

**RECONCEPTUALIZING MMORPG PLAY: A TREATISE OF  
ACTOR-NETWORK THEORY IN PRACTICE.**

*Robert Li*

**Swinburne University of Technology**

**Australia**

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**Supervisors: Dr. Mark Finn & Dr. Steven Conway**

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## **RECONCEPTUALIZING MMORPG PLAY: A TREATISE OF ACTOR-NETWORK THEORY IN PRACTICE.**

It's 7:54am, September the 16<sup>th</sup>, 2005. Faxmonkey appears inside his hovel and makes his way towards the market board of Orgrimmar eager to see whether any of his wares have sold while he's been "logged out".

As he snakes his way through the city's buildings made of mud and straw he notices dead and decomposing bodies littering the streets. He did live on a PvP or "player-versus-player" server, and so it wasn't unusual for assassins of the Alliance to sneak in unannounced and murder some of the city's denizens. However, the number of bodies was a little out of the ordinary,

"Odd", he thought to himself, "an Alliance guild must have decided to do an early morning raid." It was the only way Faxmonkey could rationalise what he was seeing.

The street opened up into the town centre, but instead of being met by the usual throng of adventurers and merchants, there were only a few avatars milling about. A fellow troll priest runs by, gushing, what looks like blood. Not more than ten meters away from Faxmonkey he collapses, motionless.

In the distance he notices similar red splotches periodically spurting from the few avatars he had noticed earlier. What he hadn't noticed until now was the ground littered with more

bodies and bones than he'd ever seen before in the years he had lived in Orgrimmar.

Faxmonkey starts backpedalling.

Sploosh.

-251 damage

-252 damage

"Crap", he thought to himself. Whatever that troll guy had, he's got it now, too. Faxmonkey casts a healing spell on himself, before turning to run back home.

And so began the Corrupted Blood pandemic (Tylus, 2007; Ziebart, A., 2011).

## MMORPGS AS WE KNOW THEM

*“Massively Multiplayer Online Games are officially mainstream. A title from the genre has had an entire cartoon episode made about it, features in an advertisement starring Mr. T, and hosts some ten million players worldwide. World of Warcraft is a fundamentally important element to the MMO landscape, but more than that it's an ecology, a society all its own.” – Zenke M., 2008*

Massive multiplayer online roleplaying games (MMORPGs) have come a long way since the first rudimentary MUDs kickstarted the genre. These were virtual worlds made in the fashion of Dungeons and Dragons within the bedrooms of computer science students such as 1978's *Zork*, (Anderson, T., Galley, St., 2004), and surreptitiously existed within university research networks.

But before diving into answering the question of whether MMORPG play has been misunderstood, and how we go about reconceiving it, it is important to briefly describe what an MMORPG is.

Boellstorff, Nardi, Pearce, and Taylor (2012, p.59) describe MMORPGs as fantasy based online games. Although they may vary in theme from being science fiction based, to high fantasy, to even being based on comic book heroes, Boellstorff et. al. described them as all adhering, mechanically, to a similar basic format of advancing characters through levels via team-based combat, exploration, crafting and commerce inspired by the conventions of Dungeons and Dragons. Some examples they point towards include *Anarchy Online* (2001); *EVE Online* (2003) and the now defunct *City of Heroes* (2004).



Castronova, in *Synthetic Worlds: the business and culture of online games* (2005), describes through the thoughts and actions of a new player and their avatar, Sabert, the controls, windows and buttons of the MMORPG interface, the camera motions following the avatar Sabert, amongst the imaginary, fantastical surroundings of a forest. Castronova states that, while the interface is unfamiliar, and the setting fantastical, in essence, it is just a new stage for the age-old performance of human social interaction (p.36-58).

More recently, Sourmelis, Ioannou and Zaphiris (2017) sought to more explicitly define MMORPGs. They arrived at the compound descriptions of them being network-based, three dimensional, interactive, narrativistic environments that are permanent and consistent. Narrativistic because they are usually driven by a defined plot; and consistent because they continue to exist in real time when a player logs out or pauses play. Massively multiplayer because they can refer to millions of users; and role playing because a player can assume the role of a fantastical in-game avatar.

