

Architecture, Space and Gameplay in World of Warcraft and Battle for Middle Earth 2

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ABSTRACT

Taking as its starting point the notion that architecture provides a way of analysing computer games and their spatiality, this paper compares two very different ways of producing architecture and space in *World of Warcraft* and *Lord of the Rings: Battle for Middle Earth 2*. Looking at the production of architecture within the two games as an object or as a spatial entity, as experiential or symbolic, this paper links videogame architecture, landscape, gameplay and the player.

Keywords

Video games, Architecture, Gameplay, Space, Spatiality.

1. USING ARCHITECTURE

An established discourse within videogames studies asserts that videogames are essentially spatial in nature and that it is their spatiality that sets them apart from media like film and television [1]. Aarseth claims that “the defining element in computer games is spatiality” [2].

Using the generally acknowledged notion of architecture as a way of organising and using space, it follows that looking at architecture in videogames is a way of looking at how they use space. Space is such a multilayered, nebulous and problematic term, that it is much easier to look at the more concrete ways in which games use architecture and infer from them how games use space. Taking as its starting point the notion that architecture is spatial in its practice this paper proposes that an architectural reading of videogames might be useful in understanding the spatiality of videogame environments.

Ernest Adams in the *Role of Architecture in Videogames* notes that the rationale for architecture in reality is different to the reasons why architecture is produced in videogames [3]. This implies that the study of architecture in videogames can reveal things about the games themselves. This paper seeks to extend this discourse, using architectural analysis to understand space and gameplay. Unlike Santos Cabral who positions concepts of game theory into architecture, focusing on how this can facilitate the architect and client relationship [4], this paper posits architecture as a way of understanding videogames.

Architecture is about more than space. Bernard Tschumi says “Architecture is not simply about space and form, but also about event, action, and what happens in space” [5]. The study of architecture in videogames can encompass social practice, interaction and movement, tying in with Lefebvre’s refutation of space as empty [6] and De Certeau’s idea of space as a practised place [7]. As a context for interaction and as a cultural milieu,

architecture contains evidence of the complex interactions between player and game-world.

It might be asked at this point how an architectural reading of videogames might be of use when studying games that are composed not just of simulated urban environments but also of natural environments. Taking Salen and Zimmerman’s position that simulations are of an abstract nature [8] it follows that the simulation of reality by a videogame is essentially an abstraction of space, with a limited representation of detail. Hence both landscape and architecture in videogame worlds are abstractions of reality. But not only are they abstractions; videogame worlds are entirely artificial constructs. Every landscape is engineered from scratch by human involvement. Even those landscapes that are dynamically generated by computer programs are defined by human intervention. The designer delineates the characteristics and limits of the world. Peter Hines of Bethesda Softworks notes of the artificially generated landscape of *The Elder Scrolls IV: Oblivion* (Bethesda Softworks, 2006):

“We created a program and ran it thousands, tens of thousands of time, on different parts of the world until we got the parameters the way that we wanted them, which took a very long time.” [9]

Videogame landscapes constructed for gameplay have more in common with the built environment and architecture than they do with wilderness and as such can be read as architecture. Until a video game can replicate a natural environment in its entirety or detail it to such a degree that it is indistinguishable from that environment then the designer’s choices of what to represent and how to represent are imposed on that landscape. As artificial and abstract human constructs, all aspects of videogame worlds (even landscape) can be read as a built environment. Videogame worlds are architectural.

For the purposes of this paper I will differentiate between simulations of man-made environments and simulations of natural environments, the first I will call architecture and the second landscape.

In this paper I am going to look at *World of Warcraft* (Blizzard Entertainment, 2004) and *Lord of the Rings: Battle for Middle Earth II* (Electronic Arts, 2006) because despite both being fantasy inspired epics with a number of commonalities to their architecture, they epitomise a fundamental divide in the way games represent and use architecture and hence space.

