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Landscape and gamescape in *Dwarf Fortress*

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Introduction

This paper argues that the computer game *Dwarf Fortress* (Bay 12, 2006-) thematizes a number of tensions around spatiotemporal presence by making these tensions available for playful interaction. Specifically, the game foregrounds tensions between being in the world and the world as object and between presence as a leftover of the past and as an orientation toward the future. These tensions can be clarified by thinking of a player's engagement with the game as a landscape of sorts, what will be termed here a *gamescape*. The term is employed to hold together in tension the various spatialities that exist in relation to the game. It is suggested that this strategy can make use of phenomenological approaches to landscape to think through the ways in which the game thematizes presence.

Tension as an aesthetic category

'Tension' is a term that is used in several branches of aesthetic theory and practice to discuss a particular stage in aesthetic response. Musical tension, for example, describes a characteristic of a passage of music that holds the listener in suspenseful anticipation that is eventually released through resolution. Even in examples where resolution is interminably deferred still the possibility of resolution defines the character of tension. Alfred Hitchcock's famous assertion that 'There is no terror in the bang, only the anticipation of it' places an emphasis on tension as of primary importance, though it also relies on the resolution of this tension. The anticipation is only aesthetically valuable to the extent that the audience can imagine its resolution. This is not the understanding of tension that is used here. *Dwarf Fortress* does not resolve the tensions that will be discussed here at any point, nor do these tensions imply the possibility of resolution. The tensions established in *Dwarf Fortress* are not aesthetic because they involve an emotional trajectory between anxiety and repose but because they foreground tensions that exist in everyday spatiality and embodiment, particularly as it relates to our everyday presence with technology. It makes these familiar tensions strange by making them in a certain sense playable.

Tension in landscape

Jonathan Wiley's (2007) book *Landscape* begins a summary of landscape theory with a strong assertion: 'Landscape is tension' (1). Wiley goes on to discuss a number of tensions inherent in the concept and experience of landscape. Two of these tensions will be elaborated here and applied to the experience of presence in *Dwarf Fortress*. The first is a tension between landscape as constituting a subject-object relationship between spectator and terrain or representation of terrain on the one hand, and landscape as emerging through practical activity as opposed to theoretical and distanced contemplation on the other. The second is

between landscape as something experienced in the present and landscape as something that enfolds and *presents* both past and future.

Wiley broadly distinguishes between approaches to landscape as an object of contemplation in art history and Marxist cultural geography and approaches to landscape as performance and lived experience in phenomenology. However, to make use of the tensions inherent in the concept of landscape it is also necessary to set these different approaches in relation to each other, not to resolve these tensions but to clarify them. This distinction serves to identify a fundamental tension between treating landscape as an object *out there* and as a *mode of presence*. While we might associate certain theorists of landscape with one approach or the other, this tension is in fact present in all writing on landscape, and can be partly attributed to the term's polysemy. It is a term that can signify either a painting or other representation of a tract of land, or the tract of land itself (Fitter et al. 2013). Rather than excluding one definition or approach, this argument attempts to maintain a productive tension between them. It is precisely the ability of the term to signify different definitions and approaches to spatiality and representation that makes it useful in thinking about the experience of presence in *Dwarf Fortress*.

Landscape as constituting subject-object relationship

The separation of land as a site of practical activity and land*scape* as an art object for contemplation was a natural corollary of the orthodox 18th century aesthetic position that established *disinterestedness* as a central aesthetic principle. In *Critique of Judgment* Immanuel Kant puts forward the best-known argument for disinterestedness as central to the judgment of beauty. He claims that in order to judge whether a thing is beautiful or not one must attend to the representation itself rather than one's feelings about the existence of the object of which it is a representation (2007/1790: 37). The judgment of the thing springs neither from a moral imperative nor from its utilitarian character.

This basic separation of the representation from the object represented in aesthetic judgment remains in accounts of landscape where the artist transforms natural terrain into an object for contemplation. This is seen, for example, in the title of Kenneth Clark's influential work *Landscape into Art* (1949). While Clarke's terminology allows for 'landscape' to mean both the terrain and the representation, he is working off an understanding of art as essentially transformative. Nature is framed and thereby turned into an art object available for aesthetic contemplation and judgment. This transformation allows for the symbolic use of the landscape to frame ideas that are political (for example, Warnke 1995; Barrell 1980) or spiritual (for example, Shaw 1988). The represented landscape is therefore not only an object of aesthetic contemplation but also a bearer of cultural meaning. This transformation of nature into an art object for contemplation also involves an objectifying of the landscape itself, of which the 'Claude Glass' – the black pocket mirror that 18th and 19th century ramblers carried around to frame natural views as picturesque objects – is only the most concrete example.