From the perspectives explored within this thesis, an MMORPG adheres to all of the above definitions. They *are* the fantastical play-grounds of heroes, aliens and epic battles, and like Huizinga's (1938) conception of the Magic Circle, they also adhere to the rituals, rules and performance art that Boellstorff et. al., describe. They are also the software programs, interfaces, and frontiers of social interaction that Castronova described, and they are also the persistent, three-dimensional, network based, interactive, and narrativistic environments that Sourmelis et. al. claim them to be. Collectively, this means that MMORPGs should be seen as techno-social constructs. They are both the product of human and technological activity and interaction. However, they aren't often seen as such. This thesis will be exploring

throughout, how humans and technologies are both equally contributing to construction of MMORPGs and MMORPG play, and how neither can be seen as subservient to the other.

So, now that you may now have a slight glimpse of what an MMORPG is, the question still remains of why you or anyone else should care.

The answer to that question and the reason why it's important to better understand MMORPGs and MMORPG play, is relatively simple: the genre, collectively, generates tens of billions of dollars a year and present substantial cultural significance.

From the underground projects of passions by research hobbyists, MMORPGs as of 2016 generated over US\$26 billion of revenue a year (Newzoo, 2016). *World of Warcraft*, released in 2004 by Blizzard, is seen as both the progenitor and flag bearer for this generation of MMORPGs. In September of 2019, Blizzard Activision released a classic version of the title for its 15-year anniversary, and that still had enough interest for over 29.6 million players to eagerly receive it (Industry Six, 2019).

When compared to our own global economy these statistics would make the MMORPG economy larger than the economy of Iceland according to the IMF (2019) and the 107<sup>th</sup> largest economy in the world according to the World Bank (2019). The collective population of MMORPG players, if grouped together, would make a country with the 89<sup>th</sup> largest population, or larger than Jordan, according to the Central Intelligence Agencies World Factbook (2019). In fact, *World of Warcraft's* active player population is larger than the population of Croatia, by itself. Point being, MMORPGs, as a genre, is a massive market that, on size and economic value alone, cannot be overlooked.

But it isn't simply economic value that underpins their importance. MMORPGs are also an important cultural artefact that lie at the centre of the increasing convergence of the social and technological.

This has been a major strand within the study of MMORPGs, and has been frequently written about and discussed. This will be elaborated on in greater detail in later chapters, but as a brief overview, at an individual level, T.L. Taylor, in *Play Between Worlds* (2006) argues that the intersection of society and culture is crucial to the enjoyment of MMORPGs. Perhaps this is best illustrated by the first few passages within her book that illustrate her offline experiences of *Everquest* (1999) (EQ), where she attends a "Fan Faire" held by the developer, Sony Online Entertainment,

"Both at the Fan Faire and within the game, solitary players quickly find themselves immersed in much larger structures that are crucial to their enjoyment of the space. The social is not just an add-on. Much like my experience of the Live Quest, it is in the moment of play in which the social and the formal game intersects that the more familiar connections are created. Shared action becomes a basis for social interaction, which in turn shapes the play... There is no single-typed EQ player, nor any single way to play the game... In much the same way that there is a multiplicity of play, we might also imagine a multiplicity to the artifact of EQ." (Taylor, T.L., 2006, p. 9-10)

Taylor suggests that these MMORPGs are more than what is conventionally seen as a game, and the definition of an MMORPG player are more than simply a person who plays the game virtually. To her they can shape and mould the activities of everyday life through the daily

practice of engaging and learning from within its culture, thereby breaking down a semblance of separation between the virtual and physical worlds.

Celia Pearce is another prominent MMORPG ethnographer who, like Taylor, found herself part of an MMORPG community that straddled the virtual and real (Pearce, C., 2009). When the community she had chosen to study suddenly found themselves orphaned from their virtual world, *Uru Prologue* (2003). Renaming themselves the “Uru diaspora” its members tried to recreate elements of their virtual home in other worlds, and other external technologies helped keep them bound together despite no longer being tethered to a defined virtual place. Her experiences illustrated the fact that the MMORPG experience at its core is a techno-social construct, and in the absence of the MMORPG itself or defined structures for sociality such as guilds, or clans, humans and technologies can continue to work together to substitute and perpetuate the experience – that the techno-cultural aspects derived from *Uru* are powerful enough that within these technologies, and within these player experiences, they live outside of the MMORPG itself, mirroring the conclusion that Taylor came to three years earlier.

