

Languages Of Navigation Within Computer Games.

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ABSTRACT

Video game designers pay much attention to questions of player navigation, terrain mapping, spatial design and aesthetic immersion. In contrast within computer game studies there is an overemphasis on ludus and narrative as defining and at times oppositional aspects of computer gameplay with minimal critical examination of navigation as the carrier of cultural meaning. This paper considers movement as a defining feature of games and places it within a wider discursive framework focusing on the role of histories of navigation and spatial representation. Drawing on Harvey's models of spatial practice and extending on de Certeau's idea of space as practiced place, the paper proposes that navigation of game space encompasses both a formal representational language and a symbolic, associative one.

KEYWORDS: computer games, game culture; electronic spatiality; interactive architecture; navigation

INTRODUCTION

One aspect of the emerging field of game studies has been the polarization of debates about the significance of narratology and ludology. Following on from the pioneering work of Brenda Laurel [11] in applying Aristotelian dramatic structure to questions of human computer agency, game scholars such as Murray [14] and Ryan [17] have taken the approach that games are fundamentally narrative based. In contrast Juul [10] makes a case for exploring computer games as games. His argument that games exist outside of narrative media ecology is extended in Eskelinen's [3] claim that stories or narratives are irrelevant uninteresting ornaments or gift-wrapping to games. What the ludology and narratology approaches ignore or take as a given is the player's navigation of computer game space. By specifically focusing on the navigation of computer space as integral to player experience I hope to open up a broader understanding of the dynamics and pleasures of gameplay. In this paper, I am interested in asking some key questions about the characteristics of the spatial and navigable and their connection with the aesthetic and ludic. Some formative questions are: How might the player's sense of exploration be analysed within a cultural framework? How might attributes of navigation be considered as spatial acts that have a history in cultures of walking and travel? How

do issues of screen visualisation and aesthetic immersion intersect with the conventions of navigation within computer games?

David Harvey [8] a cultural historian who anticipated the spatial turn in cultural studies provides a loose framework that is useful here for examining the spatial elements of player navigation. Extending from Lefebvre [12] he suggests that spatial practices can be analysed through three different levels: material spatial practices (experiences), representations of space (perceptions) and spaces of representation (imagination). Using these categories as a way of focusing on the experience of navigation provides a model for considering both the dynamics of interaction and the aesthetic dimension. By focusing on navigation of computer space as integral to gameplay I propose that navigation operates as a language with its own structure and formal attributes that we are only just starting to articulate. This paper intends to contribute to that process by placing computer games within a media history of navigation and exploring the interplay between the aesthetic and navigable elements of specific computer games. By necessity, the scope of the paper is limited and forms the foundation for a larger project that explores in more detail the interplay between the semiotics of navigation as spatial practice, the cause and effect aspects of player agency and the aesthetics of interaction.

GEOGRAPHY OF PLACE.

Navigating in the digital domain has a history in design and spatial strategies. Awareness of the link to the spatial dimension of other architectures or landscapes forms part of the pleasures of navigation. Henry Jenkins [9] makes important linkages between older forms of spatial stories such as literary myths and travel narratives, the contemporary design of theme parks and the 'interactive architecture' of computer games. Lev Manovich [13] outlines how cinematographers of the 1920s used the camera as an interface to create a visual database of navigation. Elsewhere I have evoked the proto-cinematic simulation experiments of the late 19th century such as the Cinéorama and the Trans-Siberian railway panorama as the predecessor of simulated movement in computer games [4]. What these discourses highlight is how space itself has associative and symbolic meanings in addition to its formal systems of visual signposts.

In 'Wanderlust, a history of walking', Solnit explores the meaning of walking as a cultural act [18]. She points out that what makes roads, trails and paths so unique as built environments is that they cannot be perceived as a whole all at once by the walker. For Solnit, the walker traveling along a path is engaged in the enfoldment of a record or trace of those who have gone before. She describes how we metaphorise the imaginary as physical objects located in space and like the memory theatres of the Renaissance the physical objects are then ways back to the imaginary. She outlines many examples of the art of wandering as spiritual

contemplation such as the labyrinth walks at Grace cathedral based on the 13th century labyrinth at Chartres Cathedral, the Chimayo pilgrimage in New Mexico and the climbing of Mt. Tamalpais in Japan. The navigation of a landscape as Solnit notes is premised on the idea that memory is not entirely immaterial, but that there is a geography of place. In this way walking or navigating a terrain can be understood as a constellation between bodies, imagination and space - a history of thinking made concrete. In considering the landscape in this way, navigation is a pilgrimage where the imagination is shaped by the spaces it passes through and which may in turn shape the spaces it passes through.