The Claude Glass and the landscape tradition from the 17th century on served to establish a subject position distanced from the landscape in order to allow for aesthetic contemplation.

For many Marxist cultural geographers of the late 20th century, this distancing is seen as the cultural side of a project of control and exploitation, both of land and of its inhabitants (for example, Mitchell 1994; Cosgrove 1985). Dennis Cosgrove's position is typical. For him landscape is:

> a way of seeing, a composition and structuring of the world so that it may be appropriated by a detached individual spectator to whom an illusion of order and control is offered through the composition of space according to the certainties of geometry' (Cosgrove 1985: 55).

This illusion of control is put to work, establishing a relationship between certain privileged subjects and the land that justifies and naturalises particular exploitative relationships of power. Derek Gregory (1994), for example, calls this the 'world-as-exhibition' and sees it as characteristic of colonial and imperial landscape.

At the same time that landscape representation puts spectator and land in a subject-object relationship that naturalises exploitative socio-political relations, it also obfuscates these relations. Raymond Williams' famous assertion that 'a working country is hardly ever a landscape' (1985: 26) identifies the way landscape art has erased from the collective imaginary the relations of production that exist in the spaces that these paintings are intended to represent. According to this argument landscape painting has had a mystifying function akin to Marx's commodity fetishism. Landscape becomes a process through which the relations of production that characterise society are hidden from sight, in a process of aestheticization of the land that 'actively hides (or fetishizes) the labour that goes into its making' (Mitchell 1998: 103-4, quoted in Wiley 2003: 107)

This mode of thinking is often indebted to Henri Lefebvre, particularly his conceptualisation of space as something that is produced in accordance with prevailing ideologies rather than being a pre-existing venue in which contestations over these ideologies can simply happen (1991/1974). Space is seen in this tradition as fundamental to political exploitation and resistance and landscape representations in art and geography, as well as cartographic representations, are seen to be foundational to this struggle over space.

Landscape as practical activity

In *Being and Time* Martin Heidegger discusses spatiality as determined by skilled practical activity (2008/1926: 95-112). Spatiality is for Heidegger a property of all things, but the spatiality of human existentiality, or *Dasein*, is different from that of things other than Dasein. The spatiality of Dasein is not to be considered in terms of geometric position within a Cartesian field, but rather in terms of the way skilled practical activity can bring entities close through a process of *deseverance*. Heidegger defines deseverance as 'making the farness vanish – that is, making the remoteness of something disappear, bringing it close' (Heidegger 2008/1926: 105). This does not necessarily entail the movement of the thing across a Cartesian field but rather a bringing of the thing within the reach of Dasein's practical activity. If the thing is within this reach it is, in a certain sense, close.

In a much later essay, 'Building Dwelling Thinking', Heidegger, while not using the term *deseverance*, sees thinking as a means of making farness vanish. Thinking about the Heidelberg Bridge from a distant location he claims, '[f]rom this spot right here, we are there at the bridge – we are by no means at some representational content in our consciousness …. [and we are closer than] someone who uses it daily as an indifferent river crossing' (Heidegger 1971: 7).

This kind of spatiality is practical and *equipmental* in that it is determined by the equipment that is brought to bear on the world. It is foundational to, rather than being founded on, Cartesian space, though there is a clear tension between these two forms of spatiality. The thing that is made close through a practical concernfulness of Dasein yet remains a certain measurable distance when thought of in terms of coordinates. Writing in 1926 Heidegger discusses the radio as a radical form of deseverance and a 'conquest of remoteness' (105). Current technologies of communication deepen this sense of a 'deseverance of "the world"' (105) and computer games are both an example of this radical deseverance and an aesthetic reflection of it.

If we apply this approach to spatiality to landscape – whether understood as a tract of land or as a representation – it becomes not an object of contemplation separated from an isolated subject but is rather brought into the province of Dasein's practical reach through this process of deseverance.

Landscape as both object and mode of presence

Given this contradiction of approaches, we might join Wiley in asking, '[i]s the landscape a picture we are looking *at*, from the outside? Or does the word refer to a world we are living *in*, a home or dwelling place?' (41). His answer, and the one pursued here, is that it is both.