But, it’s not simply the cultural significance of MMORPGs to individual researchers and players. MMORPGs, especially the most successful ones, like *World of Warcraft*, and the current day *Final Fantasy XIV*, as well as older worlds like *Second Life*, also entered popular consciousness. Through mediums such as television, film and social media, built shared experiences and constructs that took them from being a niche genre within the gaming industry that went largely unnoticed, to cross over titles with multi-billion dollar franchises, such *Lord of the Rings Online*, *Marvel* and *DC Universe* MMORPGs, *Star Trek Online* and *Star Wars: The Old Republic*, and pop culture artefacts with enduring impact.

For example, *World of Warcraft* is regularly referenced on television, from popular commercials featuring celebrities such as Chuck Norris (who, coincidentally, made it into the game proper as a non-playable character) and Mr. T, to entire shows built around it, such as the *South Park* episode, “Make Love, Not Warcraft”. There were meme’s, or pop culture artefacts that spread rapidly online, such as the haphazard Leeroy Jenkins character; and it even influenced fields of research that may have seem far removed from MMORPGs. For example, there was the Corrupted Blood pandemic, described above, that happened in *World of Warcraft*, was a virtual contagion that spread throughout Azeroth in late September of 2005 with particularly fatal effects for less experienced characters. It was first studied by Balicer in 2007 and it informed future studies on similar real world outbreaks of SARS and avian influenza.

More recently, MMORPGs as a genre has inspired and informed the production of a number of widely released films including *Player One* (2018), *Ralph Breaks the Internet* (2018), the Japanese film *Brave Father Online: Our Story of Final Fantasy XIV* (2019) and, *Warcraft* (2016), which was based on *World of Warcraft*.

## THE ASSUMPTIONS OF A GENRE

The success of *World of Warcraft* spurred an explosion of titles, many of which aped the *World of Warcraft* gameplay but attempted to tap into other existing popular fictional universes hoping to similarly capture the imagination of their audiences in the same way that Blizzard had. These efforts were not always successful.

Sony Online Entertainment released *Everquest II*, also in 2004, the successor to one of the most successful titles of the previous generation of MMORPGs, *Everquest* (1999). It never reached the peaks that *Everquest* did, only achieving a maximum of 325,000 subscribers soon after its release compared to the 550,000 subscribers that *Everquest* had in just the previous year (Ivory, J.D., 2012).

*Matrix Online* was released in 2005 by Monolith Productions as a followup to the recently concluded *Matrix Trilogy* (Warner Bros. Pictures, 1999, 2003a, 2003b). It was shut down in 2009 with less than 500 remaining players.

*The Lord of the Rings Online* was released by Turbine in 2007 expanding the universe popularised in *The Lord of the Rings* book and recently concluded film trilogy (2003). It peaked at 570,000 subscribers in 2010 after moving to a free to play subscription model (O'Connor, A., 2013).

*Warhammer Online: Age of Reckoning* was released in 2008 by Mythic Entertainment attempting to capitalize on the long running and enthusiastic player base of *Warhammer Fantasy* (Games Workshop, 1983). Despite winning numerous awards, it was shut down in 2013, as well as its planned successor *Wrath of Heroes* (O'Connor, A., 2013).

*Star Trek Online* was released by Cryptic Studio in 2010 and was developed in anticipation of the release of, what would be, the hugely popular reboot of the *Star Trek* franchise with the 2009 film *Star Trek*. It received a middling response (VanOrd, K., 2010; Welsh, O., 2010) and just two years later it was relaunched as a free to play title.

This slow progression towards the convergence of popular culture and MMORPGs would culminate in the 2011 release of *Star Wars: The Old Republic*. Developed by BioWare and released by Electronic Arts, it was and still is one of the most expensive video games ever created, at nearly \$250 million dollars in budget and around 1,800 actors, designers and developers working on it (Ivory, J.D., 2012).

