Free the Code, Free the World

The Chronotopic "Worldness" of the Virtual World of *Ryzom*

Paul Manning

Trent University

Abstract

In research on Massively Multiple Online Games and Worlds (MMOs) like *World of Warcraft*, *Everquest* or *Second Life,* the term "worldness" addresses how the various layers of a virtual world--the animated 3D pictorial spectacle, the interactive world of mobile nonplayer characters, the virtual community of other players-- all hang together as an autonomous "world." This article deploys Bakhtinian concepts of chronotopes operating at different scales to explore the worldness of one such online "world" (*Ryzom*'s Atys). I will show that these different layered chronotopes become visible at moments of crisis. In each crisis, the chronotopic worldness of Atys affords developers and players not only a domain for potential conflict, but also political collaboration and engagement.

Keywords

Animation; Chronotope; Conlang; Liberalism; Virtual World

Introduction

Massively Multiple Online Games (MMOs) like *World of Warcraft* are among the largest virtual communities on the internet: the player community of *Eve Online* is larger than the population of the country where the servers are located, Iceland. Such virtual worlds have long served as privileged "field sites" for ethnographies of virtual life in general (e.g. Taylor 1999; Boellstorff 2008; Manning 2009, 2018a). Boellstorff et al. (2012:7) describe virtual worlds

> as possessing the following characteristics. First, they are *places* and have a sense of *worldness*. They are not just spatial representations but offer an object-rich environment that participants can traverse and with which they can interact. Second, virtual worlds are multi-user in nature; they exist as shared social environments with synchronous communication and interaction. ... Third, they are *persistent*: they continue to exist in some form even as participants log off. They can thus change while any one participant is absent, based on the platform itself or the activities of other participants. Fourth, virtual worlds allow participants to *embody* themselves, usually as avatars … such that they can explore and participate in the virtual world.

Virtual *game-world*s, like the one I am writing about here, *Ryzom,* a science fantasy game which takes place on the alien planet of Atys, are often said to have a property of "worldness" which emerges out of the

> the complex interplay between a) the aesthetics of the gameworld as both an actualised explorable and mentally imagined universe*;* b) the experiences and means of expression the world as a game system and tool allows and affords; c) the social interaction in and about the world… (Klastrup 2009)

When all these different elements seamlessly and invisibly work together as a kind of stable Latourian "blackbox" (Latour 1999:304), players can experience a sense of "presence" and "immersion" in otherworldly spaces (Boellstorff 2008:112-117). When they do not, the normally inert, invisible gaps, layers and fragments of the world become visible "matters of concern" for players, developers, and anthropologists. I explore in detail two such crises of worldness of a single game-world, *Ryzom*'s world of Atys, from the first time the world disappeared in 2006, when the servers shut down due to bankruptcy, to the crisis of the merging of gamer servers and divergent game communities in 2012. In each case I analyze how the multilayered chronotopic worldness of Atys became both a problem and resource for enabling political engagement about the fate and future of the game-world.

I will use a narratological approach, in which games are treated analytically as being akin to stories, and stories are grounded in "narrative architectures" or *worlds*: "Game designers don't simply tell stories; they design worlds and sculpt spaces" (Jenkins 2004). This particular approach to games as spatial "narrative affordances" allows game-worlds to be analyzed in terms of *chronotopes,* a term introduced by Russian literary theorist Mikhail Bakhtin (1981) to denote narrative spacetimes, that is, the "world," the time and place, in which a story (the narrated event [Jakobson 1957]) takes place. While others have made persuasive claims that the narrative chronotope is only a special subcase of a more capacious conceptualization of this concept (see Lempert and Perrino 2007), here as in other work (Manning 2017, 2018b) my goals are narrower, and my operational definition will be the definition of chronotope offered by Michael Silverstein (2005:6) as "denoting the temporally (hence, chrono-) and spatially (hence, -tope) particular envelope in the narrated universe of social space-time in which and through which, in emplotment, narrative characters move."

Obviously, this definition requires some unpacking. First, chronotopes, like scales (the

other concept of this volume I will bring into play), are "semiotized space and time" (Blommaert 2007:4-5), a kind of spatiotemporal envelope, what I will call a "world," in which a certain kind (genre) of story takes place, a world which contains certain expectations as to kinds of plots that happen there, and in which certain kinds of characters exist, live and move. Well-known taxonomies of genres of folkloric narrative are defined by chronotopes of this kind (Manning 2017, 2018b): the myth is a narrative in which the narrated event takes place at a time when the world was very different from the way it is today; a folktale is a story that takes place "once upon a time," in a world with no spatiotemporal connection with our world; and the legend is a story "told as true," as belonging to our here and now reality, taking place somewhere just down the road. Each genre has its own narrative spacetimes, its own characteristic emplotments, and kinds of characters and attendant heteroglossia of character voices.

As (Woolard 2012:2) points out, Bakhtinian chronotopes are particular examples of *scales* (Lempert and Perrino 2007; Blommaert 2015; Carr and Lempert 2016), and narrative chronotopes operate across different scales. Ancient Greek adventure novels (Bakhtin 1981:86-110) include chronotopes like "the road," the space of "adventure-time," a picaresque space for random encounters where "Time, as it were, fuses together with space and flows in it (forming the road)" (Bakhtin 1981:244). But the road does not operate independently as a chronotopic space of "adventure"; it operates as a subordinate part of a larger chronotopic system. The road is like Bakhtin's example of chronotope of the Gothic Castle and the Gothic "Old World," where historical legendary time becomes entangled with landscape to produce the possibility of a "haunting" encounter (Manning 2016, 2017, 2018a). Here the chronotopic *qualia* of Gothic "hauntedness" are shared across different scales, through recursive semiotic processes of *scaling*, in which self-similar qualities or *qualia* are shared within nested scales relationally, depending on what they are contrasted with (Gal 2016, for chronotopic *qualia* see Yeh 2017). Similarly, the picaresque emplotment of "the road" within adventure novels (and it might be added, all later genres, literary and ludic, of what Jenkins (2004:121-22) calls "spatial storytelling," including fantasy novels and games modeled on them) operates within, and presupposes, a larger "*abstract* expanse of space" of the fantasy world (Bakhtin 1981:99, original emphasis), an exotic "*alien world*: everything in it is indefinite, unknown, foreign" (101, original emphasis). Each individual plotline of "adventure" in such a picaresque fantasy world takes the form of a road taken through this larger world, implying that there are other roads not taken. These roads not taken-- unexplored narrative potentials of worldness-- inspire the reader or player to fill in the blanks in the fictive world, focusing not on

> individual characters or specific plots but rather complex fictional worlds which can sustain multiple interrelated characters and their stories. This process of world-building encourages an encyclopedic impulse in both readers and writers. We are drawn to master what can be known about a world which always expands beyond our grasp. (Jenkins 2007).

Like literary chronotopes, ludic chronotopes of "worldness" operate at different scales: now Ryzom's world of Atys is a virtual world unto itself, now it is part of other, encompassing, virtual worlds or virtual communities of cyberspace, now it is a set of persistent sub-worlds called "shards," hosted on different servers with different player communities each with their own histories and styles of play. Within some such fantasy worlds, there are also densely emplotted "instanced" subspaces, often called "dungeons," where the very walls of the dungeon serve as what Jenkins calls a "narrative architecture," affording, that is, enabling and constraining, narrative and ludic potentials for players (2004:121-122).

Ludic virtual worlds, or game-worlds, belong to a larger family of virtual objects: There are virtual game-worlds that are not virtual communities (single-player RPGs like *Skyrim*); there are virtual worlds which are virtual communities but not ludic, for example *Second Life*; and there are virtual communities that are not really worlds, for example an online forum. There are also "virtual diasporas," virtual communities founded in a specific virtual world that have lost their virtual world and seek another home (e.g. the "Uru diaspora" (Pearce and Artemesia 2009). Shared or similar properties of worldness afford trans-ludic migrations of virtual communities between worlds: *Second life* and *Ryzom* were both worlds chronotopically similar enough to the *Uru* "homeland" to be considered as new homes for the displaced virtual community of the "Uru Diaspora" (Pearce and Artemesia 2009:94-5).