One example of how these two spatialities interact is seen in how landscape as representation is determined in part by an artist's and audience's understandings of landscape as terrain, that is, by their practical activity. Similarly, artistic representations of landscapes inform how a rambler might frame the terrains he traverses, for example in the case of the Claude Glass. The landscape is both something inhabited and traversable *and* something out there, available for aesthetic and distanced contemplation.

Tim Ingold (1993) describes landscape as a process of implication involving a rich engagement that takes in a number of registers. Important here is landscape as a performative process, both in the sense that the supposedly distant observer is actively doing things with the landscape and in the sense that the landscape is emerging from the activities of others, human and non-human. These activities impress themselves upon the landscape, incorporating in the landscape a mosaic of spatialities and temporalities belonging to an array of actors past, present and future.

Ingold uses the term 'taskscape' to explain how landscape always involves the diffuse activities of dispersed but interconnected agents. This approach focuses on landscape as performance. This is not just the performance of a privileged subject – the artist on the hill or

the viewer in the gallery – but of the range of teeming human and non-human agents that populate the landscape. A place, for Ingold, 'owes its character to the experiences it affords to those who spend time there' (1993: 155). Spending time, or dwelling, and the character of that dwelling, produces the landscape not only for the dweller but for all that encounter the landscape.

This leads to a fundamental distinction between 'space' and 'landscape': 'whereas with space, meanings are attached to the world, with the landscape they are gathered from it' (Ingold 1993: 155). If we are to accept this distinction, then it has important consequences for meaning and interpretation in all kinds of media, but particularly in games, where spatiality is frequently foregrounded. The Marxist approach to landscape is, following Ingold's argument, one that treats landscape as space. It is something that is framed and to which meaning is attached. While the Marxist tradition is interested in the ways nature is inscribed with meaning through traditions of landscaping, Ingold's focus is on how dwelling in the world involves an incorporation that intertwines interacting components.

Ingold sees tasks as 'constitutive acts of dwelling' (1993: 158). The indebtedness to Heidegger is clear here. Skilled practical activities, or tasks, constitute dwelling, gathering things in the environment within the reach of Dasein. For Ingold, this gathering together is a 'taskscape' that is the temporal and dynamic form of the landscape. In other words, as the constitutive acts of dwelling, tasks are also constitutive of landscape. These are not only the tasks of a particular subject engaging with landscape, but of all entities within that landscape as they interrelate in their projects and activities.

If the landscape is constituted by the activities of all its agents, it is necessary to think past the activities of one privileged subject. Ingold argues that, 'the landscape is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them' (1993: 156). However, this means that for any given 'agent' whose activities are partly constitutive of the landscape, the activities of others also appear as constitutive of the landscape. In what mode do these others' activities present themselves?

In 'The Temporality of the Landscape' Ingold answers this question by broadening out the discussion of landscape to account for its temporal character. This temporal character presents itself partly in relation to the activities of those who have previously dwelt there: 'the landscape is constituted as an enduring record of – and testimony to – the lives and works of past generations who have dwelt within it, and in so doing, have left there something of themselves' (Ingold 1993: 152). In an evocative phrase, Ingold sees landscape as 'pregnant with the past' (153), suggesting more than the inscription or ghostly persistence of the past in the present, but rather a fertile and ever-imminently-emerging past presented.

But the implication of time in landscape is not limited to the persistence of the past. Ingold cites Alfred Gell (1992) to differentiate between two temporal models. The first, the A-series, posits time as 'immanent in the passage of events'. The second, the B-series, posits events as 'strung out in time like beads on a thread' (Ingold 1993: 157). Thinking in terms of the A-series, Ingold argues that each engagement with landscape enfolds within it both retensions

from the past and protensions of the future. The various tasks that bear these retensions and protensions form a set that is the *taskscape*.

Games and landscape

Michael Nitsche identifies a number of different 'conceptual planes' through which game spatiality might be discussed and analysed. These are the rule-based space of the computer, the mediated space of the screen, the fictional space of the player's imagination, the play space of the player's body and the computer hardware, and the social space of the relations between players and non-players encountering the game (Nitsche 2008: 15-16). We might translate some of these planes into terminology associated with landscape using *Dwarf Fortress* as a case study. I start a game of *Dwarf Fortress* with an outpost called Etkaskadol on a continent called Nir Tholest – the names are randomly generated. The mediated space displays an arrangement of coloured characters – commas, full stops, symbols. This is structurally similar to a landscape painting or poem in that it is a representation of a landscape. But where is the original of which this is a representation? On the one hand it is a representation of a simulated landscape that exists in Nitsche's 'rule-based space' of the computer programme. But it is also a representation of the fictional landscape that the player imagines into being in the 'fictional space'. Neither the *simulated landscape* nor the *fictional landscape* is available directly, but only through the *represented landscape* on the screen.