It was critically lauded. The most popular gaming publications described it as “...stand-out, wonderfully crafted...” (Kolan, N., 2012); “...the best of both worlds with characters who not only advance both in terms of physical ability, but also express a kind of emotional identity” (Butts, S., 2012); and “...an achievement as an RPG and MMO, The Old Republic offers something bold and new...” (Augustine, J., 2011). NASDAQ analysts marvelled at the scale of the launch and expected that it would “...boost its [Electronic Art’s] top-line growth going forward...” (Zacks Equity Research, 2011). In 3 months *Star Wars: The Old Republic* had sold more than 2 million units and had nearly 1.7 million active users.

Just five months later that population had fallen by 400,000, and two months after that, Electronic Arts announced that they, too, had decided to convert *Star Wars: The Old Republic* into a free-to-play title (Electronic Arts, 2012).

Despite generating its first billion dollars in revenue nearly eight years later (Makuch, E., 2019), it never achieved the commercial success first predicted. In March of 2017, *Star Wars: The Old Republic* would bottom out at just 33,058 active players, less than a 50<sup>th</sup> of the population the virtual world started with (Industry Six, 2019).

*Star Wars: The Old Republic* would be one of the final major MMORPG titles to be released during, what could be reasonably considered a period of tremendous growth and maturity in the genre.

MMORPG population data tracked by Van Geel showed that the genre's total population had peaked in 2011 at just over 22.5 million active players, before steadily declining (Van Geel, I., 2013). More recent population data tracked by the media network Industry Six lists the total population of tracked MMORPGs at just under 12.5 million active players as of September of 2018 (Industry Six, 2019).

The success of *World of Warcraft* enticed an entire industry to create their own version of it in the hope of emulating its success. Yet, in the fifteen years since its release, no other MMORPG has come close to matching its population size and the size of its active users.

It is perhaps because of this rush to create the next major MMORPG title, and an assumption that *World of Warcraft* was a blueprint for success, that developers failed to acknowledge that *World of Warcraft* itself had a long history of influences, and went through hundreds, potentially thousands, of obstacles and trials, large and small, involving numerous technological actors, adjustments and innovations. At a conference in early 2011, just ten months before the release of *Star Wars: The Old Republic*, Greg Zeshuk, one of BioWare's co-founders, admitted as much, "It is a touchstone. It has established standards; it's established how you play an MMO. Every MMO that comes out, I play and look at it. And if they break any of the WoW rules, in my book that's pretty dumb... If you have established standards, WoW established them." (Martin, M., 2011)



The long history of where the MMORPG came from as well as the subsequent forgetting of it will be discussed later within this thesis in chapter four.

In a similar time frame the size and scope of MMORPG research also saw rapid growth. Analysis of MMORPG research by Pena et. al. (Peña, Sierra, Romero, Gutiérrez, & Echavarría, 2013) demonstrated that the most prevalent areas of inquiry between 2000 and 2009 were in the study of its systems, and the game experience. Within the research area of the game experience, the paths of inquiry were highly diverse. Some researchers saw MMORPGs as a new avenue for socialization, and exploration (Bainbridge, 2012; Boellstorff, 2008; Castronova, 2001; Nardi, 2010; Pearce, 2009; Taylor, 2006). Others explored the blurring line between virtual and real economies (Dibbell, 2006; Castronova, 2005, 2007). Research into the addictive potential of MMORPGs has also been highly visible (Caplan, Williams, & Yee, 2009; Griffiths, King, & Demetrovics, 2014; Hide, 2006; Lee, Yu, & Lin, 2007; Lin & Tsai, 1999; Ng & Wiemer-Hastings, 2005; Wan & Chiou, 2006).

The investigation of MMORPG play as product of both technological as well as human influences is lacking, however. While Bainbridge (2012), Boellstorff (2008), Nardi (2010), and Pearce (2009) did all, indeed, discuss the physical process of how one would go about beginning MMORPG play, for example, the installation and updating process, the focus was largely on their lived and virtual experience, acclimating to the virtual world and their interactions with other avatars and players, as opposed to the technological influences in shaping the way they interacted with the virtual world or “played”.

Taylor, similarly, explored her lived experience within *Everquest* in her 2006 book, *Play Between Worlds*, but in a later article, *The Assemblage of Play* (2009), she would go on to acknowledge the importance of technology in shaping MMORPG play.

