First published as Citta Modellate & Cittadini Modelli; Supervisori vs. residenti in *SimCity3000* e *Anarchy Online* in *SimCity Mappando le Citta Virtuali* ed. Matteo Bittanti as part of the Ludologica series by Edizioni Unicopli pp 193-210 English version copyright Carr, Diane. (2004) 'Modelled Cities, Model Citizens; from overseer to occupant'

Modelled cities, model citizens: from overseer to occupant in Sim City 3000 and Anarchy Online

Diane Carr Institute of Education University of London

Introduction

What follows is a short consideration of the ways that two computer games offer different cities to their players. One of the games is *SimCity 3000*, a simulation game in which a single player manages the development of 'their' city. The other is *Anarchy Online*, a multiplayer online RPG in which each player builds and then manipulates an avatar in order to enter shared cities. These are games from different genres. Each offers its own version of control and participation. The player's relationship with each game and their respective cities is distinctive. Yet these cities obviously do have something in common. Each exists within a game; each city is accessed in play.

Michel de Certeau begins his essay 'Walking in the City' (1988:91-110) with a description of the view of New York City from a skyscraper. From this perspective, thanks to a sanitising distance, the city is reduced to a legible plan, a 'concept city'. In ascending, the subject shakes off the multiplicity of the streets, becoming a reader rather than a participant when his "elevation transfigures him into a voyeur"(1988:92). Thus positioned the viewer can savour the "pleasure of 'seeing the whole', of looking down on, of totalising the most immoderate of human texts"(*ibid*). De Certeau's account of the concept-city is suggestive of the isometric identification invited by *SimCity* – isometric in terms of vantage point, and in the sense that the game invites identification with an orchestrating, exterior role, alongside any focalised role within the game worldⁱ.

The game I have used as a comparison text is also susceptible to de Certeau's theory. *Anarchy Online* is a Massively Multiplayer Online Role-Playing Game (MMORPG). Its vast and varied landscapes are dotted with distinctive cities, towns and outposts that players enter in the guise of characterised avatars. If *SimCity* resembles the concept-city, *Anarchy Online* is suggestive of the 'real city' that de Certeau describes as the flipside of the concept-city. The 'real city' is the site of ephemeral and fertile practices that resist and evade the panoptic order. The analogy is compelling. The problem is that de Certeau is not describing two different places. He is describing co-existing aspects of a single place, viewed from two alternate perspectives: that of the planner/overseer, or the occupant/participant. Likewise, *SimCity*, for all

its isometric clarity, does generate practices that are opaque, elusive and ephemeral. Similarly, *Anarchy Online*, for all its seething and synchronous trajectories, does embed separate and individual zones of plan and order. This resemblance raises perplexing questions about what it means to study a text that 'lives' through a practice as ephemeral as play.

SimCity 3000

SimCity is often referred to as a toy, rather than a game, because it has no overtly stated objective or winning outcome.

"(Wright) conceived of *SimCity* not as a game but rather as a "toy" because at least in its standard use there is no preset goal or contest. The player decides what kind of city to build—whether to emphasise its size, wealth, beauty or harmony with the environment" (Starr 1994:4)

Goals might be vague, but there are markers of success and efficiency, and gain is preferable to loss. During play the city will arc towards harmony and growth, or slide towards riot, pollution and disarray. *SimCity 3000* is a simulation: It is a dynamic system that models processes, rules and behaviours (Frasca 2001a). As Paul Starr has pointed out "simplification is inherent in any simulation. [They] inevitably rely on imperfect models and simplifying assumptions" (Starr 1994:2). A simulation allows the user to experiment with processes and variables, but the outcome demonstrated depends on the assumptions built into the model: the bias that is built in, the information that is left out.