Previous work on landscape in games has tended to think in terms of the represented landscape on the screen and the simulated landscape of the machine. Shoshana Magnet (2006), for example, analyses the landscape of the computer game *Tropico* as a representation that is controlled by the player from a distance. The argument proceeds by suggesting a 'gamescape' that is over there on the screen distinct from an implied player space. There are of course flows between these two distinct spaces. Player input is understood in terms of a will to control in keeping with the Marxist approach to landscape as a process of distancing. The flow back is seen in terms of possible effects that the game's problematic representations of Latin America has on players.

The main problem with Magnet's reading is the suggestion that due to the game's birds-eye viewpoint and the player's autocratic position of power, the player 'is able to stand outside the *Tropico* gamescape and observe it "as an object, a thing to behold, and not only scenically but instrumentally and ideologically" (Corner 1999)' (Magnet 2006: 147). For Magnet, the representational logic of *Tropico* produces a particular kind of ideologically charged space in the same way as does traditional landscape painting for James Corner.

This is problematic because, while Magnet claims to be using the term 'to underline the fact that the virtual landscapes found in video games are not static objects "to-be-looked-at", but are dynamic and require the active involvement of the player in their construction' (Magnet: 143), it is uncertain in what way the term gamescape underlines this point. Magnet's analysis in fact fails to engage with the 'active involvement of the player' in any way. The player may be active in the construction of the gamescape, but it is something that exists irreconcilably

over there on the screen and in the machine. The player is active in the construction of the gamescape but from a distance, and it is central to Magnet's argument that the player is capable of remaining distant from the gamescape as constructed.

Ian Shaw and Barney Warf (2009) have pointed out the importance of attending to the tensions between different spatial experiences in games. Using non-representational theory (NRT), they suggest that there are two ways of approaching game spaces: in terms of representational issues, and in terms of affect. They argue from the NRT position that 'spaces are always in excess of our orderings and cognitions' (4). This is an important assertion. The affective properties of gameplay force the critic to consider games as more than the implementation of systems. Thinking about affect prevents us from a simple association, for example, of the bird's eye viewpoint with a colonial gaze, since this viewpoint is only one part of a large assemblage of game and player characteristics that must be analysed in their interaction.

However, Shaw and Warf mistake the nature of presence in computer games when they write:

> With one or two dimensions the on-screen character or avatar is detached from the player, producing a kind of "Cartesian transcendence" or distant separation between player and avatar. With three dimensions, however, a video game is substantially better positioned to immerse the player in a virtual and affective world. (Shaw and Warf 2009: 5)

Shaw and Warf are talking about the extent to which a player feels present in some fictional landscape: Azeroth, Liberty City, the Mushroom Kingdom. This conceptualization of 'presence' is, however, a red herring. The problem with this approach is that the player is *already* immersed in a 'virtual and affective world' that is prior to any immersion in a fictional world. The real question around presence and computer games is not the extent to which a player feels present in some fictional realm but rather how engaging with a computer game shapes the quality and texture of the player's being in the world. This is not a question of more or less but one of quality or texture of experience. The strangeness of Shaw and Warf's position is made clear when they claim that some games are 'more experiential' (8) than others. The idea that a game is 'more experiential' because it manages to convince the player – and this is never really convincing – that s/he is inhabiting the fictional world that is being represented does not make sense because experientiality is not a measurable quantity. Presence and experience are qualitative concepts that must be described rather than measured.

Gamescape definition

Gamescape is a term used here to think about the spatialities of game play as they jostle together in the moment of play. The gamescape folds within it a number of spatialities and temporalities in such a way that these cannot be reliably separated out. Such separation can be useful for conceptual clarity, but the gamescape is encountered in play not as an ordering of neatly defined spatialities and temporalities but as an inextricable bundle.