Castronova's (2001) first work would mirror that of other virtual ethnographers like Bainbridge, Boellstorff and Nardi, but the majority of his work later focused mostly on the economy of MMORPGs, including their size, activity and monetary flows and how they shaped play (2005, 2007). Julian Dibbell (2006) similarly focused on elements of the economy, but rather than viewing it from a macro level, Dibbell viewed the economy through the lens of virtual currency and how it is used, exchanged and crosses the boundaries of the real and virtual. The economy and virtual currency are both non-human and, in a way, technological influences on MMORPG play, however, what Castronova and Dibbell primarily focused on was the use of these to facilitate play, as opposed to influences in their own right shaping the MMORPG experience.

Finally, the research on the addictive potential of MMORPGs was perhaps the most visible body of MMORPG studies. A number of theorists, including, notably, Caplan, Yee (2009) and Griffiths (2014) among others, argued that the incentives and environment afforded by MMORPGs, effectively turned them into potent Skinner boxes. However, these studies framed the technological influence of MMORPGs as disease-like, something that needed to be diagnosed, treated and eliminated. In essence, MMORPGs were seen as destructive before they ever got the chance to be understood for what they truly were, a socio-technological construct that shaped by both technology and the human – they do not sit apart from the researcher or players.

This is but a small subset of some of the foundational research within MMORPG studies, and it will be explored in greater detail in chapter two, the literature review.

Essentially, in much of the fundamental research that has been done on MMORPGs over the last 20 years, the focus has been centred squarely on the part of the human player within the MMORPG experience, with little attention paid to the influence of technology as a fundamental part of MMORPGs and MMORPG play.

This has been similar to the approach developers and has led to erroneous assumptions by both creators and researchers for how to best sustain and grow the population, and commercial sustainability of MMORPGs.

This thesis will make the argument that the failure of MMORPGs is because of a failure to understand both the human and technological influences that go into creating the MMORPG experience and are foundational to MMORPG play. It will be an exploration of the MMORPG and the MMORPG player as a construct that is equally influenced by technological advancement and the innovation of humans. And it will do so by exploring four key assumptions found throughout literature and evidenced by the actions and statements of MMORPG developers.

This will be done through the novel application of Actor Network Theory, which, throughout this study, it emerged as a natural choice as a framework to understand MMORPGs as a technosocial construct due to its ontologically flat nature, and the equal importance humans, and non-human actors, including technological actors, are given in trying to understand the MMORPG construct.

This is done in service of advancing the *theory of the mechanoid*, which will be discussed in greater detail later both within this introduction and in the final chapters in this thesis.

However, briefly, the theory of the mechanoid relates to a new understanding of the technosocial construction of MMORPGs and MMORPG play. Whereas, and notwithstanding the influence of Haraway (1984), a cyborg is seen as the human augmented by machines, in the context of this work, the *mechanoid*, is seen as not only as a marriage of the machine and the human, but, really, the perspective of seeing the machine, that is both the rendered virtual world, and the software and hardware that is connected to it, given equal import and tracing all the way back to the human actors supporting it through mediated interactions with the interfacing technology.

Up to this point, Actor Network Theory has been employed only sparsely within MMORPG. Firstly, by De Paoli and Kerr (2009) in their description of cheating within the MMORPG of *Tibia* (CipSoft, 1997) as a socio-technical construct. It described how cheaters, developers, and the technological actors tussled to define the bounds of “cheating” and police or evade it. And secondly, by T.L. Taylor (2009) who explored how the interfaces, specifically modifications to the interface that tracked damage, could take on a pivotal role in the co-construction of MMORPG play and group play, “We can see a complex set of relationships between not only the player and their software, but the collective use of software and the production of group practices.” (Taylor, T.L., 2009, p.336)

The other reason for the use of Actor Network Theory is that MMORPG studies are still relatively nascent as an area of inquiry. Our understanding of MMORPGs is still relatively fluid, and in its most elemental form Actor Network Theory is an unfiltered description. This

allows the reader and text to construct meaning together, rather than having it be contrived by the practitioner.

This and Actor Network Theory as both a methodology and framework will be discussed later in this thesis in chapter two.

Going back to the four key assumptions mentioned previously, the first of them is that friends are seen as an essential requirement for the success of an MMORPG. This is common across both the makers of MMORPGs, and those that study them. However, the importance placed on friends is, as will be seen later in chapter three of this thesis, often overstated.