Selective exclusion has its benefits. In a paper titled 'Does Simulation Need a Reality Check?' Swartout and Lindheim (2002) write that military training simulations aim for exact replication (of a cockpit, for example), and that this thorough inclusiveness is actually counterproductive. They argue that the entertainment industry's more selective style of simulation evokes a suspension of disbelief that can enrich the pedagogical value of the experience. Gaps and omissions stimulate engagement. Wright, the designer of *SimCity*, understands the value of leaving things out. Frasca (2001b:2) has noted that Wright's design of *The Sims* was influenced by Scott McCloud's *Understanding Comics*, "particularly the section when McCloud explains how the reader fills in the gaps of what happens between each panel of the illustrated story".

In *SimCity*, useful information is sorted, specialised. Data about resources, for example, is available to the player as a set of distinct and reductive maps: maps of aura, of density, crime or property value. Simplification is combined with amplification. The game leaves things out, but it also dramatises the things that it includes: "The models deliberately exaggerate effects to provide feedback to the player; in real life, the effects of many decisions would be imperceptible." (Starr:1994).

In their paper 'Neuropsychology and Game Design' Jussi Holopainen and Stephan Myers (2002) have described the relationship between dramatic closure and predictive closure. Dramatic closure is the satiation of tension courtesy of resolution. Predictive closure is when your brain makes sense of a partial object or phenomena, by 'joining the dots'. They write that these "two forms of closure create a feedback loop between them. The expectation of resolution drives the player to perform the actions needed to reach closure" (2000:2). The feedback loop they describe seems particularly pertinent to simulation gaming, where simplification, experimentation, omission and outcome foster player pleasure. The player is cast as the city's mayor, but his or her power and perspective is not limited to that of a character within a scenario. The player has the power to slow down or to accelerate the system's velocity. This suggests that they watch the world primarily from outside.

Distance is also implicated in Ted Friedman's account of identification in SimCity:

"We could see playing *SimCity*, then, as a constant shifting of identifications, depending on whether you're buying land, organizing the police force, paving roads, or whatever. This, I think, is part of what's going on. But this model suggests a level of disjunction – jumping back and forth from one role to the next – belied by the smooth, almost trance-like state of gameplay. Overarching these functional shifts, I think, is a more general state of identification: with the city as a whole, as a single system." (1999)

During the game, players receive a mix of information delivered by different agents. Petitioners lobby the mayor on issues such as parking fines, smoking in public spaces, and other civil ordinances. They are highly opinionated, but they can be ignored. These Petitioners are described by the game (as fussy, potty or earnest, for instance) and they are themselves descriptive (to the point of rudeness, when disgruntled), but the information that they relay is of relatively low strategic importance. By comparison, the game's professional Advisers are less characterised, and more impassive. The player may choose to ignore these advisers, but they offer useful information: "We need to...review our zoning priorities, particularly the high density zones" warns the game's Public Safety Advisor, Maria Montoya. Their manner is less descriptive, and more instructive. The information they offer is plainly of strategic value. Both the professional Advisors and the Petitioners uphold the fiction that the player is 'the mayor'.

Compared to the passionate Petitioners and the professional Advisors, the in-game agent that issues the most non-negotiable information ("City needs Power") is unnamed and disembodied. This unnamed agent is aligned with the force that sets off alarms, that halts the game until the player has put out fires or dispersed rioters. Rather than being descriptive or instructive, this voice is imperative: it makes demands.

Additionally, this most authoritative voice addresses the player with the 'you' of direct, 2nd person address, rather than upholding the pretence of player's role as mayorⁱⁱ.

As this brief review of a few of the agents in *SimCity* should indicate, the status of information (as crucial, strategic, elective, pejorative or decorative) within game-play is linked to the degree of characterisation of the agent who delivers it: the most authoritative agent is neutral, nameless and disembodied. The most emotive and characterised agents deliver information that is relatively trivial. Distance (in this case emotional distance, or apparent neutrality) is associated with clarity and authority. Players can zoom in close to fragments of their city, but the point is that they manage it in its entirety: they move over the city, planning and co-ordinating the whole, rather than entering it to linger at or act within a particular location.