2. TWO GAMES, ALIKE BUT DIFFERENT

It might seem at first glance that *World of Warcraft* and *Lord of the Rings: Battle for Middle Earth II* have a lot in common. Both are fantasy inspired epics containing the staple denizens of

fantasy realms; dwarves, elves, dragons and orcs. Both are games about fighting and conflict between disparate cultures. Both are three dimensional, open, indeterminate worlds that Jesper Juul describes as games of emergence [10].

When we look at their architecture we see the same kind of similarities occurring. Both are extensive fantasy worlds, rich in the kind of archaic architecture that the modern world has left behind, including castles, fortresses and medieval-style walled cities. Other similarities are culturally applied, the dwarves in both games are associated with the same heavy stone architecture incised with geometric patterns. But *World of Warcraft* and *Battle for Middle Earth II* (here on referred to as *BFME II*) are fundamentally different in the way they represent space.



Figure 1. Dwarven city of Ironforge, *World of Warcraft*



Figure 2. Dwarven Fortress, *Battle for Middle Earth II*

An initial architectural reading of both videogames reveals a dichotomy in the way they portray or produce architecture. Contrast the dwarf built city of Ironforge from *World of Warcraft* with the dwarven fortress in *BFME II*. On one hand the architecture is a vivid transitable space, a three-dimensional construct whose volume we can enter into, inscribe trajectories

across and explore. In the other architecture is produced and built as an object, a solid entity that we cannot enter, cannot explore and cannot transit through.

World of Warcraft privileges architecture as a spatial experience. It is concerned with the ability to move through space, constructing architecture as a series of solids and voids. When we interact with the architecture we are alternately channelled and impeded. The architecture encompasses us, organizing our activities into discrete zones and structuring the way in which we move between activities. In Ironforge I go to the auction house to sell things, the bank to deposit items for storage and the inn to buy food. This is a spatial architecture that mimics the ways in which we use architecture as containers for specific purposes in the real world. The architecture has what architects call program, so that Ironforge can be divided into circulation space and activity space. This is space that works on a personal level, an intimate experience, where we guide our avatar through the intricacies of the game world looking through their eyes.

Conversely *BFME II* is not concerned with architecture as space. The architecture is created as an object. Though the buildings are three-dimensional you cannot enter them. You can view a building from any angle except from within. The architecture of *BFME II* does not function as a spatial entity and instead is about a symbolic association with the functions and results that architecture houses in reality. A barracks building becomes not a place to house soldiers but an object that creates soldiers. A marketplace is not a space to sell goods but creates the economic effects that are associated with trade.

These are objects that have all the appearance of architecture but none of the habitable function associated with them. In essence this architecture is a symbol of itself, representing the web of allied affects that architecture has in the real world, here made concrete and attainable. Eric Champion notes that architecture is no object, that architecture contains interior space and links spaces together. More interesting in relation to *BFME II* he notes that architecture locates and employs symbolic objects within space [11]. The architecture of *BFME II* singles out and emphasises this aspect, operating as a spatial metaphor that contains and locates concepts in game space. Despite clearly presenting buildings as objects with no interior space, *BFME II* moves beyond a static view of architecture, imbuing it as a symbol for the many activities and interactions that take place within it.

This abstraction of architecture into either space or symbol is further clarified by the way in which the architecture of *World of Warcraft* is devoid of simulation of materiality beyond its appearance. Be it simulated wood or simulated stone, there is no inherent difference between a castle and a cottage. Beyond allowing or denying us movement the architecture has no effect upon us. *BFME II* in contrast takes on an abstracted materiality, each building has its own *health* and can withstand a certain amount of punishment before it is razed to the ground in a cloud of dust. A dwarven fortress can be made stronger with the addition of dwarven stonework and gain offensive capabilities with the addition of an axe tower. A conceptual view of strength that echoes the defensive capacity that buildings materials afford in reality. Beyond a simulated solidity the architecture in no way simulates the actual physical properties of building materials.

Similarly a dwarven mine in *BFME II* is a resource gatherer, being neither a defensive nor an offensive structure, symbolising the productive capacity of a mine. Despite the inherent strength such a structure may have in reality, within the game it is as vulnerable as a farm or Mallorn tree, the resource units for men and elves. The link between the intrinsic matter-based qualities of architecture in reality and the applied qualities of videogame architecture is tenuous. The architecture is subservient to the requirements of the game and architectural accuracy sacrificed to the balancing of army factions.