Almost universally, developers have attempted to use the friendship networks of their existing player base to aid the recruitment of new players. For example, *World of Warcraft* and *Final Fantasy XIV*, both have recruit-a-friend programs, which dangle incentives such as faster levelling, free virtual currency and the prospect of obtaining rare virtual items that can only be obtained through referral.

Similarly, in the academic sphere, many theorists seized on the primacy of the human actant in forming MMORPGs and constructing MMORPG play early, and have continued to do so to this day.

The first was Turkle (1994) who, when interacting with the progenitor of MMORPGs, MUDs (or Multi User Dungeons), which were text based, multiplayer dungeon adventures, saw them as vehicles to expand social reach. She described technology as directly servicing the

expansion of the human capacity for friendship. In 1998, Richard Bartle, makers of one of the first MUDs, *MUD1* (Bartle R., Trubshaw, R., 1978) argued that MUDs were a unique society of their own, and that players, masked by their avatar nom de guerre, were able to develop deeper feelings of attachment because they felt more uninhibited.

In more recent research, Jakobsson and T.L. Taylor (2003) based their argument that the notion of sociality was central to the success of the MMORPG player base, on their personal shared experiences in *Everquest* (1999). They further argued that the current formalized methods of player groupings through constructs such as “parties”, “guilds”, “clubs” and “clans”, didn’t go far enough to facilitate the full range of human interaction that needed to be developed to sustain them.

However, not every theorist subscribes to the importance of friendship. In fact Yee, Ducheneaut, Nickell and Moore (2006), some of the most widely read theorists in MMORPG studies, concluded that, despite the importance typically placed on social interaction within MMORPGs, when looked at more thoroughly, it is, perhaps a misnomer to consider these interactions as friendship forming. Rather, social interaction in MMORPGs was more about being able to have audience to either perform feats in front of, discuss those feats or engage in chitchat.

This matched the earlier conclusion of Ducheneaut and Moore in 2004. Their investigation of interactivity within *Star Wars Galaxies* (Daybreak Games, 2003) found similar short termed, transactional social interactions.

This thesis finds, like Ducheneaut, Nickell, Moore and Yee (2004, 2006), that friendships, despite being referenced by eight of the fifteen participants in this study, were similarly, short termed, unstable and transactional.

For some they found themselves drawn to the fantastical nature of the virtual world, and the avatars within it, as opposed to the other players. For many others, friends were actually an impediment to MMORPG play. Those that had predicated their play on the play of others had, perhaps, the highest likelihood of quitting,

“Some of my friends stopped playing and it was just again down to me and a different one of my friends playing. [...] I just felt that the game was kind of becoming a responsibility rather than having fun playing.” (Interview with Admike, 2016)

This is but a brief account of how the focus on human friendship by both academic and commercial actors within MMORPG studies and production is flawed, and these perspectives fail to take into account the important influence of technology. How the importance of friends and friendship have been exaggerated, and how we can reshape the understanding of the significance that these hold in MMORPGs and MMORPG play, will be discussed in greater detail in chapter three of this thesis.

This brings us to the second assumption that will be discussed in this thesis, that the human and technological are distinct and separate in MMORPG play, leading to the makers of MMORPGs using technology to entice the human player. This is done by shortcutting the not un-arduous process through which a player would typically acclimate and build mastery; trivializing the activities not done with others, otherwise known as “solo-able” content; and

providing perks such as the ability to skip 30 levels, as is the case in *World of Warcraft*. This in an effort to direct the player's focus on the "end game" or "elder content", which, coincidentally, is also typically the most complex content in the virtual world, requiring a high amount of skill and co-ordination between team members.

Not unlike the rush to ape *World of Warcraft* spoken of earlier, the rush to shepherd new players into the end game means that no time is given for that person to acclimate to the MMORPG to master new skills; similarly no time is given for the environment to mold that person's MMORPG play. But that human impatience leads to undesirable consequences. Untested and only lightly invested, any challenge then is likely to overwhelm, introducing a commercial consequence of churn.

The perils of a hastily built construct of MMORPG play, separating from the influence of technological actors within the MMORPG world, will be discussed in greater detail through the long history of how MMORPGs themselves came to be constructed in chapter four.