In addition, there are imaginative *worlds* that are not virtual, some of these are literary, others are ludic. After all, these virtual game-worlds are also called "worlds" because they remediate the fictional *worlds* of the fantasy narratives that inspired them: Ryzom's world of Atys is a *world* in the sense that Tolkien's Middle Earth is a *world* (Taylor 2006:20-24; Boellstorff 2008:37-48; Manning 2009:314-366, Manning 2018a). Not merely exotic settings like the barbarian frontiers of the Greek adventure novel, which are part of our own world, they are the entirely autonomous, alien worlds of fantasy and science fiction. Accordingly, each fantasy MMO game is set in a game-world, always equipped with a world map, often with a set of exotic languages and a good deal of mythological and historical "lore" (Krzywinska 2006): *Everquest* is set on the game-world of Norrath, *World of Warcraft* on Azeroth, *Ryzom—* on the entirely organic alien world of Atys (Manning 2018a). Some ludic worlds have no specific literary forebears (Norrath, Azeroth, Atys), others are specifically designed to evoke a specific literary world or other media-franchise world (allowing players to play in the world of *Lord of the Rings* or *Star Wars*) (Jenkins 2004 calls these "evocative spaces"). The history of virtual "worlds" arises as part of a process by which the literary chronotope of "fantasy world" becomes the foundation for ludic "game-worlds," beginning with tabletop roleplaying games like *Dungeons and Dragons*, which in turn were remediated as virtual game-worlds (see also Helmreich 2004, Boellstorff 2008, Pearce and Artemesia 2009, Manning 2009, 2018a).

But these are *virtual* worlds and their imaginings are of a piece with the imagining of the internet as a whole as a chronotope. Alongside scifi/fantasy novels and roleplaying games, an important literary intertext here was Neil Stephenson's imagining of cyberspace (what he called the "metaverse") in his novel *Snow Crash* (1992) as a virtual world, inhabited by avatars, in which all internet locales take the form of virtual buildings on "the Street," which "played a key role in imagining what virtual worlds might be like" (Boellstorff 2010:124). This chronotopic model of "the Street" as a 3-dimensional virtual world navigated by avatars moving along a street between buildings obviously bears a striking resemblance to virtual worlds like *Ryzom's* Atys, but it is important to realize that this appears to be an imagining of cyberspace, the internet, as a virtual world. Thus, early internet research involved a *scaling* (Gal 2016) in which MMO virtual worlds were treated as having homologous properties with cyberspace as a whole (Manning 2018a). There was also a chronotopic fusion where chronotopes of imaginary fantasy worlds and the internet as *autonomous* worlds become mutually reinforcing, affording escapist fantasy chronotopes of an "electronic elsewhere," radically separated from life in the real world, or IRL, and importantly, both are envisioned as a technolibertarian space of freedom from the constraints of this world.

Which brings me to my final point--which is the dominant chronotope for understanding Ryzom/Atys: the virtual world of the internet is composed of virtual communities, some of which are worlds, some of which are not, but chronotopic motifs of autonomy and freedom

pervade all these virtual communities from the smallest online forum to the internet as a whole. Just as virtual worlds are distant kin of the imaginative fantasy worlds created by Tolkienian "subcreation" (Tolkien 1947) or the science fiction worlds of what Ursula Leguin called "Do it yourself cosmology" (Le Guin 1979), so too they are children of what Adrian Johns (2009:41-56) has called the "piratical enlightenment." As Johns shows, the chronotopic model of piracy (with the pirate figuring both as villain and hero) supplied a rich source of affectively engaging metaphors to conceptualize print publics, at a time when the Carribean was filled with literal pirates, where each pirate ship or pirate island (pirate island republics like Libertalia or Nassau) constituted a kind of alternative society, a "commonwealth in the making" (Johns 2009:41-2). These pirate republics formed a concrete chronotopic horizon which could be applied metaphorically to the emergent Enlightenment republic of letters. Johns traces the genealogy of the "piratical enlightenment" to the present day "hacker" cultures (see also Coleman 2009, 2013) noting that the term "virtual community" arises precisely out of this piratical chronotope to denote "an emergent frontier domain—at once a village full of diverse skills, bound together by an 'informal, unwritten social contract,' and an unsettled landscape of new stakes and homesteads…" (Johns 2009:486). As Johns points out (2009:491-3), alongside these virtual communities, the idea of the Free and Open Source Software movement (FOSS) associated with these virtual communities was also a descendent of the ideals of the "piratical enlightenment," so that code and virtual communities and worlds were all homologously viewed not as being constituted by copyright – property – but free speech (Coleman 2009, 2013).

These chronotopes of worldness also afford political engagement, collaboration and conflict across scales. Particularly important is this last chronotope of Ryzom/Atys as a space of liberty: the freedom of Ryzom as software is the freedom of the world of Atys; the "sandbox" properties of the game-world as a space for enacting new "emergent" narratives -- that is, unplanned and unscripted "bottom up" rather than scripted "top down" narratives (Jenkins 2004:128-9) -- embodies the liberal political philosophy of the designers, creators who build their worlds as spaces of freedom (Nardi et al. 2008, Malaby 2009, Manning 2018a); the "bottom up" emergence of distinct communities of play territorialized within individual servers leads to each server becoming an autonomous world unto itself, raising conflicts when these server worlds are merged together. Each case I will consider here involves a moment when Atys as a world, whether as game or as an individual server, ceases to exist, producing a sense of real loss or bereavement (cf. Pearce and Artemesia 2009), and a concomitant political engagement to revive, and at the same time "free", that world.

Free the Code, Free the World

First of all, in this world --what developers, players, and everyone else, call the "real world" (Nardi 2015:19-20)-- Ryzom is a defined legally as an artifact of code, a piece of alienable intellectual property, an object of copyright. Ryzom was launched in 2004 by the French firm Nevrax, a firm which went bankrupt on November 20th 2006. In response to this crisis, a group formed of former Nevrax employees, Ryzom players and cyberlibertarians of the Free Software Foundation created the *Free Ryzom Campaign* around November 27-28th 2006. The goal was to collect enough pledged money (200,000 Euros) to buy the Ryzom code and release it as nonproprietary "free software" (as in the mantra "free as in speech, not as in beer" (Coleman 2009, 2013)), and maintain the game-world as a nonprofit organization: free the software, free the world. When the bid failed, the Free Ryzom Campaign was renamed the Virtual Citizenship Association in 2007, and its goals have incrementally realized by a company (Winchgate) run by ex-developers which acquired the software in 2009.

I will begin with the revolutionary moment of late November 2006, the birth of the Free Ryzom Campaign, which represented Ryzom (and its game-world of Atys) as potentially a kind of chronotopic Libertalia or Nassau, a pirate island republic of freedom within a digital ocean of unfree software. In this chronotopic imagining of Ryzom/Atys as one of many software objects or virtual worlds needing to be freed from an *ancien régime* of unfree code (where code is imagined as speech rather than property [Coleman 2009, 2013]). The Free Ryzom Campaign echoed the foundational chronotopic imagining of the internet as a wholly autonomous republic based on the natural autonomy of code, summed up in the oft-cited dictum of David Clark, early internet protocol designer and ideologist of the internet (1992): "We reject: kings, presidents and voting. We believe in: rough consensus and running code" (Coleman 2013:125). Here chronotopes of "virtual communities" operating at different scales (Ryzom/Atys, the internet) are understood as having homologous properties, as naturally autonomous republics of code/speech that need to run free.

The rhetoric of the Free Ryzom Campaign drew together factions who might have had different answers to the question: "What are we liberating?" --- Was it Ryzom the software object? Was it Ryzom the game? Was it the immersive alien world called Atys? To show how they did this, I will look at the chronotopic rhetoric of the revolutionary pamphlets: the social contract posted on Ryzomdotorg,on November 27th 2006 and "Free Ryzom Campaign" video posted on YouTube the next day, November 28th 2006.