Anarchy Online

The cities of *Anarchy Online*, by contrast, are perceived from street level, from the perspective of the tourist or the inhabitant. Anarchy Online is an MMORPG: players enter a shared world, and shared cities, each with its own geopolitical, historical and aesthetic qualities. Seen through either 3rd or 1st person perspective (behind your avatar, or 'through' your avatar's eyes) the vast game world cannot be paused, because it is shared. The player of *Sim City* floats over their city, whereas in *Anarchy Online* players have a presence localised within the bounds of their customized, characterised avatar. Each avatar is a simulated character, a set of subsystems, a biography and a representation. The avatar is a space unto itself, organised and managed by the player.

The first section of the game for a new player is the avatar construction phase. Players select from a set of templates relating to gender, species, physicality, face, profession and alignment (corporate, neutral, or clan) in order to build the avatar that they will use in the game world. As they play, their avatar will 'level up' in experience points and skills. Online RPGs are descended from live action or 'tabletop' RPGs, such as *Dungeons and Dragons* (TSR, 1974), where characters are similarly developed, and collaborative scenarios are played out 'in role'.

It is clear from the game's online fan forums that some players believe that the whole point of *Anarchy Online* is that it offers a fictional locale as a backdrop to playing in role. These players (who refer to themselves as Role-Players) form clans, chat 'in character' and participate in the group performance of scenarios conducted by a volunteer Game Master. Meanwhile, other players of *Anarchy Online* are much more interested in utilising the game in a straight action-adventure style. They go on missions, battle player to player or explore the game world while collecting booty and weapons.

The relationship between the different player communities in *Anarchy Online* is not always harmonious: as posts to player websites such as this indicate: "Some people just don't want to RP (Role Play)...if they're not interested, fine by me, I won't force them or be an ass to them, as long as they ain't an ass to me, (by) continuously disrupting a RP event though they were told not to...that's something I hate..." (Demenzia's contribution to the player forums)ⁱⁱⁱ. A contributor named Halouk submitted a post that reflects similar tensions^{iv}: "I ordered my squadron to march away. And they did. Yet were followed by 2 or 3 people who just kept dancing away and taking the piss...what has happened to this game? ...fair enough if your don't want to RP – its your choice (but) to go around ruining other people's RP is just sick." As the Role-Play related concerns expressed here by Demenzia and Halouk make clear, there is more than one way to practice *Anarchy Online*.

It is not unusual for Role-Players to fill out their avatar's biography with histories, traits and quirks. This means that for experienced RPers, the set of templates offered by the game itself during character construction (species, gender, physicality, profession, etc.) are only the starting point for creative extrapolations, as this advice from Vixentrox demonstrates: "If you have multiple characters...make sure they RP as different people. My main character has a stepsister. They trade insults and don't like each other very much. The one is more fun loving...the other is more serious and stern".^v

For Role-Players there is more to *Anarchy Online* than game mechanics, scores or levelling up. Yet even for the player who prefers to ignore the game's RP associations, and who chooses instead to prioritise the empiricist or ludic potentials of the game, there is still a degree of implicit 'role playing' involved – their presence will still be dependent on a named character with displayed traits (even if such traits are limited to weapons specialisation, physicality, wardrobe preferences, or profession).

Anarchy Online is set on the planet of Rubi-Ka where (according to a back-story that is delivered by the game's developers in regular instalments) a powerful corporation struggles with anarchist rebel collectives over mineral rights^{vi}. Players position themselves differently in relation to the powers on Rubi-Ka (as corporate assassins, lone-wolf rebels or neutral doctors, for instance) but they don't alter the simulation, as much as they alter their location or alignment *within* the simulation. Some explore the idea of playing a militaristic, corporate flunky with obvious glee. Others form eco terrorist collectives. Such divisions are functional: they inspire conflict, as well as clannish teaming, which in turn allows for interesting game-play. Multiplicity is part of the game.

