medium through primarily spatial terms. The videogame incorporates many non-spatial elements, or at least, many non-primarily spatial elements; however, as I have shown, the medium is best holistically conceptualised spatially.

To conceptualise videogames through Michel de Certeau’s strategies and tactics is to highlight the interrelated textual and power structures of the medium. As in Chapter Two, it is possible to view the videogame from above, as a whole, as a ‘concept’. This is the perspective of designers, and of those seeking to analyse a videogame in its totality. As in Chapter Three, it is also crucial to observe the videogame from below. This is the practiced experience of the text, the perspective of the player. It is the tactics enacted in navigating, a perspective which may not see the whole.

From the perspective of the designer, spatial strategies are vital to the videogame. Through them, a designer can chose to communicate rules and fiction through the space to powerful effect, as illustrated in my analysis of Portal in Chapter Two. Furthermore, a designer may attempt to influence the behaviour of a player through strategies of space, and the clever use of design and playtesting may streamline gameplay.

In this sense, the player is the practitioner of the designer’s navigable text. The strategies of the designer may serve as the overriding force, but only if this is the manner that the player interacts with the text. The videogame may be designed,
as *Portal* is, to be pleasurable when players voluntarily enter its preferred power structure, yet players may use their own frames of practice. As Foucault argues, for environments to have effect, the practices of space must match the architect’s intentions.
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VIDEOGRAPHY


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