The Social Contract

First, the Free Ryzom Campaign posted a "social contract," originally hosted on the now defunct Ryzomdotorg page (Free Ryzom Campaign 2006), the original home of the Free Ryzom Campaign in 2006, which morphed into the also defunct "Virtual Citizenship Association" page in 2007 (versions of the a similar social contract generalized to all online virtual worlds or universes can be found at Virtual Citizens Association (2008)). This name change already suggests how the interlocking chronotopes of the virtual world allowed the campaign to free a specific piece of software, Ryzom, to be understood as the formation of a digital republic. In the social contract, the campaign to save Ryzom was phrased as a smaller, but emblematic, campaign within the larger Free Software Movement. Opening, appropriately, with a quote from Enlightenment philosopher Rousseau's own *The Social Contract* (*Du Contrat Social* [1762]*)*, the page addresses itself to the larger Free Software Movement by using a version of the influential "Debian Social Contract." Debian is a well-known free (Linux) software distribution project, so using a version of the Debian social contract intertextually locates the Free Ryzom campaign within a larger series of Free Software campaigns (on Debian see Coleman 2013:123-158).

Debian Social Contract

Social Contract with the Free Software Community

1. Debian will remain 100% free
2. We will give back to the free software community
3. We will not hide problems
4. Our priorities are our users and free software
5. Works that do not meet our free software standards

The Free Ryzom Campaign

The Social Contract

[Quote from Rousseau]

1. Ryzom and all materials produced by the Free Ryzom project will become and remain 100% free software
2. We will give back to the community
3. We will not hide problems.
4. Our priorities are players and free software.
5. The avatars will be the property of their respective players.
6. We will respect the users private life.
7. We will use the development methods of free software projects.
8. Our organization will be a non-profit one.
9. Our decision process will be based on participative democracy.

…All the players are developers…

Figure 1: The Debian and Ryzom Social Contracts

Where the Debian contract has five clauses, the Ryzom contract has nine clauses, the first three of which are directly reproduced with minor changes from the Debian version, the remainder of which address the peculiar way that Ryzom, unlike other free software projects, has two overlapping but distinguishable sets of what the Debian contract calls "users": developers (who are interested in Ryzom as "code") and players, who are interested in Ryzom as a "game-world." Clause one substitutes a more specific software object (Ryzom for

Debian), and notes that instead of *remaining* free, the object will first have to *become* free. Where clause two of the Debian contract specifies that "we will give back to the *free software* community," the Ryzom contract simply uses an unmodified "community," an ambiguity that is resolved partially later. Clause four of the original Debian contract reads "Our priorities are our users and free software. We will be guided by the needs of our users and the free software community." In the Ryzom version, the generic Debian "user" is replaced by the more Ryzom-specific term "player."

As the Ryzom social contract moves beyond the model of the Debian contract in clauses 5-9, it deals with hybrid software objects specific to game-worlds, like avatars, and in so doing introduces competing liberal models of software as property. Clause Five of the Ryzom social contract reads: "The avatars will be the property of their respective players." This seems at first like Lockean "possessive individualism" (Macpherson 1962), where an individual player's avatar, which they define as "the data of a player, located on our servers," is recognized as "the property of the player who created it." Such possessive individualism-- based on Lockean appropriation through labour, or rather, a hybrid of play and labour, "playbour"--in which player-avatars are private data owned by their player-creators, is hard to square with the Debian model of free software in which software, created collectively, is part of a digital commons. It also seems to illustrate competing liberalisms: a Lockean liberal model of appropriation through labour, obviously anathema to the free software community, versus a Millian liberal individualist model of technical self-fashioning, which as Coleman (2013:119,136) shows, is central to the Free Software movement. But perhaps this is only an apparent conflict, since an avatar --or "player character"-- is a proxy for the self, player-ownership of avatars is an extension of the quintessentially liberal principle of self-ownership, just as leveling up a player-character is a proxy for liberal self-fashioning.

The Ryzom social contract contains competing liberal models of property and community-- at once creating inclusive communities and technocratic or meritocratic hierarchies—which are inherited from the ambiguities of Debian models of governance, which includes "democratic majoritarian rule, a guild-like meritocracy, and ad-hoc deliberations" (Coleman 2013:21). These competing liberal models of governance come to a head in Clause nine, which reads simply: "Our decision process will be based on deliberative democracy." Now, as Coleman (2013) shows, the Debian system is not a straightforwardly egalitarian deliberative democracy. Rather, it is a technocratic or meritocratic hierarchy, in which an individual moves from being a mere "user" to being a voting member of the community, a "developer," through a process of ethical and technical "mentorship." In the Ryzom version, what the large print giveth, the fine print taketh away: Clause nine recognizes that "all the players are developers," but immediately adds the significant caveat that players can become developers only contingent on an undefined mentorship.

The Video

The Ryzom adaptation of the Debian social contract extends chronotopic understandings of Ryzom as an object of Debian-like code, thereafter accomodating Ryzom-as-software to the specificities of Ryzom-as-virtual-world, which includes more heterogeneous array of software objects and a more heterogeneous "community" of "users," including data created by "players" (avatars) and data created by "developers." By contrast, the Free Ryzom Campaign crowdfunding video (Ryzomdotorg 2006, uploaded onto the Ryzomdotorg Youtube channel on November 28th 2006, the day after the Ryzomdotorg social contract appeared) begins with Ryzom as first and foremost an inhabitable virtual world, one of many on the internet, only later exploring its digital underpinnings in code.

Figure 2: Virtual Traveler… Have you Ever Dreamed of Owning A Universe? (ryzomdotorg 2006, all Ryzom material is open source)

This video addresses itself to a broad public of "virtual travelers" (Figure 2), that is, generic denizens of the internet. Against a panorama of virtual landscapes of Atys, the video asks them "have you ever dreamed of owning a universe?" and then announces that "Others are pursuing the same dream…" Who are these others? In the images that follow, The Free Ryzom Campaign is represented as a collectivity consisting both of players and developers, whose distinct perspectives on the game-world as world and as software are blended into a hybrid image, using a mixture of capture footage of player avatars from inside the world and real world footage from the "backstage" of the designers' world. Chronotopes leak into one another as capture footage from the world of Atys is laid bare, exposing the artifice and showing underlying structures of code (Figure 3), while the real world images of designers are shown occupying the same real world spaces with three dimensional animated versions of Ryzom creatures (Figure 4).
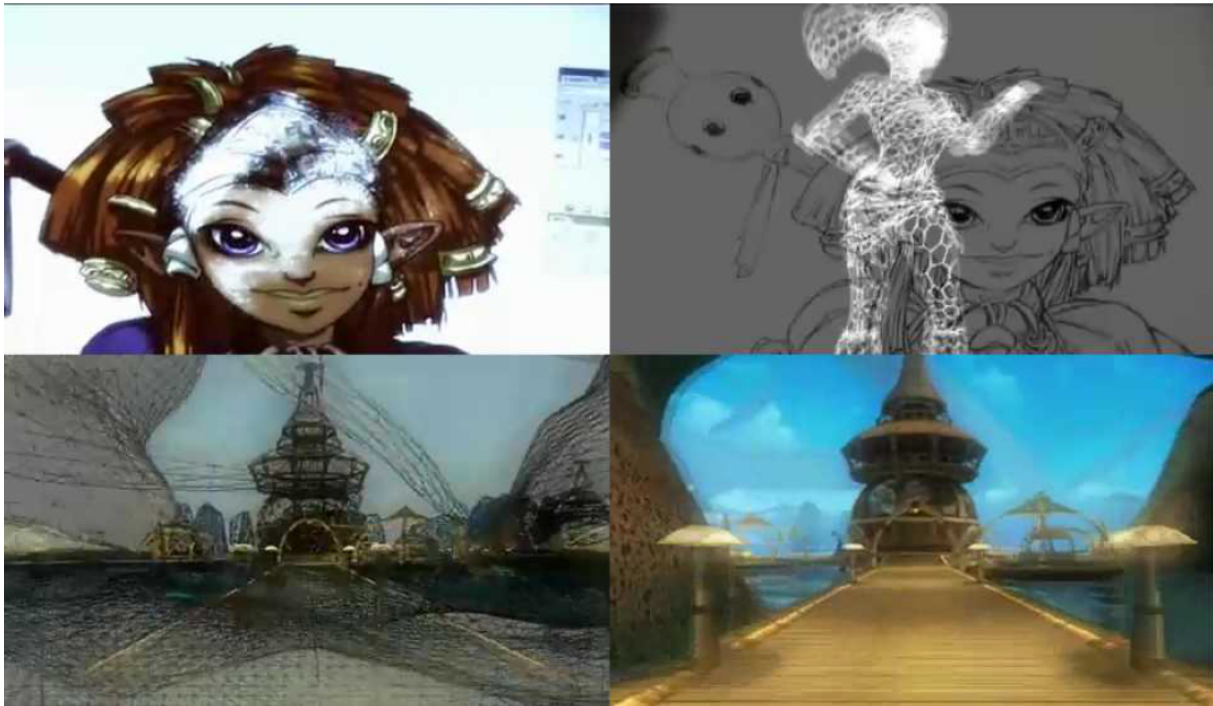
*Figure 3: Developer-Eye View: Showing the software code underlying the world
(ryzomdotorg 2006, all Ryzom material is open source)*