The Chinese scholar's garden offers an important example of the use of spatial design to shape the imagination. In a geographically small area the intention of the 16th century Chinese scholar's garden as suggested by Pajin [15] is 'to depict a favorable environment in three-dimensional set-up, or installation.' It offers visitors a miniature map of the cosmology by simulating a three-dimensional landscape painting within its garden design. Techniques such as borrowed scenery create 'the reality of an actual landscape, outside the confines of the garden, into an illusive 'painting' inside the garden' [15]. This 'painting' works to shift the sense of perspective and scale so that the relativity of the human figure is destabilised as the visitor moves through the garden. For example, the frame of the moon gate suggests a larger space beyond and a miniature bridge over the pond suggests a large distance traveled. The visitor is guided by the design techniques of zigzag bridges, corridors, pavilions and moon gates to move to specific vantage points for observation and contemplation of unique views. Pajin makes the comparison between the visitors being led into these different garden scenes to the viewer being led into a composition that is only ever partially revealed [15]. The compositions are observed and contemplated gradually, in time, through a succession of scenes, designed to unfold one after another. Unlike the Renaissance single point of perspective, which assumes a static viewer, the garden is unraveled and reveals itself only through the process of navigation. As the visitor walks through the landscape - the landscape painting slowly reveals itself. To express it another way, adopting Michel de Certeau [2], the act of walking opens up a place (a limitation of space) to human creativity and articulation, transforming it into 'a space of enunciation.'

In outlining the walking strategies of the spiritual pilgrimage and the design strategies of the Chinese garden, a parallel can be drawn with the construction of imaginary worlds as believable landscapes within exploratory computer games. In games, rather than physical elements being used to suggest the immaterial imaginary or sacred, three-dimensional graphics are used to suggest an imaginary physical landscape. Games then operate as the reverse mirror image of the Chinese garden - the upside

down reflection of the imaginary world made back into a landscape. In Henry Jenkins's exploration of narrative architecture in computer games as a middle ground between the narratologists and the ludologists positions, he suggests that certain adventure games embed narrative within their mise-en-scene [9]. It may seem that in arguing for the importance of navigation I am outlining the same territory as Jenkins's notion of embedded narrative. However I wish to make a distinction, which I think is important. Jenkins's model is based on the idea that certain games function like information spaces with narrative consequence located within their space waiting to be discovered. Related to this, but distinctly different, my argument is that whilst adventure games may have narrative attachments or traces of story associations, they are generally not narrative spaces and operate outside of the narrative causality structure. Rather they are based on constructing an experience of shifting perspective and illusionism gained through the process of navigation. In 'The language of new media' Manovich argues for the centrality of space by proposing that in new media, space itself has become a media type. In other words now that space has a digital form that allows agency and interaction it operates as a cultural form in its own right [13]. In this way we can see how elements of this cultural type provide navigational, ludic and aesthetic pleasures, which are unrelated to narrative. An example of moments of heightened pleasure in games is in the liminal moments as the player is briefly suspended between one realm of experience and another. Examples of this shift in perspective include when the view from the tower is finally revealed or the player steps through a doorway or portal. The aesthetic techniques to depict these moments borrow from Chinese garden design (which also appears in Japanese Cyberpunk films and animation) such as borrowed scenery, the dog-leg pathways, differences in scale and an emphasis on water elements. The multiple points of view draw attention to detail and more significantly emphasis and extend the sense of movement between one scene and the next within a small area of screen real estate. Traversing the game landscape specifically highlights these liminal points. At these moments the gaze is intensified and the experience of the interplay of the body's location and the foreground and background elements combine to produce a sense of embedded or spatial occupation. The pleasure of aesthetic interaction is derived from having agency in this imaginary world of representation and pictorial illusionism rather than being based on any storyline or narrative progression. In this way the repeated exploration of a game environment and its cultural contents creates a mnemonic of the landscape where associations within the game world trigger other cultural and imaginative associations.