In my current game of *Dwarf Fortress* the gamescape encompasses in its broadest sense my body, the furniture in my room, the computer screen and set up, my body configured appropriately to engage with the technology; in other words, all those physical elements of the gaming situation that facilitate engagement and interact with each other. Within that, the gamescape also encompasses the simulation and its on-screen and in-speaker representation. It also includes my imagined response to both this representation and the aspect of the simulation that is not represented and that I might guess at. This imagined response constructs in my mind an outpost called Etkaskadol on a continent called Nir Tholest that is defined primarily for me in terms of determined and specific spatiotemporal relations. It is on a mountain of some particular dimensions on which there is snow in the winter and rain in the spring. There is a brook a certain specified distance from the main entrance to the outpost, and so on. It has a history, and a projected future, in the course of which the current game session is located.

The player's encounter with the gamescape always happens *from within*. While the events of *Dwarf Fortress* seem to be happening over there on the screen my concernful encounter with this representation takes in those events and the reach of those events takes in my body. Both I and the dwarves of Etkaskadol are folded together within the same gamescape, though our ways of being in this gamescape are not of the same order.

Dwarf Fortress

Slaves to Armok: God of Blood. Chapter II: Dwarf Fortress, or *Dwarf Fortress* as it is more commonly known, is a computer game set in a Tolkienesque world. It has three modes, two of which will be discussed here: Fortress Mode and Adventure Mode. In Fortress Mode the player is tasked with building and maintaining, or rather managing the building and maintenance of, a fortress for an ever-expanding community of dwarves. The player chooses certain parameters such as temperature, and the game generates a unique world. The player then chooses a location for 7 dwarves to begin building a fortress. Throughout this mode the player manages the building of the fortress by making lists of tasks to be completed, for example, build 5 chairs, install a door here, chop down these trees. Dwarves will complete those tasks based on their abilities and inclinations. Throughout the game migrants arrive, dwarves marry, multiply and die, and the community, depending on the management of the player, flourishes, fades and is finally, sometimes very quickly, abandoned. In Adventure Mode the player can return to a previously generated world as a single character and search out an abandoned Fortress, exploring the buildings designed and artefacts crafted in the Fortress Mode.

The most immediately striking thing about the game is the graphical style. The elements – grass, stone, trees and so on – are differentiated using 16 colours and the 256 characters in the Code Page 437, or 'Extended ASCII', character table (see figure 1). Underlying this simplistic representational scheme that constitutes the represented landscape of the game is a very complex set of overlapping systems defining everything from how waters flow to whether a particular dwarf will adopt a particular stray dog. This constitutes the game's simulation landscape. Player-made tile sets are available for download to replace the characters, for

example figure 2 shows a represented landscape using a tile-set created by a player named Phoebus. There are, then, two systems – an underlying simulation and a representational system. The former is essentially inaccessible without the latter, which may take the form of the original ASCII characters or a player-made tile-set.

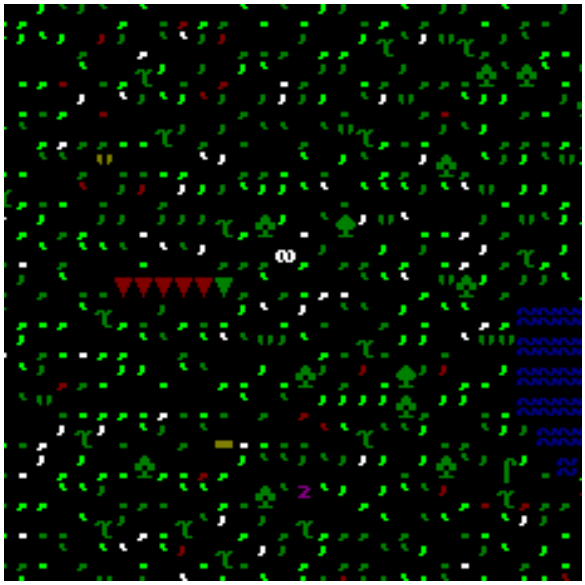

Figure 1: Dwarf Fortress's representation of Etkaskadol using Code Page 437 characters.

Figure 2: A view of Dwarf Fortress landscape using a Phoebus graphic set. Available at fileplanet.com. **http://blog.fileplanet.com/2011/10/03/monday-mod-dwarf-fortress-phoebus-graphic-set/dwarf-fortress-phoebus-graphic-set-screen-1/**

Two tensions in *Dwarf Fortress*

This paper will explore two tensions that can be identified in the gamescape of *Dwarf Fortress*. The first is the tension between a landscape that is an object of contemplation and a landscape that is borne of practical activity. The second is the tension created by the

implication of the past and the future in the gamescape as presented – that is, *made present* spatially and temporally – to the player.