No matter how real-looking the architecture, how detailed the construct, the architecture of both these games remains a symbol of itself. The architecture in *World of Warcraft* is an abstraction of the spatial organisational characteristics of architecture and the architecture in *BFME II* an abstraction of the productive/defensive capacity of architecture in reality. *World of Warcraft* has containers, *BFME II* coded objects. One is concerned with an experiential understanding of architecture, the other with a symbolic representation of architecture.

2.1 Another Architecture in BFME II

There is another architecture beyond the fortresses and barracks under the player's control, which can be found in *BFME II*. As part of the mise-en-scène of Tolkien's world the epic buildings that featured in the books are recreated. A player fighting a round of skirmish in Gondor would find the city of Minas Tirith looming nearby, while other maps feature places like the Grey Havens and Osgiliath, places we are familiar with from the movie settings.



Figure 3. City of Minas Tirith, *BFME II*

Once again the buildings are not accessible and here act either as part of the player's repertoire of useable object architecture or as backdrops, scene setting for a Tolkien milieu. But Tolkien's architecture is often more about entire urban settings than individual buildings and when these settings are translated into a strategy game the results are uncanny. The cities are strangely empty, blank carcasses from which the sustaining activity has been stripped. While less noticeable in a ruined city like Osgiliath where one expects emptiness and desolation, entering the city of Minas Tirith becomes a surreal experience. The player can move their army through the city (at the expense of ignoring their opponent) but there is little to do there, the city remains a vacant lot, a city comprised only of circulation space.

These iconic architectural forms pepper the game like a Tolkien seasoning. They have no more effect on what is happening on the screen than the rivers and mountains that restrict access and channel movement, though a clever player may take advantage of the additional walls to impede his opponent. We can view these settings much as we would the landscapes of *BFME II*. This is architectural scenery, part of the evoked narrative space that Henry Jenkins notes builds on pre-existing narrative associations [12].

Some maps substitute an iconic building for the initial structures with which each player starts a campaign, proffering a castle instead of a fortress in the map of Dol Guldur, Sauron's fortress in the forest of Mirkwood. These buildings retain only their distinctive appearance as different and offer no new advantages to the player. Acting as exploitable structures they function in the same manner as the other player controlled buildings, as symbolic objects. These well-known Tolkien buildings operate then in three ways, as a substitute for player controlled architectural objects, as evoked narrative and as landscape.

2.2 Landscape

In both *World of Warcraft* and *BFME II* the architecture is only part of the setting, a large percentage of available space in the game is simulated landscape, natural scenery. How then does this landscape function?

Despite the production of architecture as objects in *BFME II* there is an overriding spatiality. The buildings are situated within a larger landscape across which the player's armies rampage and though the buildings in *BFME II* do not function spatially they are still three-dimensional representations within a greater simulation of space. Yet that space is somehow planar, a monopoly board world that might be viewed more as a three-dimensional map, a spiritual descendant of the papier-mâché territories across which legions of tin soldiers fought.

The landscape of *BFME II* is a disputed space, where you race against your opponent to utilise the resources and protect your investments. A space to be conquered, consumed and controlled. Landforms function as obstacles, allowing and denying access. A map where the geography creates a limited number of routes and approaches to a player's stronghold plays differently to an open map from which enemies can appear from any angle. Landforms are barriers to the player's forces and their enemies alike, influencing the fight but never actively taking part. A hill or river operates as a wall, creating a no go zone and dividing the map into distinct and sharply separated areas of access and denial.

In *BFME II* the change between accessible terrain and inaccessible terrain operates not as a function of physical characteristics but occurs as an abrupt change. So that landscape which appears as a gentler gradient is as inaccessible as the steeper terrain next to it. A river can only be crossed at a ford, no being can swim. The edges of each map are simply inaccessible, wreathed in shadow, un-traversable even if there are paths leading out into the blackness. Landscape features appear as rivers and as mountains yet do not function spatially. Instead they operate as a visual code for inaccessible terrain. Like the buildings of *BFME II* that operated as a symbol representing the allied effects of architecture in reality, the mountains and rivers operate as symbols for the impenetrable nature of topographical boundaries in warfare. The environment looks like natural landscape but plays as a map.