*Figure 4: Player-Eye view: Virtual Animals invade real world developer labs
(ryzomdotorg 2006, all Ryzom material is open source)*

The video issues a call to arms: "Today, by uniting together there is one world we can conquer." Here, the players themselves are enlisted as actors in this struggle, represented as avatars doing battle within the world. Finally, we are reminded what is at stake, the world itself, the video leaving us with images of the living, breathing natural world of Atys (Manning 2018a). The result is a hybrid of the developer-eye view of virtual world as underlying code and the player-eye view of virtual world as a real space of immersion and presence.

Like the social contract, the visual rhetoric of the video addresses itself to the overlapping goals of the "Free Ryzom Campaign" to free a world, to liberate Atys both as a world and Ryzom as a software object, moving back and forth between the experienceable, playable world of Atys and the latent invisible software of the game Ryzom that lay behind this experienceable world, as virtual landscapes of Atys are stripped down to reveal the underlying software matrix of Ryzom, and fully animated creatures of Atys invade the very software labs that created them.

Behind the Scenes

The loss of the virtual world of Atys in 2006 not only created a lively community of refugees like other virtual diasporas (Pearce and Artemesia 2009), but also concerted attempts by ex-developers and players to assert community control over a game-world, producing a model of community that involved a chronotopic alignment between world-as-software (Ryzom, developers) and world-as-place (Atys, players): the Free Ryzom Campaign thus could be seen as one of a series of Free Software campaigns. The vanishing of the world of Atys became briefly a moment when the worldness of Atys itself became a political affordance via processes of scaling (Gal 2016), where a virtual world could become a free software utopia, a virtual world which is also a miniature model of what the whole internet should be, enacting a new virtual social contract, with new models of property and governance.

Early in 2009, the existing player base was notified that Ryzom has been reacquired by a company, Winchgate, which included some of its original developers, and the players were informed they would be able to return to Atys and play for free (Manning 2009:322). Soon thereafter, goals of the Free Ryzom Campaign were realized as a series of "firsts" within the broader world of Free Software: on May 6th 2010, the game assets (the source code, artwork, including the video discussed above) was released as free software (Rakowski 2013), the first step in turning Ryzom into an "open source world": "This gave birth to Ryzom Core, which has established the Linux version of Ryzom, and also provides a basis for other projects of games based on the source code of Ryzom, such as Khaganat or Tempest in the Aether" (Ryzom Team 2018). Finally, Ryzom Forge (beginning in 2018), following in the footsteps of other radical spin-offs of collaborative worldbuilding based on Ryzom code like Khaganat (Domperss 2016), seeks to make good on clause nine of the original Debian contract above, bringing developers together with players (brought in through a kind of mentorship which emphasizes matching scarce skills of volunteers to tasks) into a loosely knit, collaborative, democratic development team to continue the development of Ryzom. Ryzom Forge is not entirely egalitarian: there are technical hierarchies since only developers can execute the imaginings of each collective into code, but the more unexpected check on this untrammeled democracy is the absolutist role of "the Lore" (the emergent backstory constitutive of "worldness"). In each democratic decision, "total respect for the Lore" (Tamarea 2018) is the ultimate check on the team's deliberations, and "the Lore," as a humanly created, but non-human artifact, is represented by a special set of team members called "lorists," lore experts, local historians whose work seems to involve the kind of encyclopedic impulse towards "worldness" explored by Jenkins (2007). Worldness, whose spokespeople are the lorists, then, is at the centre of the design process.

My online ethnographic work "behind the scenes" with developers on the newly-formed Ryzom Forge (Tamarea 2018) is a recent offshoot of my longer term online ethnographic engagement with Ryzom as a participant-observer and player (see Manning 2009, 2012, 2018a). The current Ryzom Forge team (who have generously answered my questions through

the medium of a dedicated chat channel to which I was invited) is a heterogeneous, cosmopolitan and multilingual, democratic collective, including not only old-timers but newcomers, developers and players, developers whose skills lie in the hidden nonhuman world of code, translators who mediate the human world of real world languages, lorists, figures of particular authority who specialize in the lore of the world of Atys, and many of whom are also language builders, and of course, occasionally, me. When I asked one of the founders, Tamarea, if the democratic, participatory quality of Ryzom Forge, including players as developers, was grounded in the original Ryzom (Debian) contract, Tamarea replied: "Yes, at least for myself. I participated in The Free Ryzom Campain and I had it in mind when I created Ryzom Forge, in partnership with free project Khaganat" (Tamarea, Personal Communication August 27 2018).

As Tamarea emphasized, some sense of the chaotic, consensus-based, emergent, principles of worldbuilding of Ryzom Forge can be gleaned from the earlier Khaganat project. Khaganat is engaged in building particular worlds ("fictional universes") that are "autonomous" (in that each world is able to develop independently of the others and independently of the intentions of the designers) and "free" (in the general sense and also in the sense as in "Free and Open Source Software"): Khanat (the name of the first such world created by Khaganat) is one of these "free fictional universes," but there can be many more, and Khaganat (the designing community) is also a "free world," displaying the fractal recursivity of chronotopic qualities discussed by Gal (2016):

> Worlds are autonomous structures. For the moment there is only one [server-world], the Unity MEMORIAL 1 (UM1), also called Khanat (it is a little abusive, because any world is potentially a khanat). Each world has its own way of organizing it's own independence of the structures, associations and Khaganat.
>
> Who is the leader?
>
> No one. No one can impose as being the leader here. Khaganat is a free world, without whip and chain.
>
> Everybody!! It is the community as a whole that pushes things forward, each adding its stone wherever it pleases. Chaos can tho emerge from great things(but also something wonderful). (Domperss 2016)

Another instance of chronotopic scaling (Gal 2016), the community of world-builders (Khaganat, Ryzom Forge) and the worlds (khanats, plural, for there can be many of them) they build all operate under the chronotopic sign of liberty deriving from the piratical enlightenment (compare Malaby 2009). As we will see, such chronotopes of *liberty* also trickle down into the ludic worlds they build, which are designed as open-ended "sandboxes" (game-worlds without built-in narratives) that encourage "emergent" styles of gameplay (on "emergence" see Helmreich 2004; Nardi et al. 2008; Malaby 2009; Manning 2018a):

> This is why the term 'sandbox' is associated so closely with emergence, since sandbox mechanics, which allow players to choose not only their own means to an end, but their own ends, affords what Jenkins (2004) calls *emergent narratives*: 'a kind of authoring environment within which players can define their own goals and write their own stories.' (Manning 2018a).