The cities on Rubi-Ka are aligned with battling factions, just as the players are. The corporate owned cities are massive and glittering, while neutral cities are plain, monolithic. Players use them as rallying points, or enter bunker style shops to trade-in mission rewards. Loudly dressed and heavily armoured

aliens assemble near portals, waiting for team-mates. It is possible for the player to get an overview of a city's thoroughfares, by zooming up and above (and apart from) the avatar - but that is not really the point, because the player's ability to act within the city is epitomised and embodied by his or her avatar.

Looking at SimCity

When playing *SimCity 3000* the player resides a certain distance from the city they oversee. From this vantage point, the focalised perspectives within the game (petitioners, assorted minions) are accessed, recognised or ignored as the player sees fit. As noted above, clarity through selective exclusion is inherent to simulations. Furthermore the player is not confined to an embodied position within the game's space. For these reasons the game recalls Michel de Certaeu's essay 'Walking in the City' (1988 pp 91-110). In this essay de Certeau describes how from high in a skyscraper a viewer can enjoy the city 'as concept'. At a distance, the city attains an ordered composition or legibility that is reliant on omission. This 'concept city' becomes comprehensible, only once it becomes a representation or even a misrepresentation: it can be read, because much of the actual city has been erased. From on high, the city conforms to a plan. It becomes a "picture, whose condition of possibility is an oblivion and a misunderstanding of practices." (1988:93)

The concept city described by de Certeau is the combination of three intentions. Firstly, it seeks to define and produce its own space, and to purge any murky excesses, "the pollutions that would compromise it" (1988:94). Then, it must generate its own brand of controlled escalation, a system that will consume and convert the various energies and voices of the actual city (stories, traditions, tactics) into the planned, univocal concept-city. Then, various focalisers, subjectivities or multiplicities must be hierarchically incorporated into the "universal and anonymous subject which is the city itself...it gradually becomes possible to attribute to it...all the functions and predicates that were previously scattered and assigned to many different real subjects" (1988:94).

These conditions are present in *SimCity*. By zoning and rezoning, the player attempts to manage and redistribute various forms of 'pollution', including garbage, as well as crime, illiteracy, riots, traffic jams and disgruntled citizens. Sets of measures and maps allow for "the flattening out of all the data in a plane projection" (1988:94). Neglect results in mayhem and waste, whereas control results in measured increase and smooth progression. Various menus organise the game's channels of address according to a set of interests (petitioners, financial statements, neighbourhood ruin or property values), each of which is a component of the city as the host subject, or host system. *SimCity*, as a 'concept city' "thus provides a way of conceiving and constructing space on the basis of a finite number of stable, isolatable, and interconnected properties." (1988:94) *SimCity* is not the simulation of a city; it is the simulation of a fiction of a city.

Walking through Anarchy Online

In contrast to the concept-city viewed from an isometric vantage point, the practices of the 'real city', as it is lived, happen at street level. "The ordinary practitioners of the city live 'down below', below the thresholds at which visibility begins" (1988:93). These practices, according to de Certeau, are epitomised by wandering and walking. The city, in practice, is a miasma of transient patterns trod by disparate bodies. These practices together form a text that is unknowable to all its varied participants. Each element reflects and responds to every other, and in the process, they "compose a manifold story that has neither author nor spectator, shaped out of fragments of trajectories and alterations of spaces: in relation to representations, it remains daily and indefinitely other." (1988:93).

This multiplicity and transience is suggestive of online multiplayer gaming. In the shared game world of *Anarchy Online*, cities are entered or crossed or occupied by avatars, according to the will of their player. Every passing avatar is a compilation of information that is, by degrees, revealed to, or concealed from, other participants. No single avatar (or player) better expresses the game as a whole, than any other. On the contrary, their tumultuous co-existence is a definitive quality of the game. Avatars are functional, strategic components, they are also characters (existents with traits), and they are the mark of a player's vicarious presence.