The third assumption that will be discussed is the assumption that the constructs of MMORPG play can be categorized into relatively straightforward taxonomies.

There are two commonly accepted models of player taxonomy. The first and most commonly cited is Richard Bartle's (1996), which he first outlined in *Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs*.

In his model of player taxonomy he outlined four player types: killers, achievers, socializers and explorers. Bartle stated that this model arose from a six month long debate in *MUD2* (a



Multi-User Dungeon that he oversaw at the time) (Bartle, R., 1985) and that he had never tested it, nor did he ever intend to, leaving it up to other MMORPG theorists to debate about its validity amongst themselves. Nevertheless, it remains largely unchanged, and continues to strongly inform contemporary games design studies (Zenn, J., 2017; Kumar, Herger & Dam, 2018).

The second and less commonly accepted model of player taxonomy, possibly due to its complex multidimensionality, is one that was formed by Nick Yee as part of his study on player motivations (Yee, N., 2006). But, despite its complex nature, at its most simple, it can be divided up into three main components: Achievement, Social and Immersion. Yee broke these down further into another ten sub-categories, or variants of the main components.

Importantly, Yee's taxonomy of player types was *still* an evolution of Bartle's model and so, despite its expanded nature, it was still subject to the same limitations. He did eventually come to the realization that subdividing players into types was counterproductive, "People are never just one thing... If it's ok for me to like both ice-cream and French onion soup in real life at the same time, why can't I be both an Achiever and Socializer in an MMORPG at the same time?" (Yee, 2006, p16-17).

Yee was hinting at what will be explored in this thesis: that every player within an MMORPG, and every style of play is interwoven, continuously evolving and complex. No two players or styles of play are truly alike, and, because of this, there is no taxonomy that can be meaningfully applied.

Take for example, two of the participants within this study. One had a style of play that was effectively the management of two distinctly different avatars and their personalities. Another found the puzzle of deciphering and then exploiting combat algorithms was central to their construct of MMORPG play.

This and further instances of MMORPG play that doesn't conform to the taxonomies provided by Bartle and Yee will be elaborated upon in chapter five.

The final assumption that will be discussed within this thesis is the idea that one's MMORPG play starts when you enter the virtual world and ends when you leave it.

An interesting finding that emerged throughout the course of conducting research was that the moments that are eventually discovered to have been pivotal to a player successfully starting their construct of MMORPG play can often come from years in the past.

For many of the participants within the study, many years of experience with previous titles within the same franchise that the research site, *Final Fantasy XIV: A Realm Reborn* (Square Enix, 2013), was allowed them to take up MMORPG play.

For others, this thread of connection to the past wasn't so apparent. For example, that pivotal moment for one participant was when she got her first console, a Sony PlayStation; for another it was being employed as a contractor in the games development industry who began his MMORPG play as a form of research; and finally, even less apparent, for one of the participants it was the experience of being home schooled.

On the other side of MMORPG play, Celia Pearce (2009), notably, demonstrated that it can exist even after the virtual world is closed down. In *Communities of Play* despite the closure of *Uru: Ages Beyond Myst* (Microsoft, 2003), Celia Pearce described the migration of its inhabitants to *There.com* (Makena Technologies, 2003) creating an “Uru Diaspora” that continued for another six years, which led to another relaunch, and then subsequently going through another exodus after the relaunch itself was also closed.

Just in the brief account above, it can be seen that where MMORPG play starts, and ends extends well beyond the “logging on” and “logging off”. For some it can stretch years or even decades before and after the existence of the MMORPG itself. This reimagining of what it means to be a sustainable MMORPG will be elaborated on further in chapter six.

Finally, and after considering the assumptions made, and the discussion of them, this thesis will conclude by advancing the *theory of the mechanoid*, which is a new visceral way of understanding socio-technological constructs. That the mechanoid cannot be seen as such without the human connected to it, it would simply be a mass of wires, circuit boards, and software instructions. Similarly, a mechanoid cannot exist with simply the human inhabiting it unconnected to and uninfluenced by any technology. Neither can be split from the mechanoid, both are intrinsic to the mechanoid. The same can be said of the construct of MMORPG play.