In the case of Ryzom Forge and Khaganat, these terms ("sandbox world," "emergence") which originate to describe freeform styles of gameplay and gaming worlds that afford such play also seem to trickle upwards as fair descriptions of the organization of the design communities that design these worlds.

Emergent Heterogeneity: Shards and Languages

For the players of Ryzom, however, the most important thing about the events of 2009 was that Ryzom, an object of code, commerce and copyright, became Atys, an inhabitable, experienceable, *playable* world, once again. Or rather, worlds. Atys had always been divided into at least three different servers, each of which hosted a different version of the world with different player avatars. This division of a unitary world into servers addresses technical problems of server overload and resultant "lag" (Boellstorff 2008:101-106): some game-worlds, like *Eve Online*, have only one single player server, others have many servers to accommodate large player populations. These copies of the same world are often called "shards," a term drawn from the original MMO *Ultima Online*, where, according to the game "lore," what had been one world was shattered into "shards" represented by the game servers (Falcon 2011).

Importantly, in Ryzom the basis of this division of one world into three "shards" or "servers" was language: from the moment of launch in 2004, Leanon was the German, Aniro the French, and Arispotle the English language server. In each server, the in-game text would be in the specified language, and that language would be the "official language" to be used in some chat channels (the Uni or Universal chat channel which communicates messages to all players online). But more on that later.

Each server begins as a copy of "the same world," albeit with a different language. After launch each server becomes what is called in game design a "sandbox," an open narrative architecture where each shard of the world is a place for "emergent" player-constructed narratives (Jenkins 2004). Over time, each server was intended to autonomously develop a distinct culture, with different histories and timelines. Precisely this emergent divergence of Lore (following Ryzom usage, this word is capitalized when it means Ryzom Lore) is what makes each server an autonomous and different "world," and what makes merging servers a "catastrophe," as one lorist explained to me (Personal Communication, 2018).

By the time of the final server merger in 2012, some of these servers had already been "merged" together from other, earlier servers. Arispotle had earlier been merged with two other erstwhile English language servers, Cho (an "international" English language server opened in 2006 and merged with Arispotle in 2007) and Windermeer (originally a North American English server merged with the European English language server Arispotle in 2005). The sense of loss of avatars who had lost their homeland was recorded: Avatars whose erstwhile home was Cho were awarded the title "Journeyer," those whose original home was Windermeer were awarded the title "Wayfarer." The loss of Windermeer as it merged with Arispotle, for example, produced a sense of loss and potential conflicts as player communities, with different emergent styles of play, came into conflict. One erstwhile Windermeer player ("splatula") comments that:

> I was playing back when the North American and European English servers were merged. Us N[orth]A[merican]ers saw the loss of all our G[ame]M[asters]s from Windermeer, and we felt pretty crappy for a while over that. There was antagonism, both overt and covert, between the two populations as we adjusted to each other's style of play. (splatula 2010)

I dwell on this apparently minor detail because it shows that servers, experienceable worlds, have their own emergent tendencies: they become different as players adapt the world to their own needs, create their own cultures of play, their own historical sense of being in the world together, creating different Lore and different emergent communities of shared practices or "communities of play" (Pearce and Artemesia 2009):

Different communities of play have different characteristics that arise out of the combined play styles of the individuals within them, each of whom is in turn transformed by the group play style. These play styles are also both influenced and transformed by the spaces they are enacted in. (Pearce and Artemesia 2007:315)

Where the server shutdowns of Ryzom as a whole in 2006 produced a melancholy sense of loss of worldness conceived of as the loss of an immersive alien *nature* (Manning 2018a), the loss of an individual server with a server merge was experienced as the loss of a *homin culture,* a "community of play." The loss of a server, then, is no longer a mere logistical problem, but a sense of real loss of a "homeland," "world" or "community." This sense of shared traumed created a "trans-ludic identity," a "fictive ethnicity" constitutive of a virtual diaspora of a player community carrying their shared histories and practices and sense of collective loss from virtual world to virtual world (see also Pearce and Artemesia 2009:85-110):

Players engage in a game about restoring the lost culture of a refugee community [Uru], only to become refugees themselves. They then set about restoring their own culture, engaging in both a performance and a game that is at once "real" and "fictional." Building off a narrative about creating worlds, they create their own sub-worlds within other, larger virtual worlds. (Pearce 2008)

Such "worlds within worlds" are exemplified not only with worlds being divided into "shards," but in-game diasporas created as one shard is merged within another, diasporic identities recorded in Ryzom by titles like "Wayfarer" and "Journeyer" marking players who had come to Arispotle from somewhere else, worlds-within-worlds to which they could no longer return.

Each server was defined by a single language: initially this meant that the language of the game interface (both nonhuman and human) would be German (Leanon), French (Aniro) or English (Arispotle). There was also a set of linguistic practices policing this one-server-one-language policy that operated, at least in the case of Arispotle, on the Universal or Uni channel, a chat channel putatively to be used primarily for questions of players about the game. These two linguistic features of the interface and communication channels produced a chronotopic sense that each a sense of a normative shared "code" was territorialized in each server. Since both the humans (GMs, CSRs, Development team) and nonhumans of the game interfaces of each server, and the Uni channel, the literal "world" channel that communicated with all *homins,* were associated with a normative language that, in the case of the Uni channel, was policed by fellow players through a set of reflexive metapragmatic discourses of linguistic purism about permanent associations of channels with codes over those same channels.

Normative linguistic purism (the hegemonic ideological territorialization of "Shard world= shared language," envisioning the shard as a chronotopic language community) co-existed with non-normative practices as actual player speech communities generated a set of hybrid practices of conflict, accommodation and compromise to deal with actual multilingual repertoires. Many players on Arispotle simply did not speak English, and so when questions about the game appeared on Uni in Portuguese or Spanish, there were mingled reactions, from explosions of an almost palpable linguistic nationalism, leaking in perhaps from the ethnolinguistic politics of the outside world, to attempts to cobble together enough linguistic competence, either using bilingualism within the player community or online translation programs, to temporarily suspend this English-only rule to accommodate non-English speakers.

A fairly tame example occurs when the player Mendrix is simultaneously accommodated

and mildly remonstrated with for speaking Portugese in the English Uni channel ("here"), and immediately self-corrects and apologizes (Ryzom Chatlog 2013/06/27):

Mendrix says:	uau!!! Obrigado :D
Yorran says:	your welcome :) de nada :)
Mendrix says:	vou cortar umas arvores :)
Meagon says:	huh
Mendrix says:	gonna cut some trees :D
Meagon says:	you cut our hearts?
Alassea says:	we only speak english here...
Alassea says:	english and tendrili speak
Mendrix says:	sorry :D

On other occasions, as I discovered when I greeted a fellow-Welsh speaker in Welsh, use of even a few simple greetings not in English on the English Uni channel of Arispotle (in 2010) provoked a vast explosion, a "flame war," which for some reason moved quickly from arguments about the propriety of speaking Welsh on Uni to much more general venting of grievances about play-styles and fears of the problems of multilingualism portended by a future server merger. In this "flame war," arguments about language use on Uni seemed to index chronotopes operating at wildly varying scales. Some such arguments "leaked in" from political conflicts over language in the "real world": one player referring to those who do not speak English on Arispotle as "foreigners," another referring to those that demand English-only on Uni as "Nazis." Others couch the language problem in terms of arguments in terms of local "rules of play" (how to use the Uni channel), and thence moved from concerns about language use on the Uni channel concerns to broader arguments about server-specific play-styles and to pervasive fears, at this time, of a potential merger between the different language communities, and communities of play, territorialized on different servers, that would become different ways of playing in the same world after a server merge.