The map is the territory where campaigns are fought on limited sections of world surrounded by impenetrable blackness. We are always aware of the overall map of Middle Earth created by Tolkien but can only access specific parts of it. The available territory is a map of which the boundaries are shown to the player in his mini-map, seductively labelled as the Palantir by the developers. What remains unknown is the location of your enemy. The lands of *BFME II* are comparable to the map that Borges proposed in *On Exactitude in Science*, a map that physically covered the entire territory that it purported to represent on a one to one scale [13].

The land is a maze or an arena, snow covered or grassy green, barren wasteland or seaside port, yet it always appears as a blank slate waiting for armies to write their stories of destruction upon it. But even the chaos of war leaves the land untouched. Destroyed buildings collapse amidst clouds of dust into piles of rubble that are smoothly and organically absorbed back into the land, leaving it once again bare and clean. The exploitation of the land by resource gathering as a function of the architecture reinforces this passivity. For efficient production a resource structure is placed on clear ground, a simple matter of available space. The gathering itself is a function of the building, which also provides access to information about the process. The land is inert and submissive in comparison to the player-controlled architecture.

In *World of Warcraft* the landscape operates in a similar fashion to the architecture, presenting a immersive spatial experience. Players weave and manoeuvre their way around and under trees, across hill, dale, dune and dell, through streams and lakes into underwater terrains, into caves and up mountain ranges. Ocean surrounds the continents of Azeroth, only avatar fatigue prevents the player from swimming endlessly into the sea, delineating a border to the game world in which death occurs before a player can reach the edge. Unlike *BFME II* all terrain in *World of Warcraft* is enterable, with usability of terrain expressed to the player as a function of simulated physical properties, such as steepness of the land in which players slip downwards as if forced by gravity on certain gradients. Rather than inaccessible mountains *World of Warcraft* has slippery mountains, that still form part of the playing field even if they act as impenetrable barriers. Players will jump off un-traversable cliffs for shortcuts and for fun, while other players devote hours to mapping out paths afforded by the junctions of geometry within supposedly impassable terrain.

The landscape functions like the architecture in the way it structures activity. Though a zone may appear to be open accessible countryside it is in fact divided up into different areas, each with their own name, with their own sets of non-player-characters and their own distinct appearance. The mountains and landforms are walls, the named areas rooms and the paths and the spaces in between circulation space. Contained within each room are thematically grouped sets of opponents or allies. Looking at the zone in which Ironforge is situated, Dun Morogh, the discrete sectors within the zone are clearly visible. Coldridge Valley is the beginner's zone, separated as a nursery from the rest of the more inimical world by mountains. Other areas are less enclosed but retain a homogeneity of scenery and populace, within the greater heterogeneity. The landscape collates quests within each zone and houses them in well-defined areas. In the same manner as the architecture, *World of Warcraft*'s landscape arranges activity.



Figure 4. Dun Morogh zone, *World of Warcraft*

The same nodal points of activity pattern that structure and organise activity within individual buildings and zones is repeated on a macro-level in the zones and continents of *World of Warcraft*. Each zone is distinct with its own character, habitat and assigned level of difficulty. Each zone has limited entrances, forcing players into circulation patterns. Dun Morogh has two thresholds accessing two other zones but denies passage to the adjacent higher-level zone of the Searing Gorge. These passageways in combination with flight paths form an elaborate interconnecting system within a continent that the player slowly learns to negotiate. Each continent also has a limited number of thresholds, two each for the Horde and Alliance, points that allow access to the adjacent zones. If the areas within a zone were rooms, each zone would be a house and the continent a suburb.