THE NAVIGATING BODY OF THE PLAYER

To experience geography of space requires a navigator. Considering a body walking by its own means evokes the figures of William Wordsworth traipsing around the British countryside and the city of Paris, Thoreau accessing the

unfamiliar through a ten mile radius around his home, Aboriginals walking the song lines or Basho's poetic musings through the mountains of Japan. Walking like game navigation is a process that as Solnit describes 'produces nothing but thoughts, experiences, arrivals' [18]. A primary figure used to evoke this idea of navigation has been the flâneur. The flâneur more than any other has been a model for the navigator of new forms of spatiality - from the early 19th century detective or investigator of the Parisian arcades (Walter Benjamin) to the visitor at the early phantasmagorias (Anne Freidberg) through to the contemporary digital dandy (Geert Lovink) [19, 6, 13]. For Bauman, the flâneur is a traveling player interacting with the simulations of the city: 'His play is to make others play, to see others as players, to make the world a play'.... 'In the dramas he imagines as he wanders, he is the sole mover, script-writer, director, discerning spectator and critic' [19]. Freidberg in another approach to the flâneur makes an important link between the activity of flânerie as physical navigation through the sights and sounds of 19th century Paris - an escape into the fantasy world of the emporium and arcades - with the emergence of another type of phantasmagoria [6]. Freidberg argues that the panorama in the Passage des Panorama, the Cosmorama and the Musée Grévin (the wax-figure museum) were apparatusical extensions to spatial flânerie in the arcades. She notes that as the visitor became increasingly more physically immobile, new and increasingly dynamic forms of virtual mobility opened up. The navigator who once negotiated architecture and the people of the city now negotiated representational illusions of space and people. These shifts in notions of mobility lead directly to the virtual flânerie of electronic computer games and bring together the experience and pleasures of the navigational and the ludic. This new form of spatial practice enables the active agency of player immersion whilst remediating (to use Bolter and Grusin's term) previous forms of visual spectacle [1]. In order to explore some parameters of this interface practice I will focus on three games which emphasis exploration as central to the experience of gameplay: *Myst III: Exile* (Ubi-Soft 2001), *Balder's Gate* (Black Isle Studios 1998) and *Final Fantasy X* (Squaresoft 2002). These games present a wide range of interaction techniques and spatial visualisation. However, given the limitation imposed on this paper, I will focus more strictly on navigational and representational aesthetics and leave the more in depth questions of psychophysical presence and play agency for the larger project.

Myst III: Exile is an exploratory adventure game that follows on from its predecessors *Riven* and *Myst* in presenting a cosmology with a distant mysterious external authority. As outlined in a previous paper, the use of spectacular and beautiful landscapes and interiors with their in-built mechanical toys and strange creatures offers a surfeit of trompe l'oeil detail which the player can explore in a leisurely ramble [5]. In locating clues, gathering hints

and artefacts, the player is immersed in 'the aesthetic emotion of wonder' [16]. The structure of the gameplay is determined by the player's extensive navigation of J'Nanin, Edanna, Amateria, Tomahna, Voltaic and Narayan in order to unravel the cultural logic of the cosmology and decode its representational signs and symbols. *Myst III: Exile* carries on from early graphic adventure games in using clickable pre-rendered still life images for navigating the landscape. However, rather than stand alone single images, the landscape in *Myst III: Exile* is visualised as a series of interconnected QuickTime Virtual Reality 360 degree panoramas. Movement within this spatial representation replicates the floating movement of a film camera on tracks. More akin to the experience of floating through water in a houseboat than the rhythm and tempo of a human stroll, the process of navigation has a mesmeric dislocating effect. This effect places the navigator within a local space - awed by the immediacy of the surrounds whilst being dislocated from a larger sense of geography.

In the console game *Final Fantasy X*, the opening title and introduction screen adopts the conventions of continuity composition and editing. The spatial separation of the background from the character emphasises the spatial co-ordinates available for movement. Lev Manovich makes a distinction between the systematic and aggregate spaces in new media, which force a visual separation between the background images and the foreground objects and characters [13]. In *Final Fantasy X* the player's avatar Tidus navigates through these background and foreground regions in order to have agency in the imaginary world. The trajectory of movement oscillates between numerous cut scenes, and the player driven agency of navigational journeys and battle scenes. These components draw attention to the numerous modes of navigation that are distinctly different from the meandering of a human form. The avatars traverse through the landscape by dynamic propulsion, flying in anti-gravity, swimming, morphing, and running suggests forms of locomotion previously depicted within Japanese traditions of anime and Cyberpunk. Transitions and portals from one moving trajectory to the next are often seamless and at times it is unclear whether the player or the cut scene is driving the action. Although *Final Fantasy X* establishes itself through the opening cut scene as narrative based, it becomes clear that a poetic and mythic experience of space rather than a cinematic sense of space is in operation.