Roleplay and Gameplay

In late 2012, the dreaded moment came: the three servers were finally merged. This merger happened across all levels of Ryzom: development, customer service teams and different player communities, which had all been separate before, were all now merged. Predictably, some of the seemingly most pressing anticipated problems of the merger were related to the problem of different language communities occupying the same world. Some issues were solved by developers and players supplying ad hoc translations, other issues were solved by machine translation and increasingly sophisticated in-game translation affordances. The erstwhile single language Uni channels were pluralized: now, alongside the main Uni channel, there were Uni channels for specific languages.

Channels for communication co-present avatars, like the "around" channel, used for interacting with non-guild others, presented special problems. For players engaged in a kind of ordinary gameplay, for example, hunting animals in the wilderness with members of a team with a shared team or guild channel, issues of translation between language communities would arise only occasionally. But such problems became especially pressing during "role playing" events where avatars from various guilds across Atys would attend a single event. Ryzom is strongly committed to democratic governance at all levels for cities, capitals, and factions, as well as on the design team, hence there are a lot of "meetings," sometimes lasting for hours (a tendency that caused one fellow player to worry that Ryzom was becoming "meetingville" [a play on the popular game Farmville]). Lack of shared languages and available translators meant that some players might be excluded from transparent participation

in events and political participation in meetings.

Interestingly, one solution to this problem for local governance meetings was to re-territorialize language onto in-game locality: so that by a process of fractal recursion (Gal 2016) erstwhile shards became cities within a shard. Ryzom's playable *homin* races (Tryker, Fyros, Matis and Zorai) each live in separate territories. Each *homin* race has four cities: for example the Tryker Federation has its capital at Fairhaven and there are three other cities (Crystabell, Windeermeer and Avendale). Tryker players can have their apartments and guild halls in different cities. After the merge one such city was allocated to each major language group, and players were expected to "move" their apartments to the appropriate city: my own guild moved to Crystabell, the English language city, Windermeer became the German city, and Avendale the French city. "Local" political meetings for these cities could now be conducted in the language of that city, and translators used primarily for the national meetings in the capital.

Importantly, during these events, when one is "roleplaying," one is not supposed to speak of this linguistic difference in terms of the real world languages or their speakers, but use circumlocutions like "homins of the Crystabell dialect" to mean English speakers (Tamarea 2012a). This is partly because, from the perspective of "roleplay" (RP, immersive playing within the world), Trykers all spoke a single "language" (called Tyll Tryker), just as the Fyros, Matis and Zoraï all have their own languages: Fyrk, Mateis, Taki Zoraï. When the game was launched, these languages were imaginary, fragments of each embedded in the names of everyday objects and places. As Jenkins (2007) points out, worldness beckons to players to "fill in the blanks" of lore, so players (and particularly lorists) set about reverse engineering these fragments as a basis creating actual *whole* languages (conlangs), similar to way Dothraki or Klingon were created (Heller 2017). Currently there is something like a grammar and dictionary of each of these languages available online.

These player-created *homin* languages of Atys represent a continuation of a long tradition of linguistic "lore" creation, "word-building" (creating constructed languages ("conlangs" and "artlangs")) as "world-building" (Manning 2009:314-5; Peterson 2015; Heller 2017) in both fantasy literature (Tolkien), early table top roleplaying games (Fine 1983:123-152), along with the current explosion of filmic fantasy languages like Dothraki (Peterson 2015; Heller 2017). As Heller (2017) notes, inventing languages is about imagining alternative worlds, so alternative worlds seem to need to be equipped with invented langages. Inventing constructed languages (conlangs), and, I would add, using them when roleplaying is, as Heller nicely puts it, is "the linguistic partner to cosplay" (Heller 2017:20).

Such constructed languages are central examples of "lore," a term used in gaming to describe the "backstory" of the world, as well as, in emergent sandbox gaming, to describe the changes to the world wrought by playerly activity. For (stereotypically Anglophone) players interested primarily in the game as a game, and not as immersive fantasy world, "lore" denotes essentially a category of knowledge definitionally useless for gameplay: "One can play without knowing a shred of what players call 'lore'" (Nardi 2010:89). For (stereotypically Francophone) roleplayers, knowledge of lore is central to a style of play called "roleplay" (RP), and the most striking index of RP is the use of Atysian languages. I admit, with some shame, as a longtime Tryker, and a linguist to boot, that my knowledge of Tyll Tryker begins and ends with *Lordoy!* ("Hello!" [literally "good (*lor-*) day (*doy*)"], obviously calqued on French). Most of my fellow players from Arispotle, like me, display a similar lack of knowledge of local languages, revealed by the almost complete absence of Atysian greetings like *Lordoy* and *Deles silam* from chatlogs before the server merge. The widespread practices of linguistic roleplaying of French players, by contrast, are revealed by

the use of Atysian greetings (usually upon logging on or logging off) in my chat logs after the merge. Where Arispotle players would say "Hello Atys" on Uni when logging on (Manning 2018a), a French roleplayer might say a hybrid Matis-French utterance like *Deles silam l'Univers* ("*Hello* Universe!"), and even get a Matis reply like *deles aiye* ("Greetings!"). The relative French fluency in Atysian languages partially reflects the fact that the grammars of these languages are in French, but these hybrid French-Matis utterances are little images of the indexical equivalence of Atysian languages and Francophony. Indeed, the motto of the liberty-loving Tryker Federation, *Tryka, Meer, Sella*, which-- according to Tamarea (Personal Communication, 2018)—is used frequently by Tryker players during RP events, means "Liberty, Equality, Sharing," a transparent calque of the French republican motto!

The frequent use of Atysian languages is also an index of a broader "French" playing style, summed up by a commitment to roleplaying (RP). Speaking in character (including using Atysian languages) is a prime example of *roleplay* (RP) as opposed to speaking "*hors roleplay*" (HRP, called in English OOC for "Out of Character" (Tamarea 2012ab)). More broadly the opposition between RP and HRP playing styles, via fractal recursion (Gal 2016) applying not only to speaking but other practices, was where the different communities differed most systematically in how they "geared into" the world and the worldness of Atys. Arispotle players took little interest in systematically playing their avatars as characters, that is, *roleplay,* usually concentrating on *gameplay*, playing the game rather than playing the world, instead. Such players orient to the world primarily as a domain of skilled performance rather than immersive fantasy (Nardi 2010:54-61). To the extent that they saw Atys as an immersive fantasy world, such characters attended more to the immersive properties of the *natural* world of Atys, the living breathing world of strange animals, over the *social* world of events and meetings (Manning 2018a). Some such players took no interest in meetings and events at all, others reserved their roleplaying, playing their avatar "in character," only for such events, and otherwise played them as entities that were more proxies for the offline player than real *homins*. The French play style, by contrast, involved an almost systematic commitment to roleplaying the *homin* character at all times.

It was only after the merge that everyone became fully aware of just how different the play styles of these different communities were, in ways that went far beyond language, but producing conflicts that were further complicated by language. These differences were opposed chonotopic senses of what kind of game-world Atys was: for Anglophone Arispotle players, Atys was first and foremost a game, for Francophone Aniro players, it was first and foremost a world. For Arispotle players, the avatar, or player character was first and foremost an extension of the player into that world ("the main character") but could also be simply a kind of pawn (an "alt") extending the player's (and main character's) capacities for gameplay (see Manning 2012), for Aniro players, the player character was first and foremost a character in that world (on these ambivalent potentialities, see Salen and Zimmerman 2003:450-55).

In the early days after the merge, a French customer service representative (Tamarea) did a brief ethnography of play styles that were now side by side in the same world, pointing out that from different styles of animating avatars different visions of worldness emerged. I quote it at length (note I use the same translation program used by Ryzom Forge):

> Roleplay is experienced differently by different communities. In order to resolve the current conflict, it is important to understand the reason for these Roleplay differences. The German and English speakers often apprehend Roleplay as a projection of themselves in their character (which can be compared to the projection of Jake Sully in his avatar Na'vi, in the movie Avatar). The result is an easily socially acceptable character behaviour; it also follows that the roleplay of others is easily perceived as the real character of the players. Moreover, for these

two communities, roleplay is generally reserved for certain privileged moments of the game: events and outpost wars. Apart from those "shooting" moments (to continue the cinematographic comparison) during which everyone acts in roleplay only, each actor generally becomes "himself" again. Going hunting with your stage enemy is therefore considered as a normal state, just as two actors opposing each other during a shooting scene can naturally, between two scenes, go talk and have a drink together.