Contemplation and task

Dwarf Fortress is a difficult game. Small mistakes can lead to catastrophic results and a deep knowledge of the interconnecting systems in the game is required to plan against the many different ways in which a fortress can be destroyed. So difficult is the game that its community has valorised an approach to play that embraces failure, demonstrated in what has become the game's tagline: 'Losing is fun'.

But even before the new player gets to grips with the complexities of the game's social or economic systems the interface and graphical representation provide a major stumbling block. The initial engagement with the represented landscape is as an entirely alien object. Not only is it not clear what the player should do, it is not entirely clear what the player is looking at (see figure 3). The landscape as represented on screen is a distant object of contemplation. This is not to say that this initial engagement with the *Dwarf Fortress* gamescape is not characterised by practical activity, but this activity gathers into the gamescape resources from elsewhere, mainly game guides, YouTube videos and player forums.

Figure 3: The player's first view of Etkaskadol is as an alien object.

In this sense the gamescape reaches out into spaces beyond the represented landscape and the interface between player and software. The wikis that are kept open in the window, or guides that are printed out and annotated as the game is played, are all folded into the gamescape, not only through the sharing of screen space but also in priming the player for particular kinds of skilled activity.

While learning the game the player is essentially reading the represented landscape. By pressing 'k' it is possible to navigate the cursor over individual characters to see what they

represent. These are translated in one of the interface windows – move the cursor above a green club symbol and it translates it as an alder tree, for example. The represented landscape is a text at this stage, in need of a particular kind of activity on the part of the player – translation.

Even though the player's tasks at this initial stage are located away from the simulation and represented landscape they are still taking place across the gamescape, and are therefore productive of the gamescape at large. This skilled activity across the gamescape is bringing the represented landscape of Etkaskadol into being as an object for contemplation and making the simulation available for configuration. It is determining Etkaskadol as representational landscape. Therefore, while the represented landscape is in a sense distanced from the player, the gamescape *in toto*, including wikis, websites and printed out guides, is still a site of the player's practical activity and is shaped by this activity. Within the gamescape *Dwarf Fortress* is encountered both as object, in terms of its alien representation over there, and as a site of practical activity.

As the player performs actions in relation to the simulated/represented landscape the representation becomes available for a smoother kind of reading. The time taken to translate the icons into the object they represent reduces and the represented terrain becomes more readily available. Now there is no need to move the cursor over particular symbols. The green club is now seen as an alder tree. The represented landscape is still not pictorial in the sense it would be with a graphical tile set, but attention can be directed more toward the represented landscape and the underlying simulated landscape it represents. The taskscape shifts from one made up of tasks to do with translating the represented landscape into a fictional landscape to one made up of tasks to do with configuring the simulation in line with the demands of this fictional landscape.

Even though the gamescape is formed through practical activity it is also available for contemplation. As Wylie argues, landscape is 'both performative sensorium *and* site and source of cultural meaning and symbolism' (2007: 161, italics in original). What cultural meanings exist in the *Dwarf Fortress* gamescape? In contrast to the traditional landscape which, for Williams, is hardly ever a 'working landscape', the gamescape of *Dwarf Fortress* has work at its forefront. It emerges through designer work, dwarf work and player work. The gamescape not only does not hide the relations of production that establish it, it actually foregrounds them.

First, the graphics are a continual reminder of the computational ground of the world. Unlike in many commercial games, where the animations hide the computational skeleton of the simulation, the representation of landscape in *Dwarf Fortress* never lets the player forget that this is a programme. The character fonts belong to the world of programming and the kind of systems-thinking that the game demands of the player places the player in a role not unlike that of a computer programmer.

Second, the dwarves' labour is forefront in the fictional landscape. Their relations to each other are defined in terms of their labour, they die of exhaustion and thirst if not properly managed, and their survival is based on what the game calls 'stout labour'. However, this is

not the alienated labour of capitalism. The dwarves labour to produce shelter, food and drink and, while there is a trading party that visits from nearby settlements, these products are not commodities. The gamescape constitutes a pre-capitalist set of socio-spatial relations.