Like *BFME II* the landscape of *World of Warcraft* uses a wide variety of locales, from toxic-toned forests festering in a miasma of purple-hued tones to sandy deserts and snow-clad woodlands. Again like *BFME II* the settings make little difference to the gameplay, with even less influence on outcomes, but here they provide clues, from the types of monsters you might find to the location of the quest objective. Wayfinding in the locales of *World of Warcraft* becomes an important part of gameplay where distinctive landmarks and differentiation in locales act as signposts that direct the player. In addition the diversity of ecology in both games helps to provide difference and retain interest in what might otherwise been seen as repetitive play.

So in an ironic manner the landscape of *World of Warcraft* operates in the same way as its architecture while the non-interactive architectural elements of *BFME II* operate more as landscape. Both games uses two distinct forms of schemata, *World of Warcraft*'s landscape functions as an organisational system, creating nodes of activity while the landscape of *BFME II* functions as a contested space, influencing but not directing, gameplay. The landscape of *BFME II* operates as a codified map while *World of Warcraft* more closely simulates a personal experience of environment. Not only do the buildings of both games separate into objects and spaces, dividing into a symbolic architecture and an experiential architecture, the landscape of both games is similarly concerned with stressing either a symbolic or experiential aspect.

2.3 Movement, Scale and Affordance

The architecture and landscape in *World of Warcraft* may be the container, the place where we often find the action, but the movement between nodes is suggested by the narrative, in the instructions contained in quests, or by the economic and commercial exigencies operating on the player. This is not to say that players do not explore without any imperative driving them, many players are driven by the pleasure of discovery to venture forth into potentially dangerous areas. The limited number of thresholds also force exploration, channelling the player through bottlenecks and through new lands. In *BFME II* the objectives of survival and conquest force players to cover territory, seeking out and destroying the enemy base being the only way to claim complete victory.

The buildings you encounter in *BFME II* seem predominantly uninhabited, the action happens out of doors with the rampaging armies. Nevertheless singular people patrol the towers and till the farms, while on order little herds of cavalry or troops of archers burst forth fully formed and armoured from the appropriate buildings. Yet in comparison with the buildings the men (or orcs or elves or horses and so on) are oversized. Watching an elephantine *Mumakil* burst forth from a tiny shed is part of the charm. As the main tool with which you fight it makes sense to have your personnel outsized and visible. But the size correlation between the buildings and the populace also reflects a hierarchical relationship; the architecture creates and supports the player's armies but it is the mobile units of that army that fight the war. Playing pure defence doesn't win.

Conversely the scale of architecture in *World of Warcraft* is exaggerated. Vast buildings tower over the player's avatar, cavernous ceilings and oversized steps make dwarfs of us all. This oversizing of the architecture is both a pragmatic decision, based on viewing angles and large player populations in a consistent world, and a reflection of the personal spatial nature of the architecture. Treading the delicate balance between making the world feel too small and inflicting miles of mindless trudging between nodes on players, the large architecture of *World of Warcraft* immerses and saturates the player in the environment.

It is interesting to briefly consider the architecture of both games in relation to notions of affordance, taking William Gaver's separation of affordances and perceptual information [14]. The architecture of *BFME II* exhibits a false affordance of conventional architectural/spatial use in the way it mimics the visual properties of real buildings. Other uses of architecture in gameplay, for example creating soldiers, exist as hidden affordances. *BFME II* relies on the gameplay manual and knowledge of established traditions in real-time strategy games to indicate to the player the buildings utility. Conversely *World of Warcraft* primarily exhibits perceptible affordances of customary architectural and spatial use to its architecture, creating a congruity between what between what the player perceives they can do and the activities they can perform.

2.4 Differentiation

Both games also use architecture to clearly differentiate between opposing forces. In *World of Warcraft* we have on one side the races of the alliance; Elves, Dwarves, Gnomes and Men all of whom build in stone with varying degrees of integration into the landscape. On the other side we have the races of the Horde; Orcs, Taurans and Trolls who all affect a more transient looking

architecture that features cloth and wood elements (the exception is the Undead Horde who feature a decayed version of man's architecture). Plans of their cities also reflect this separation with the Alliance featuring more geometric structured layouts and the Horde looser more organic plans.