Each avatar, and each avatar's act, is the re-presentation of a player's actions and will. Each gesture in the game world is a reflection: a viciously armed alien waves 'at me' because somewhere in this world a player has typed "emote/wave". My named, personalised martial artist avatar dashes across a town square in a cocktail dress, with a team, on a mission, and our acts join other innumerable and simultaneous actions.

According to de Certeau, the street is remodulated by use. In the wake of wanderers, window shoppers and pedestrians, a "second, poetic geography" (1988:105) comes into being. de Certeau imagines that floating accumulations of histories and stories drift about the streets to form "A strange toponymy that is detached from actual places and flies high over the city like foggy geography of 'meanings' held in suspension, directing the physical deambulations below" (1988:104). The notion of alternative signposts and routes that relate only distantly to rules or function, is suggestive of the ways that the various potentials of an MMORPG such as *Anarchy Online* might be realised by the player population. The invented roles, ephemeral fictionalising and collaborative scenario building of Role-Players, is one variation on possible styles of play, but there are as many variations, as there are players. Every player actualises the game in a particular way. The combination, during play, and in the game's cities, of all

these potentials, is a constituent of *Anarchy Online*, and this 'fog' is arguably impossible to divorce from 'the game itself'.

Of walkers, de Certeau writes "They are myriad, but do not compose a series. They cannot be counted because each unit has a qualitative character...Their swarming mass is an innumerable collection of singularities." (1988:97). He writes that these "pedestrian movements form one of these 'real systems whose existence in fact makes up the city". These movements can be transcribed, collated or recorded, but any such data would only refer to "the absence of what has passed by. Surveys of routes miss what was: the act itself of passing by". De Certeau's analysis raises questions about documentation and method that are pertinent to computer games studies as a whole.

It is certainly possible to survey the paths taken by pedestrians, and it is possible to record and analyse the paths taken or choices made by individual players, but such documentation, while "Itself visible, it has the effect of making invisible the operation that made it possible...The trace left behind is substituted for the practice. It exhibits the (voracious) property that the geographical system has of being able to transform action into legibility, but in doing so it causes a way of being in the world to be forgotten." (de Certeau page number?) Computer game analyst Torill Mortensen makes a related point, when she writes that in order to study games, and

"how they are realised into texts or experiences through the activity of playing, I have to study that process from the viewpoint of a player. To study logs from the game as texts afterwards is like studying a description of an event rather than being present at the event." (Mortensen 2002)

I would not, based on this, go on to argue that there are more correct, or incorrect perspectives (or 'objective' positions) from which to analyse a computer game, or the situated actualisation of a computer games through play. I would suggest, instead, that all approaches are partial, reductive and provisional. Hence our analysis will be partial, specific and selective also. This is not in itself a problem, unless it is denied.

Playing SimCity and Anarchy Online

In certain ways *SimCity* is a neat model of de Certeau's concept-city. Similarly, his account of the actual city's unruly and transient practices is reminiscent of the cities of *Anarchy Online*. But in de Certeau's essay, the city-as-practice is the underside of the concept-city: they do not exist apart and in different places. The relationship between the panoptic concept city and the lived city (between the constructed order, and the transient, fertile multiplicity of lived practice) is mutually informing and unresolved. Practice

mushrooms between the cracks and thus the "surface of this order is everywhere punched and torn open by ellipses, drifts, and leaks of meaning". (1988:107)

While it is possible to argue that *SimCity* models the 'concept city', and *Anarchy Online* resembles the 'city as practice', this is only part of the story. *SimCity* and *Anarchy Online* both exist on their own terms, and each has their 'concept' and their 'practice' manifestations. Both games replicate "the 'geometric' or 'geographical' space of visual, panoptic, or theoretical constructions" (1988:93) of the concept-city. And both games host those "practices of space" that are characterised by "an *opaque* and *blind* mobility" (1988:93).