Francophones, on the other hand, often apprehend Roleplay as puppeteers: they make their characters live intensely but "from afar," without projecting themselves inside and thus without identifying with it. The result is a more theatrical roleplay, allowing them to easily play roles that go beyond social norms. For them, it is obvious that a character's character and actions do not reflect those of the player who controls it. Moreover, French-speaking roleplayers consider everything that happens "around" as an integral part of the "shooting" (so not only events, but also outpost wars, hunting, drilling, expeditions, trade, etc.): the film camera is constantly in action. For them, there is no break between two events, everything that is played around is part of the film. The result is mutual misunderstanding and mutual embarrassment in the way the other behaves. (Tamarea 2012b, translated from French using DeepL Translator (https://www.deepl.com/en/translator))

The way that different forms of play index different senses of worldness produced a series of conflicts between players from the different groups. Part of the "Lore" of Atys is that there are enemy religious factions, Kami and Karavan, to which characters belong, and under certain circumstances, it is possible or necessary for players from rival factions to engage in combat (called PVP for "Player versus Player," as opposed to PVE or "Player versus Environment, as, for example, when a group of players hunts animals). Arispotle players (with some dissenters) adopted a broadly cooperative play style in which players from different factions would eschew PVP and cooperate in PVE, to the extent that even mandatory conflicts called "outpost battles" by which outposts, important sources of rare resources, were often distributed peacefully to ensure that all players had equal access to these resources. PVP violence was heavily morally circumscribed for Arispotle players to consensual PVP. By contrast, the French players seemed to engage in PVP at every opportunity, precisely because their commitment to roleplaying caused them to treat members of rival factions as actual enemies.

Similarly, Arispotle players focused on technically complex modes of gameplay called "multiboxing" which allowed a single player to control multiple characters, including both a "main character" (a fully-animated social being from whom the player took their identity in the world) and a series of usually silent "alts" (short for "alternate characters"), effectively robotic servants, a partially-animated being whose actions were parasitic on the actions of the main character, allowing a single player to control a whole team of avatars (Manning 2012, Manning and Gershon 2013). In order to distinguish between truly social human characters and asocial non-human "alts," conventions were adopted, main characters would play all the speaking parts and the "alts" were excluded from guild channels and were in general silent, except for playful moments of "roleplaying" where the alts were allowed to speak (though even this was generally frowned upon). The average skilled Arispotle player had at least a main and one alt, and sometimes many more. Obviously, multiboxing (which was strongly curtailed as a form of "cheating" by the French developers after the merge), which allowed a single fully-animated player-character to control an army of partially-or-parasitically-animated avatar "alts," is absolutely antithetical to the puristic perspective of fully-animated roleplaying, where one player plays one character. The alt, a purely functional game creature, like an animated pawn (Manning 2012, Manning and Gershon 2013), is the absolute opposite

of a fully-rounded character roleplayed immersively in the French style.

Conclusion: The Many Worlds of Atys

The "worldness" of virtual world of Atys is composed of layered chronotopes which come into view in moments of crisis. In 2006, Ryzom shut down its servers, producing a "virtual diaspora" (Pearce and Artemesia 2009), a community of shared trauma who could experience the lost world of Atys only through player created "machinima" (videos made from capture footage from in the game-world) on Youtube (Manning N.D.). One of these machinima, the Free Ryzom Campaign video (ryzomdotorg 2006) not only memorialized the lost world, but sought to revive it, part of a more general revolution attempt to liberate both the code and the world. In 2012, three existing servers, three autonomous parallel versions of Atys, merged, producing a different kind of catastrophe, where players from different worlds sought to accommodate historically emergent different communities of play and language formed on other worlds. At each step, as I have shown, the chronotopic layers of the worldness of Atys came into view at precisely moments of crisis where Atys' very existence was threatened.

In 2006, after the crisis of the first server shut down, the Free Ryzom Campaign represented Atys from a developer-eye view as being an object of code (Ryzom) which needed to be liberated from copyright (and which then could be used to create new worlds like Khaganat), and at the same time, from a player-eye view, as an experienceable world (Atys) and a virtual community of players. They addressed their rhetoric and practices to overcoming these divisions, restoring the world (2009), freeing the code (2012), and finally (2018) structuring of the current Ryzom Forge to include players not only as players in the world but as developers within a recursive "geek" public (Kelty 2008) working on creating and developing that world.

When the three shards of Atys were merged in 2012, another crisis of worldness occurred in which the chronotopes of each shard were retained as different conflicting styles of play, resulting in different "ethnic" identities within the same world (cf. Pearce and Artemeisa 2009). In addition to differences of language, different chronotopic visions of Atys as a world embodied in different emergent styles of gameplay collided face to face and took on moral valuations: It was learned that the French-server players were murderers who were overly fond of meetings, and the English-server players were "Carebears" who detested PVP violence but who had a penchant for *homin* slavery (multiboxing with alts) and cheating. Not only had the different "shards" of Atys diverged in terms of playstyle, but the differences in playstyle revealed different chronotopic visions of worldness, of what Atys was as a hybrid game-world. For Arispotle players, Atys was immersive primarily as a *natural* world where players engaged cooperatively in technically skilled (PVE) *gameplay*, leading to technical gameplay innovations such as "multiboxing." Atys is, for such players, primarily a *game*-world. For Aniro players, Atys is an immersive fantasy *social* world for roleplaying, a game-world. Differences in community playstyle, immersive RP (roleplaying) and performance-oriented gameplay, index different player chronotopes of Atys as world, in a way similar to the way developers in 2006 saw Ryzom as a software object, code, and also as Atys, an experienceable world, which could be restored by the Free Ryzom Campaign: Free the code, free the world.

Acknowledgments

References Cited

Bakhtin M., 1981. The Dialogic Imagination. Translated by C. Emerson and M. Holquist. University of Texas Press: Austin.

Blommaert, J., 2007. Sociolinguistic scales. Intercultural Pragmatics 4(1), 1-19.

Blommaert, J., 2015. Chronotopes, scales, and complexity in the study of language in society. Annual Review of Anthropology 44, 105-116.

Boellstorff, T., 2008. Coming of Age in Second Life: An Anthropologist Explores the Virtually Human. Princeton University Press, Princeton, N.J.

Boellstorff, T., 2010. A typology of ethnographic scales for virtual worlds. In: Bainbridge, W. (Ed.), Online Worlds: Convergence of the Real and the Virtual Springer, London¸ pp. 123-133.

Boellstorff, T., et al. 2012. Ethnography and Virtual worlds: A Handbook of Method. Princeton University Press, Princeton, N.J.

Carr, E.S., Lempert, M., 2016. Scale. University of California Press, Berkeley.

Coleman, G., 2009. Code is speech: Legal tinkering, expertise, and protest among free and open source software developers. Cultural Anthropology, 24 (3), 420-454.

Coleman, G., 2013. Coding Freedom: The Ethics and Aesthetics of Hacking. Princeton University Press: Princeton, N.J.

Domperss. 2016. Organization of the Free Project Khaganat. Khaganat, at https://khaganat.net/wikhan/en:structure, Last modified november 23 2016, accessed December 17 2018.

Falcon. 2011. Reply to thread 'Why are servers called "shards"?' at http://forums.riftgame.com/general-discussions/general-discussion/40451-why-servers-called-shards.html, posted January 28 2011, accessed December 17 2018.

Fine, G., 1983. Shared Fantasy: Role-Playing Games as Social Worlds. University of Chicago Press: Chicago.

Free Ryzom Campaign, 2006. The Social Contract. Defunct web page, at www.ryzom.org/page/project_social contract, accessed December 28 2008.

Gal, S., 2016. Scale-making. In: Carr, E.S., Lempert, M. (Eds.), Scale. University of California Press, Berkeley, pp. 91–111.