Third, the labour required to shape the landscape of Etkaskadol is located in the body of the player. The planning decisions, the calculations, the selecting of tasks, the movement of fingers across the keyboard, the time given over to the game – both at the keyboard and thinking through strategies when away from the computer – all take place in the body of the player, *bringing home* the labour involved in the construction of Etkaskadol's landscape. This ergodic effort (Aarseth, 1997) demonstrates why it is necessary to refrain from conceptualising different spatialities of the gamescape in overly concrete terms. The landscape of Etkaskadol is not just *over there* on the screen but is also in the body as the body spreads out to meet the tasks that the game establishes.

In 'Fortress Mode' the player can only act on the simulated landscape by generating lists of tasks for the dwarves to accomplish. The tasks that the player is involved in, that contribute to the taskscape, are making lists. The dwarves contribute in their own way to the taskscape, by executing the tasks on these player-created lists. The tasks of the dwarves are important in the taskscape that *Dwarf Fortress* presents as, for Ingold, 'the taskscape must be populated with beings who are themselves agents, and who reciprocally "act back" in the process of their own dwelling' (Ingold 1993: 163).

In 'Adventure Mode' the player takes up a specific position in the represented landscape through a located character or avatar. Any action that the player wishes to perform is spatially constrained by this character's current location on screen and in the simulation.

In Fortress Mode the task of managing the dwarves creates a gamescape composed of tasks. We might think of these tasks in terms of Maurice Merleau-Ponty's distinction between being 'at my task' and 'confronting' a task (1962: 416). Being 'at my task' is, Merleau-Ponty argues, a better way of describing worldly action than is 'confronting' a task because it gets at the way in which a task and an actor are interlaced in its execution. But we might also think of tasks that we confront as more external to us, with which we are not as intimately interlaced. These two forms of agency exist side by side and in tension in *Dwarf Fortress*. We might say that the player is 'at' the list-making tasks of Fortress Mode. But there are also sets of tasks that the player is not 'at'. These are the dwarves' tasks as they perform them. This is partly due to the way in which management is achieved through sets of lists. These are still the player's tasks, but they seem closer to tasks that the player confronts. They are not, however, tasks that the player is entirely distanced from, as they were set in motion by the player and can be managed by the player.

Past and future presented

For Ingold, the landscape is not viewed *at* a particular moment but rather *from* a particular moment. That is, the past and the future are made present or folded into the landscape in one's encounter with it. The past, present and future are presented in the *Dwarf Fortress* gamescape in a number of ways.

History has a particularly vivid presence in the *Dwarf Fortress* gamescape. Many games, particularly in the fantasy genre, inscribe history on the represented landscape. *The Elder Scrolls IV: Oblivion* (Bethesda, 2006), for example, has a represented landscape dotted with monuments and ruins from bygone eras to give the world of Tamriel a sense of history. *Dwarf Fortress* goes further than this, embedding the history of the generated world at the level of the simulation and also having the player bear witness to the passing of time in the world generation phase of the game.

The world generation is a key part of *Dwarf Fortress*. It is one of the ways in which each game is made unique. It functions in the following way: The player decides on parameters such as temperature, elevation and how far into the world's history the game will start. The player watches as mountains are formed, rivers are created and erosion takes place. The computer will calculate the events that happen in the pre-history of the world and these events are incremented and displayed as a number as the world forms and its history progresses (see figure 4). For example, the rise and fall of civilizations or the death of a great warrior, will leave a trace on the world that is counted in the world generation phase and discoverable by the player once the game begins.