The concept-city and the actual city are counterparts. As the concept-city progresses, it is able to consume an increasing amount of the real city's waste products. This consuming fuels the increasing complexity of its regulatory networks. "This is the way in which the Concept-city functions; a place of transformations and appropriations, the object of various kinds of interference but also a subject that is constantly enriched by new attributes" (1988:95). As the concept-city pursues its totalising agenda, urban life responds with practices that contradict the regulatory model. "Beneath the discourses that ideologize the city, the ruses and combinations of powers that have no readable identity proliferate; without points where one can take hold of them, without rational transparency, they are impossible to administer" (1988:95).

In *Sim City*, the player stands outside of the game-world, and takes an isometric view of the goings on within it. In this way the game mirrors de Certeau's description of the concept-city. But the text is *played*. The player's simulated city is mirrored by ghost doubles from previous games and discarded experiments. The simulation is unlikely to play smoothly forwards in time. It is more likely that the player will save, experiment, play on or play over their game, producing impermanent loops and transient events. Just as Role-Players cloud *Anarchy Online*'s cities with stories, players of *SimCity* invent their own peculiar goals. In the process, they generate unplanned and inventive parallel trajectories. In this way things "*extra* and *other* (details and excesses coming from elsewhere) insert themselves into the accepted framework, the imposed order". (1988:107 emphasis in original)

On the forum for *SimCity* fans at <u>www.simtropolis.com</u>, for instance, there is a running debate about how best to build a 'realistic city'. The term 'realistic' has a contextually specific meaning that has nothing to do with creating a city with a grim set of urban demographics. For some contributors, a 'realistic city' seems to mean a 'nice city', with a beach perhaps, and 'not too many skyscrapers'. The game itself might not spell out objectives, but players find goals, share goals, and share advice about the best way to realise them:

"A couple of suggestions that make things look very realistic; take a bit of time to study a map of one of your favourite cities. Notice the consistencies and irregularities that make it organic looking...work WITH the terrain... and cram dirty industry together in slum areas, but don't overdo it... think of a typical drive to the store, then to work...When you pull out of your street, what do you see ...?^{nvii}

Also evident is the pleasure that players take in sharing irreverent 'cheats' that will enable the spawning of multiple birds or UFOs^{viii}. The point is that alternative goals are proposed outside of (but inspired by) the game, and this suggests that, and for all its isometric clarity, *SimCity* generates lapses, diversions and multi-vocality. However apparently controlled or linear a game is, the fact that it is played will always mean there is scope for multiplicity and deviation.

Conversely, *Anarchy Online* appears to model de Certeau's 'city of practice', but, on closer consideration, it also accommodates its own version of planned isometry. The game world is larger than can feasibly be explored, it cannot be viewed 'at once', the game's population together form a vast, mobile collage. The game is shared, and so it cannot be fully known. The game space cannot be paused. Yet, for all this, a site of isometric and quantitative legibility is still offered to players.

Going up in de Certeau's skyscraper allowed the viewer to reduce the miasmic practices of the city to a legible ordering. In *Anarchy Online*, the player can distance themselves from its shared cities by entering the mapped interior of the avatar. Each of the avatars that winds their way through the various cities scattered around the game world is a container for a second (and relatively independent) set of processes. Each player enters the game world via an avatar, and then enters their avatar to allocate and organise various resources (skill points, weaponry, clothing, for example). Each avatar is constituted of empiricist, numerical values, as well as more elusive variables. When the player is examining and redistributing experience points, resources and statistics they have, in effect, attained order through a retreat. They have not climbed up a skyscraper, they have backed into the inner space of their avatar, and structure, plan and clarity are attained with this recoil.

In conclusion

Sim City 3000 is a simulation game or toy, where the player manipulates the development and growth of a city from the perspective of overseer. The identification invited by the game is dispersed, general. The player tinkers with variables from outside the game world, and the game responds, modelling outcomes and talking back. The city surges or shrinks, thrives or burns, according to the player's actions and the biases built in to the simulation.

The simulation relies on simplification and momentum. The perspective is isometric in that the player can hover over the city and direct it from a distance, and isometric in that the player adopts a dispersed and distanced identification. These tendencies recall de Certeau's account of the planned concept-city, where clarity and legibility are attained through distance, exclusion and simplification.