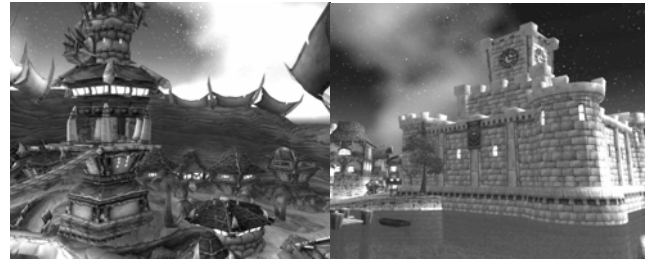


Figure 5. Orc vs. Men, *World of Warcraft*

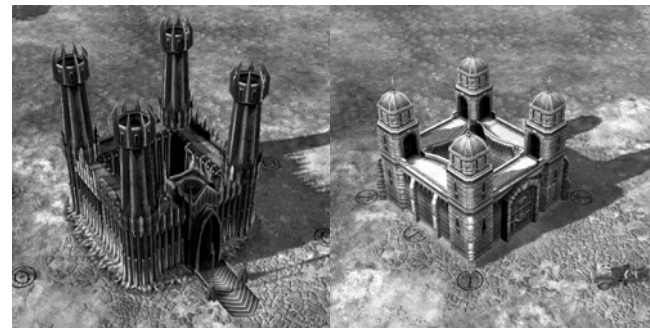


Figure 6. Mordor vs. Man, *BFME II*



Figure 7. Goblins, *BFME II* and Elves, *World of Warcraft*

BFME II uses the same sort of architectural differentiation, with a marked difference between the dark forces of Mordor who enjoy the use of black pointy features in their architecture and members of the opposing side, the men and elves who in contrast evoke more classical allusions. In both games each race is defined within its coalition by their own peculiarities of architectural form.

2.5 Base Building

In *World of Warcraft* the entire world is completed, players cannot build or own space. The only personal area you can access is your bags or your bank. In *BFME II* building your own base, noting here the military context of the word, is an essential part of gameplay. Based on the developer's three principles of build anywhere, upgradeable fortresses and free form walls players have access to a limited number of buildings depending on which race they play. A fortress operates as a base hub, recruiting heroes and builders. Lose your fortress lose the war.

A base for the Mordor army generates resources from slaughterhouses and lumber mills, creates warriors from orc pits, troll cages and mumakil pens. Siege works create offensive weapons while battle towers increase defensive capabilities. The fortress might be upgraded with a lava moat, a catapult and a tower that shoots volcanic fireballs. The base becomes an aggregation of architectural effects, an army of buildings that create soldiers, economies and fights on the defence. Working as a series of individual units within the game the base never simulates any of the attributes of an urban collective. The buildings work not as a settlement but as intriguingly immobile battalion.

3. GAMEPLAY

Games use architecture and landscape to support gameplay. The most obvious and so far un-stated role of both is to provide attractive and interesting visual settings, what gamers call eye candy. This should not be underestimated, graphical environments are one of the main selling points and failure to provide such can be met with devastating criticism from gaming media. *World of Warcraft* in particular was lauded for its rich colourful graphics. But Bernadette Flynn argues that looking at video games “needs to include a broader notion of spatiality that takes into account the participatory and embodied positions of the player” [15]. What then are the links between spatial architectural style, viewpoint and gameplay considering that *World of Warcraft* and *BFME II* have very different gameplay styles?

BFME II is a real time strategy game whose gameplay consists of combat on a collective scale, creating and defending a base, attacking the opponents. Players can play solo against the AI or engage in online multiplayer tournaments, with up to 8 participating people. In *BFME II* the architecture is a vital part of the gameplay, forming part of the player’s army, as necessary a part of the militia as any soldier or hero. Architecture functions as an object in a symbolic role, becoming an emblem of a complex range of interconnected effects that in some way tangibly relate to architecture in real life. Architecture acts as a simplifier that reduces these effects to a comprehensible and localised icon. A limited spatiality supports this simplification and allows the player to focus on the gameplay. To participate spatially with the building on a personal level would nullify this simplification. The architecture also functions as a shortcut compressing the years of birthing, training and equipping that goes into every soldier. Thus *BFME II* compacts complex interactions into a convenient package that builds on an association of place with the activities that happen there.