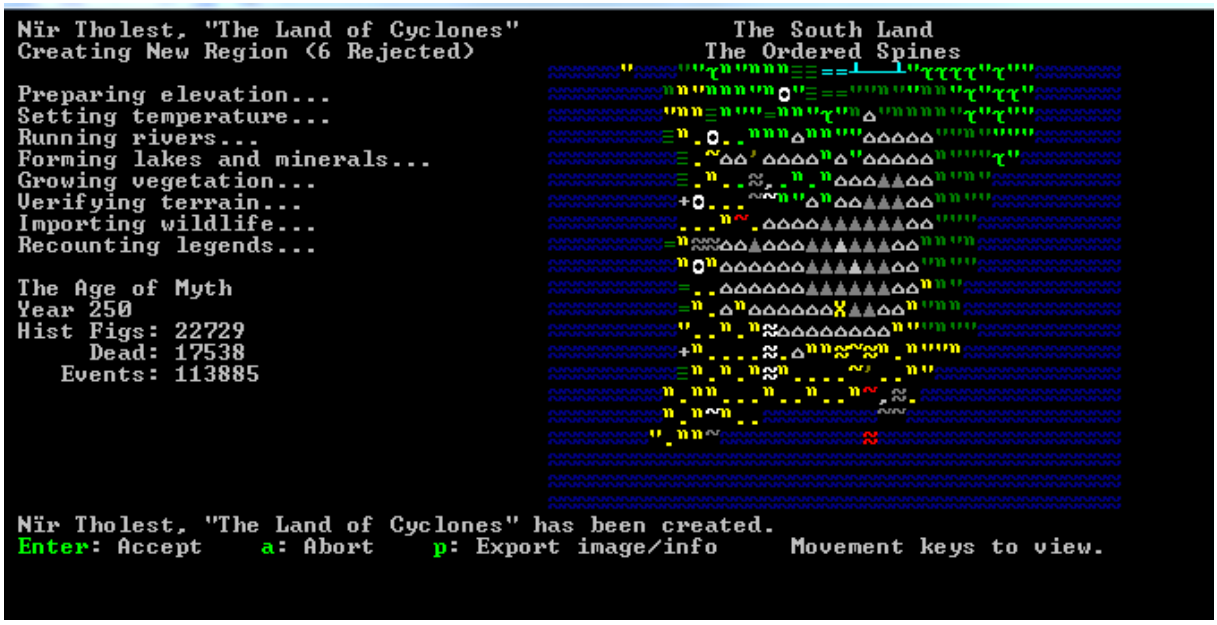

Figure 4: World generation showing how many 'events' have happened in the world in the 250 years before the player's game starts.

This witnessing of the birth and development of the world is an important aspect of the game. Tarn Adams has said that he intentionally has the view skip around the world as it is formed, so that the player can see world-forming events such as mountain erosion (Harris, 2008: 7). This witnessing means that retensions of the world's development are not experienced as designed objects with only a fictional history as in *The Elder Scrolls* but as both elements of the simulation and as processes that the player lived through. They are in this way incorporated more fully into the gamescape. By witnessing the development of the world in this way the player is brought into its history.

Protensions exist in all games and are fundamental to the task-oriented character of games. The represented landscape in *Dwarf Fortress* presents itself primarily as a thing to be changed and so always has an eye to the future. This is particularly vivid due to the unforgiving nature of the game. Decisions about what trees to fell and what hills to dig out may have fatal consequences. For example, digging in the wrong place will often lead to a fortress-destroying flood. Every decision is made in terms of a hypothesised future.

The future and the past are also presented in the play between modes. Adventure mode replaces the player in relation to a represented landscape that the player has previously been 'with' in a radically different way. The diffuse agency of Fortress mode is replaced by a located agency in Adventure mode. While playing in Fortress mode the gamescape folds in the protensions of Adventure mode. That is, the player's encounter with the gamescape is coloured by the knowledge that what is being crafted is a landscape capable of being part of an Adventure gamescape. More straightforwardly, part of the appeal of playing in Adventure mode is encountering the traces of one's own, and one's own now long dead dwarves', activities in the Fortress gamescape. The gamescape of Fortress mode is alive with the protensions of Adventure mode and the gamescape of Adventure mode is alive with the retensions of Fortress mode.

Conclusion

The tensions that are made available for playful interaction in the gamescape of *Dwarf Fortress* are central to its aesthetic. This is because they are not simply ways of creating a fun game, but speak to questions of presence, particularly presence with technology. This is not to say that *Dwarf Fortress* makes some coherent argument about the nature of presence or being, or that this is the intention of the designers. *Dwarf Fortress* is a game that situates the player in a particular relationship of presence to a particular kind of gamescape in such a way that some of the philosophical conundrums of presence become thematized, heightened and available, not for philosophical inspection necessarily, but for embodied play.

This paper has suggested a number of ways in which different spatialities in *Dwarf Fortress* overlap in ways that establish and maintain tensions between them. These tensions are felt in play and so take on an aesthetic character, clarifying spatiotemporal aspects of presence in general and with computer technology in particular. No attempt has been made to generalize this beyond the specific case of *Dwarf Fortress*, though it is suggested that many computer games, to the extent that they establish and foreground complex spatiotemporal relations between bodies and technologies in a way that subjects these relations to play, could be analysed in terms of gamescape.

Games

SLAVES TO ARMOK: GOD OF BLOOD. CHAPTER II: DWARF FORTRESS. Bay 12 Games, PC, 2006-.

THE ELDER SCROLLS IV: OBLIVION. Bethesda Game Studios, PC/Xbox360/PS3, 2006.

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