In *Anarchy Online*, players share cities, whether they prefer to play solo, join temporary teams for the length of a mission, or have their characters swear allegiance to one of the many factions quarrelling for supremacy on Rubi-Ka. The game world is populated. Players act within the game world through avatars and so the identification or perspective invited by the game is localised. These avatars incorporate characterisation (a profession, a name, a personal history) as well as numerical and strategic variables. The city is a stage, a resource and a backdrop that is entered and crossed by occupants. All the avatars are mobile, and all are the cover for a player who is, to some degree or other, playing a role. The high level of variation and multiplicity, and the fact that players are embodied and at street level, mean that the game is suggestive of de Certeau's city-in-practice.

While it is tempting to align *SimCity 3000* with the panopticism of the concept city, and *Anarchy Online* with the proliferating practices of the lived city, the fact is that both texts are played. Both mix rules and order, with ephemeral and proliferating practices. It does not necessarily follow, however, that the games are identically situated in relation to de Certeau's models. Once narrative aspects, structural factors, simulated behaviours, rules, address and identification have been considered, what emerges is a sense that these games accommodate both legible domains and spheres of practice in ways that emphasize different potentials. By positioning the player outside the game world and evoking an identification with the system itself, *SimCity 3000* leans towards the legible and the panoptic, even as it continues to offer practice and deviation. *Anarchy Online*, by offering a shared world with narrative factors and proposing an embodied and yet mobile identification, prioritises practice. Yet, at the same time, the game offers its players differentiated sub-zones of legibility and reductive order.

Bibliography

Bal, Mieke (1997) Narratology; *Introduction to the Theory of Narrative, Second Edition* Toronto, Buffalo, London University of Toronto Press

Burn, Andrew and Diane Carr (2003) 'Signs from a strange planet: role play and social performance in Anarchy Online' COSIGN 2003 Conference Proceedings pp 14-21 De Certeau, Michel (1984) The Practice of Everyday Life Berkely and Los Angeles University of California Press

Jenkins, Henry (2001) 'Game Design As Narrative Architecture', online at http://web.mit.edu/21fms/www/faculty/henry3/games&narrative.html accessed September 2003.

Frasca, Gonzalo (2001a) Simulation 101: Simulation versus Representation. Available online at www.jacaranda.org/frasca/weblog/articles/sim1/simulation101.html accessed September 2003.

Frasca, Gonzalo (2001b) 'The Sims: Grandmothers are cooler than trolls' in *Game Studies* vol 1 issue 1 July 2001 <u>www.gamestudies.org</u>

Fuller, Mary and Henry Jenkins (1995) 'Nintendo and New World Travel Writing: A Dialogue', in *Cybersociety: Computer-Mediated Communication and Community* ed Steven G.Jones, Thousand Oaks, Sage Publications 1995 pp 57-72

Flynn, Bernadette (2003) 'Languages of Navigation Within Computer Games', available online at <u>http://hypertext.rmit.edu.au/dac/papers/Flynn.pdf</u> (accessed September 2003) and presented at the 5th International Digital Arts and Culture Conference, Melbourne 2003.

Friedman Ted (1999) 'Semiotics of SimCity' First Monday issue 4 vol 4 www.firstmonday.dk/issues/issue4_4/friedman/ accessed September 2003

T. Friedman, 1998. "Civilization and Its Discontents: Simulation, Subjectivity, and Space," In: Greg Smith (editor). *Discovering Discs: Transforming Space and Place on CD-ROM.* New York: New York University Press. Also online at <u>www.game-research.com</u> accessed September 2003

Holopainen Jussi and Stephen Myers (2000) 'Neuropsychology and Game Design', paper at *Consciousness Reframed III 2000*, online at <u>http://www.stephan.com/NeuroBio.html</u> accessed September 2003.