The landscape of *BFME II* functions as a map, a contested space in which the topography of the setting influences the manner in which we play but has no direct effect on gameplay. Salen and Zimmerman note that war-games need to represent and simplify geography in ways that relate to the end use of the map and be meaningful to players [16]. In *BFME II* the rich landscape detail is part of the mise-en-scène of a Tolkien world and partly due to the graphic expectations of the current gaming climate. Player interaction with the landscape, simplified into go or no go zones, reduces the complexity. The landscape then looks detailed but plays simply.

The player quickly learns to understand the game landscape as an edited interpretation of terrain and to ignore superfluous detail on a tactical level. The mini-map facilitates this by showing only the

gross landforms and landmarks. The abridged landscape focuses army interaction and reduces the opportunity to use landforms to a manageable and simplified level. The planar landscape reminds us that this is a map to be fought over, that the strategy of war is more important than the individual’s relationship to space. The landscape functions as an object to be conquered and used, not a space to be experienced.



Figure 8. Fighting and viewpoint in *BFME II*

This is a game that depends on a macro-view point. Players can zoom in to see their soldiers and heroes carrying out their orders and fighting opponents but cannot fight the war on that level. *BFME II* requires you to build and organise armies as an overseer, not as a direct participant. The high wide viewpoint is a necessity, allowing supervision and management of a large number of operatives. The camera can be moved around by the player who can then concentrate on relevant sections of the map, easily switching from conflict hot spots to managing base operations. The player is watching and directing the action above the landscape and is external to the space in which the action is happening. Buildings *are* objects from this height.

The gameplay of *BFME II* focuses on decision making, should I put my resources into making more elven archers or should I upgrade my armor? Will I build a defensive unit or concentrate on offensive capabilities? Will I set my archers to attacking that troll, while the cavalry goes for the enemies foot troops? The external viewpoint and the codified space support this tactical gameplay, reducing distraction and allowing a meta-view of manoeuvres. Concerned with managing resources and preparing for battle under time pressure the player is not likely to notice the abbreviation of Tolkien’s cities to empty architecture or the passiveness of the landscape. Gameplay becomes the activity that fills the empty spaces. The architecture and landscape functioning as symbolic space, the tactical gameplay and the external viewpoint form a triad of interaction that works cooperatively in *BFME II*.

World of Warcraft is classified as a MMORPG, in which you manipulate a single avatar through the game’s challenges. The main objective of gameplay is developing your character through combat versus a diverse number of opponents, against a subtext of way finding, exploration and learning skills. Players are immersed in a complex environment, the camera is tied to the player’s avatar following or preceding it according to the player’s

predilection. This personal viewpoint is crucial to the experiential environment. If terrain changes intimately affect the player's movement then the player must be in a position to observe and act on these changes.



Figure 9. Fighting and viewpoint in *World of Warcraft*

The world is vast, the quests numerous and the components manifold. Part of the problem is presenting such complexity in a manageable and easy to understand system. By using the architecture and landscape as an organisational system the game appends itself to classic structures of space and architecture familiar to players from everyday life and media. While Ernest Adams notes that buildings are not the most efficient way to organise activity in games [17], this spatialization of activity through architecture and landscape is familiar and easily understood by players. Karen Franck and Lynda Schneekloth note:

“Our social practices and our built landscape are structured by elaborate system of place types, which enforce myriad distinctions and separations between different kinds of activities, people and places that are often codified in policy and regulation.” [18]

Be it urban buildings, rural structures or arterial components; banks, inns, houses, farms, villages, paths and roads are structures we know how to use intuitively.

Using architecture and landscape as a series of containers for activity relies on not subverting popular conceptions of architectural roles. *World of Warcraft* also builds on these conventions adding game specific program, including the association of inns with instant travel through a personal teleportation system (known as hearthstones in the game). Video games often reuse these game specific functions, creating a new genre of architectural meaning.