Heller, M., 2017. Dr. Esperanto, or anthropology as alternative worlds. American Anthropologist 119: 12-22. doi:10.1111/aman.12824

Helmreich, S., 2004. The word for world is computer: Simulating second natures in artificial life. In: Wise, M. (Ed.), Growing Explanations: Historical Perspectives on Recent Science. Duke University Press, Durham, N.C., pp. 275–300.

Jakobson, R., 1957. Shifters and verbal categories." In: Waugh, L. and M. Monville-Burston (Eds.), On Language. Harvard University Press, Cambridge, MA, pp. 386–392.

Jenkins, H., 2004. Game design as narrative architecture. Electronic Book Review: First Person at http://electronicbookreview.com/essay/game-design-as-narrative-architecture/, accessed December 17 2018.

Jenkins, H., 2007. Transmedia Storytelling 101. Confessions of an Aca-Fan; the Official Weblog of Henry Jenkins, at http://henryjenkins.org/blog/2007/03/transmedia_storytelling_101.html, Accessed December 17 2018.

Kelty, C., 2008. Geeks, social imaginaries, and recursive publics. Cultural Anthropology 20(2), 185-214. https://doi.org/10.1525/can.2005.20.2.185

Klastrup, L., 2009. The worldness of EverQuest: Exploring a 21st century fiction. Game Studies 9.1, at http://gamestudies.org/0901/articles/klastrup, accessed December 17 2018.

Krzywinska, T., 2006. Blood scythes, festivals, quests, and backstories: World creation and rhetorics of myth in World of Warcraft. Games and Culture 1 (4), 383–396. doi: https://doi.org/10.1177/1555412006292618

Latour, Bruno. 1999. Pandora's Hope. Harvard University Press, Cambrdige, MA.

Lempert, M. and Perrino, S., 2007. Entextualization and the ends of temporality. Language & Communication, 3(27), 205-211.

Le Guin, U., 1979. Do-it-yourself cosmology. In: Wood. S. (Ed.), The Language of the Night: Essays on Fantasy and Science Fiction. Putnam, New York, pp. 121–125.

MacPherson, C.B., 1962. Political Theory of Possessive Individualism: Locke to Hobbes.: Oxford University Press: Oxford.

Malaby, T., 2009. Making virtual worlds: Linden Lab and Second Life. Cornell University Press, Ithaca, N.Y.

Manning, P., 2009. Can the avatar speak? Journal of Linguistic Anthropology 19(2), 310–325. doi: https://doi.org/10.1111/j.1548-1395.2009.01036.x

Manning, P., 2012. Altaholics anonymous: On the pathological proliferation of parasites in massively multiple online worlds, Semiotic Review, at https://www.semioticreview.com/ojs/index.php/sr/article/view/30, accessed December 17 2018.

Manning, P., 2016. Pixie's progress: How the pixies became part of the 19th century fairy mythology. In: Foster, M. and J. Tolbert (Eds.), The Folkloresque: Reframing Folklore in Popular Culture. University of Colorado Press, Boulder, Colorado:, pp.81-103.

Manning, P., 2017. No ruins. No ghosts. Preternature 6(1), 63-92. doi:10.5325/preternature.6.1.0063

Manning, P., 2018a. Animating virtual worlds: Emergence and ecological animation of Ryzom's living world of Atys. First Monday, 23(6) at http://firstmonday.org/ojs/index.php/fm/article/view/8127, https://doi.org/10.5210/fm.v22i6.8127 accessedDecember 17 2018.

Manning, P., 2018b. Monstrous media and media monsters: From Cottingley to Waukesha. In: Blank, T. and L. Mcneill (Eds.), Slender Man Is Coming: Creepypastas and Contemporary Legends on the Internet. University of Colorado/Utah State University Press, Louisville Colorado, pp.155-181.

Manning, P. Animating virtual worlds. Paper delivered the the department of Anthropology, University of Texas, Austin, December 2017. At https://www.academia.edu/36649293/Animating_Virtual_Worlds_6_Austin_final_with_film_clips_final.doc

Manning, P. and Gershon, I., 2013 Animating interaction. HAU: Journal of Ethnographic Theory 3(3), 107–137, at https://www.haujournal.org/index.php/hau/article/view/hau3.3.006, doi: https://doi.org/10.14318/hau3.3.006 , accessed December 17 2018.

Nardi, B., 2010. My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft. University of Michigan Press: Ann Arbor.

Nardi, B., 2015. Virtuality. Annual Review of Anthropology 44, 15-31.

Nardi, B. et al., 2008. Productive play: Beyond binaries. Artifact 2(2), 60–68. doi: https://doi.org/10.1080/17493460902898786.

Neal, S., 1992. Snow Crash. Spectra: New York.

Pearce, C. and Artemesia. 2007 Communities of play: The social construction of identity in persistent online worlds. In: Harrigan P. and N.Wardrip-Fruin (Eds.), Second Person: Roleplaying and Story in Games and Playable Media,. MIT Press, Cambridge, MA, pp.311-318 P

eParce, C., 2008. Identity-as-place: Trans-ludic identities in mediated play communities—The case of the Uru diaspora. At www.lmc.gatech.edu/~cpearce3/PearcePubs/PearceAIOR08.pdf, accessed December 17 2018.

Pearce, C., and Artemesia, 2009. Communities of Play: Emergent Cultures in Multiplayer Games and Virtual Worlds. MIT Press, Cambridge, MA.

Peterson, D.J., 2015. The Art of Language Invention: From Horse-Lords to Dark Elves, the Words behind World-building. Penguin Books: New York.

Raykowski, M.. 2013. Ryzom Core: Open Source FAQ, at https://ryzomcore.atlassian.net/wiki/spaces/RC/pages/884826/Open+Source+FAQ, last modified October 22 2013, accessed December 17 2018.

Ryzomdotorg, 2006. The Free Ryzom Campaign. https://www.youtube.com/watch?v=_naflL_xzVo. Published November 28 2006, accessed December 12 2018

Salen, K. and Zimmerman, E., 2003. Rules of Play: Game Design Fundamentals. MIT Press: Cambridge, MA.

Silverstein M., 2005. Axes of Evals. Journal of Linguistic Anthropology 15(1), 6-22.

Splatula, 2010. Comment on thread "Merge the servers?" https://forums.ryzom.com/showthread.php?t=35108, posted October 8th, 2010, accessed december 17 2018.

Tamarea, 2012a. Fusion des serveurs et roleplay: explications de l'équipe d'animation. https://app.ryzom.com/app_forum/index.php?page=post/view/96075, accessed December 17, 2018.

Tamarea, 2012b. Et le respect alors? https://app.ryzom.com/app_forum/index.php?page=post/view/113297, , accessed December 17, 2018.

Tamarea, 2018. Ryzom Game Design Team. RyzomComm at https://app.ryzom.com/app_forum/index.php?page=topic/view/28519/1, accessed December 17 2018.

Taylor, T.L., 1999. Life in virtual worlds: Plural existence, multimodalities, and other online research challenges. American Behavioral Scientist 43 (3), 436–449.

Taylor. T. L. 2006. Play between Worlds: Exploring Online Game Culture. MIT Press, Cambridge, MA.

Tolkien, J.R.R. 1947. On fairy-stories. In: Essays presented to Charles Williams. Oxford University Press, London, pp. 38–89.

Virtual Citizens Association, 2008. Reproduction of "Virtual Citizens Association social contract" from defunct web page at http://www.virtualcitizenship.org/page/project_socialcontract, published January 11 2008, at http://wiki.p2pfoundation.net/Virtual_Citizens_Association, accessed December 17 2018.

Woolard, K., 2012. Is the personal political? Chronotopes and changing stances toward Catalan language and identity. International Journal of Bilingual Education and Bilingualism 16(2), 210-224.

Yeh, R., 2017. La racha: speed and violence in Tijuana. Signs and Society 5(S1), S53-S76.