Mortensen Torill (2002) 'Playing with Players; Potential Methodologies for MUDS' *Games Studies* vol 2 issue 1 July 2002 <u>www.gamestudies.org</u>

Swartout, William and Richard Lindheim (2002) 'Does Simulation Need a Reality Check?' SimScience Workshop, Scientific Exploration of Simulation Phenomena, at the Simulation and Wargaming Centre, National Defense University, 6-9 June 2002

online at <u>http://www.amso.army.mil/harmon/papers/swartoutpaper.html</u> Accessed September 2003.

Starr Paul (1994) 'Seductions of Sim; Policy as a Simulation Game' *The American Prospect* vol 5 issue 17 March 21 1994

Frasca Gonzalo (2001) 'Simulation 101: Simulation versus Representation' online at <u>www.jacaranda.org</u> accessed September 2003

Fan sites cited:

Anarchy Online www.anarchy-online.com and fan forums: http://forums.anarchy-online.com Bigcheat (http://bigcheat.com) Simtropolis; Many Cities, One Community (fan site) www.simtropolis.com Accessed September 2003 (other fan sites, mainly for the recently released Sim City4000, are listed at http://simcity.ea.com/community/fansites/fansites.php)

Games Cited

Anarchy Online (2001) dev Funcom, publisher Funcom <u>www.anarchyonline.com</u> Sim City 3000 (2000) dev Software MacKiev, publisher Maxis

ILLUSTRATIONS:

CAPTIONS

Fig 1. Petitioner from the Society for the Excessively Cultured: Opinionated and characterised, she delivers information of relatively low (or less direct) strategic value.

Fig 2. Maria Montoya, Public Safety Advisor: Professional, named, but less characterised. She delivers information of greater obvious strategic value, in a tone that is more instructive, than descriptive.

Fig 3 and 4. *Anarchy Online*, copyright Funcom.

NOTES

ⁱ Henry Jenkins has used de Certeau's theory (especially that of 'spatial stories') to write about games in at least two papers: 'Game Design As Narrative Architecture' and, with Mary Fuller 'Nintendo and New World Travel Writing: A Dialogue'. Bernadette Flynn (2003) has drawn on de Certeau's work to argue that navigation is more pertinent to games than narration. Ted Friedman has used Jenkins work on 'spatial stories' for his analysis of *Sim City* (1998) and *Civilization* (1999).

^{viii} For examples of cheats, visit <u>http://bigcheat.com/pc/simcity3000cheats.htm</u> which includes cheats such as these sent in by Buckeroo02 "Yo. I have a cool cheat here. Type in "UFO Swarm" in the cheat menu and then go to disasters. Pick UFO and watch as tons of UFOs fly over. It is alot more than by just clicking on UFO. To see a lot of birds, type "the birds". Many birds will pass over your head."

ⁱⁱ This passage draws on Mieke Bal's theories of focalization. Focalization is Bal's term for "the relation between the vision and that which is 'seen', perceived" (1997:142). It incorporates the idea of perspective, but it also incorporates a consideration of that perspective's bias or subjectivity. The question of grammar and address in games (imperative, indicative, etc) was brought to my attention by Andrew Burn, one of my colleagues on the AHRB funded *Textuality in Video Games* Project (Centre for Children, Youth and Media, Institute of Education, University of London, September 2001-November 2003).

ⁱⁱⁱ Demenzia, post, dtd 10.10.2002, accessed September 03

^{iv} Halouk, post dtd 13.3.03 (accessed September 03)

^v Posted by Vixentrox, *Anarchy Online* player forum, 31.12.02, in response to a thread titled: 'Interested in RP, not sure where to start'

^{vi} I have not seen any evidence on the player forums, on in the game, that these suggestive issues evoke critical engagement in a 'real world' political sense. This does not mean that it does not happen

^{vii} Posted by Jhipolito, resident and moderator, 6.21.03 from <u>www.simtropolis.com</u>, from a thread on 'realistic city building', *Sim City 4* city-concept forum, accessed 09/03).