It is worth noting that within any area of greater architectural density in which a number of important player related activities take place, such as the Undead capital of the Undercity, there are directions available from non-player characters. Conversely some of the most activity rich combat nodes, such as the quest laden Blackrock Depths increase the wayfinding challenge through spatial complexity and by not providing maps (a challenge met by players with add-on maps, quest walkthroughs and guided dungeon runs).

World of Warcraft is also a game in which non-combative social activity is important. Unlike *BFME II* in which social interaction is limited to oppositional play through warfare in small numbers, *World of Warcraft* as a multiplayer game offers players an environment in which large numbers of people take part. Players can converse and gesture at each other, they can sell and swap items or fight as small and large groups, sharing common goals. Social space is enacted within a common environment, through instance dungeons that section off and replicate themselves for each party that enters them and through activity hubs like cities. Architecture and landscape nodes accumulate player activity and interaction by hosting and supplying the common needs and goals of the population.

Players fight monsters and other players, they collect loot and gain experience. They sell loot, craft loot and find loot. They go on quests that ask them to fight, loot, locate and learn. As they gain experience they move up levels, opening up new possibilities, new skills and enabling the player to tackle more difficult enemies. The environment of *World of Warcraft* operates within this system. Levelling allows players to enter areas that were previously too dangerous or difficult to travel in. Higher level players can fight in more difficult dungeons and find better loot. The reward of new terrain lures the player on. The quests may be the same, the combatants similar, but the disproportionate variety of Azeroth's landscapes confers a intricacy and richness to *World of Warcraft's* gameplay.

Along with personalised combat, *World of Warcraft's* character developing and acquisitional style of gameplay is enhanced by the experiential space, which combines with the individual viewpoint to personalise the game and support the intimate relationship the player has with his or her avatar. The places of *World of Warcraft* are a passive but essential part of gameplay acting as an incentive, a reward and as a setting for social interaction. The environment adds complexity and then acts as a structural system in which that complexity can be understood. Experiential space, gameplay and viewpoint in *World of Warcraft* work together, as does symbolic space, viewpoint and gameplay in *BFME II*.

4. CONCLUSION

This is architecture to make gameplay legible. Both games build on established fantasy traditions, using architectural and ecological diversity to differentiate races and spaces. Both games use architecture to clarify and simplify gameplay in two very different ways. *World of Warcraft* uses architecture and landscape as an organisational system that contains activity and builds on usage patterns from real life. In contrast *BFME II* creates architecture as a symbolic object that stands for complex systems within a flattened and simplified contested space that reads as a map.

In *BFME II* large scale strategic warfare necessitates a high overall viewpoint facilitating management on a macro scale and an environment that reduces complexity. *World of Warcraft* uses a personal viewpoint in a game that features personal combat and personal development, where the gameplay demands a spatially oriented architecture and landscape. Clear links are formed between the gameplay, the viewpoint, the architecture and the spatial qualities of these videogames.

The dichotomy between architecture in videogames as a spatial entity or as an object suggests a primary division of games into those that are concerned with movement through space as a

visceral experience and those that are not. Having examined both architecture and landscape as part of videogame environments within *World of Warcraft* and *BFME II* it is clear that they operate with significantly different approaches to spatiality. On one hand we have a game that represents architecture and landscape as accessible and spatial, that is characterised by an embodiment in and a personal view of space, that focuses on an individual's movement through that space and that simulates a physical (though primarily visual) experience of space. On the other we have a game that produces architecture as an object and the landscape as a map, that uses architecture to represent intangible concepts, that simplifies the landscape and favours an external viewpoint, a game that simulates a conceptual view of space in which codified relationships are more important than physical characteristics, favouring metaphor over corporeal experience. Thus *World of Warcraft* is concerned with representing an experiential space, *BFME II* with symbolic space.

Further categorisation based on an architectural reading of videogames might include contested spaces that push and pull at the gameplay, organisationally directed spaces that orientate activity and objectified spaces that symbolise and reduce spatial endeavour. The manner in which these video games portray architecture is entwined with the way in which they use space. Architecture then forms a useful tool in analysing the spatial qualities of videogames.

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