Balder's Gate is based on the turn based advanced *Dungeons and Dragons* games and offers a quasi-mediaeval fantasy game world. The landscape is schematic and reminiscent of illustrations of John Bunyan's *The Pilgrim's Progress* where pilgrims navigate through a map to reach the celestial city. As Harvey points out, the sensibility portrayed in de Certeau's spatial stories most closely matches the psycho-physiological approach to spatial representation in Mediaeval art and cartography [8].

This can be extended to the imagery and map view of the world depicted in *Balder's Gate*. Based around exploration, the player navigates in an accelerated linear trajectory through a potentially hostile space from one medieval enclosure to another. Navigating from Balder's Gate to Beregost then becomes (to use Fuller and Jenkin's words) a 'conspicuous consumption of space' [7]. In consuming space in this way there is an amplified sense of the connection between the characters and the background. The still graphic background is scrolled in all directions by the player's navigation in a manner that literally draws the world. Reminiscent of the images in children's colouring books that appear through adding water, this form of representation collapses the distinction between the avatar and its exteriority and suggests a world that is flat and infinite. This operates against any narrative coherence, but reinforces the player's experience of spatial transition or embodiment in the game landscape.

In his 'Practice of everyday life', de Certeau outlines that each story is a travel story- a spatial practice [2]. However, the reverse is not the case – each spatial practice does not constitute a story. Instead spatial practice through the interface creates a set of perceptions, impressions and phenomenological experiences. The game examples that I have used, *Myst III: Exile*, *Final Fantasy X* and *Balder's Gate*, have frequently been described and critiqued from a narrative perspective. However, I would argue that these representations and story fragments offer what de Certeau calls bricolage of previous stories. Rather than following a formal narrative structure or storyline, these computer games extract fragments of myths from the world cultural database. These are then multi-layered and composited with other legends and cultural associations. The homogenous form of the story is discombobulated into fragments of floating narrative elements removed from their historical cultural meaning. These disassociated elements act as a gesture towards narrative but fail to adopt the typical narrative conventions of plot, temporal development and closure. It is the representations of the space and movement through that space rather than narrative that function as the organising principle around which ludic and aesthetic experiences takes place. In addition, whilst the forms of representation owe something to cinematic visualization techniques they fail to take on board cinematography and continuity editing conventions. Instead the spatial visualizations in *Myst III: Exile*, *Final Fantasy X* and *Balder's Gate* can be seen to borrow more directly from pictorial, navigational and simulation space-medium traditions.

A LANGUAGE OF NAVIGATION

Jenkins states 'game designers don't simply tell stories; they design worlds and sculpt spaces' [9]. Whilst Jenkins's notion of spatial sculpture is a useful one, as I have argued his emphasis on story is misplaced. Instead the spatiality of computer games marks a shift in importance from narrative

to geography where players have experiences, which are not centrally narrative based or confined to narrative experiences. In navigating through the visually remarkable and often spectacular landscapes of *Myst III: Exile*, *Final Fantasy*, and *Balder's Gate* it is environmental architecture and play action rather than plot or story that is privileged. The representational image as a component of these experiences operates at a symbolic or associational level evoking Debord's idea of the *dérive*. 'A technique of transient passage through varied ambience...In a *dérive* one or more persons during a certain period drop their usual motives for movement and action, their relations, their work and leisure activities, and let themselves be drawn by the attractions of the terrain and the encounters they find there' [18]. Questing through these spaces then forms a type of ritual geography whose significance is gained by the interplay of Harvey's three forms of spatial practice – virtual experiences of navigation, representation of space and the imagination. As Harvey reminds us these categories of spatial practice are not independent of each other or politically neutral. The player's interaction with the various forms of representation creates a type of spatial mnemonics that makes up an important part of the experience and pleasures of gameplay. For de Certeau, walking is an act of speaking the language of the terrain and through the improvised movements of the walker spatial elements are transformed or abandoned. In it, space becomes a practiced place precisely through the activity of walking. By extension, for the game player, it is only through navigation that gameplay acquires a language and this language then operates at the level of a central organising device. Film and new media scholars have commented on the depthlessness of computer games and have stated that computer games lack the ability to express profound ideas and themes. However, what this paper has argued is that the language of navigation as articulated through player agency and mobility enables the experience of profound ideas and different modes of consciousness.

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