As is the nature of all works that involve Actor Network Theory, the aim of this thesis is not to provide something definitive. Rather, the hope is that this thesis reorients the way that the MMORPG and MMORPG play are viewed. That this leads to new and innovative approaches to investigations, which uncover previously unseen influences, and that we are

able to return to the way some early MMORPG theorists viewed MUDs, with a sense of “newness”. Instead of seeing play that falls outside of accepted taxonomies as aberrant, viewing it as valid, unique and a construct that is valuable in further informing us on the countless permutations that MMORPG play can evolve into.

It is only through this necessary passage point that we may be able to collectively question the truth of our conceptions on the MMORPG and MMORPG play itself.

## CHAPTER ONE: LITERATURE REVIEW

As was previously discussed, the MMORPG player base has been in a state of decline since 2009. Reasons for this have yet to be clearly defined. Part of the problem has been that MMORPGs are densely packaged networks that have yet to be critically unpacked.

This chapter aims to draw a more complete picture of research done within the field of MMORPG studies, which has, largely concentrated on the questions of why people play and people become engaged so far. Its purpose is not to provide an exhaustive list of summarised references, rather to define broad subsections that MMORPG studies has slowly separated itself into over the course of the last two decades, and major contributors to these subsections.

Academic interest in MMORPGs first emerged in the mid-1990s with early research occupying the fringes of media theory and computer science. The most prominent scholars of this period were Sherry Turkle, Richard Bartle, and the duo Pavel Curtis and David Nichols who began Palo Alto Research Centre's (PARC) long standing association with MMORPG research.

Bartle and Turkle both explored theories in the construction of the MMORPG "player", while Curtis and David experimented with modes of communication in virtual environments, comparing them to real world interactions (1994).

More specifically, and building on her work in *The Second Self* (1985), Sherry Turkle investigated Multi-User Dungeons (text based multiplayer virtual environments, otherwise known as MUDs) in terms of identity construction, and the malleability of human behaviour

when interacting with technology. She argued that the line between the human and the artificial had become vague, and that virtual representations of the self had real implications for the physical representation of the human self. Consequently, Turkle saw the changeability of virtual identities as potentially therapeutic for the player inhabiting them, but Turkle also saw that this gave rise to some peculiar consequences. She observed heightened aggression in virtual interpersonal conflicts; she anticipated problems occurring from the misrepresentation of the self, and argued that differentiating between real and virtual crimes would become more problematic then and into the future.

Turkle's ideas regarding the human-virtual interaction continue to be evoked in modern debates. In contrast, Richard Bartle's (1996) early work has, in many ways, been superseded, although it is still regularly cited. Arising out of attempts by MUD players under his oversight to classify themselves, Bartle's most significant early contribution to MMORPG studies was his taxonomy of player types. There were four player types constructed out of a matrix of two binary abstract concepts: *Acting versus Interacting*, and *Player versus World*. These described the types of activities player types enjoyed, and how they interacted with other players and the environment. The four player types Bartle termed *Achievers*, *Explorers*, *Socializers* and *Killers*.

*Achievers* described through Bartle's matrix were "Acting *on* the World", in other words, they were interested in imposing themselves upon the environment. *Explorers* were more interested in experiencing the environment or "Interacting *with* the World". *Socializers*, as their name suggests, "Interacted *with* other Players", while *Killers* were more prone to imposing their will on others, or "Act *on* other Players". This will be discussed in greater detail in Chapter Five: Players are Snowflakes.

Bartle's theories were implemented by Andreason and Downey in 1999, in what is now referred to as the *Bartle Test of Gamer Psychology*. A questionnaire with thirty items of binary choice, it has since had over 800,000 participants, and continues to be a widely accepted method of classifying player archetypes within MMORPGs. However, it has not been without its detractors.

John Radoff (2011) criticized the dichotomous nature of Bartle's theories and Andreason et. al.'s test, and Nick Yee (2004) advanced an alternative model arguing that component attribution based on motivation factors was a better method of defining the player than Bartle's characterization framework. Bartle's taxonomy also suffered from errors in research methodology, and sweeping assumptions from its inception. This included a limited and narrow sample size (fifteen leading members of a single MUD from a single server), and Bartle's tendency to commit to absolutist conclusions with a lack of data, citing his own experience instead.

However, research conducted by Turkle, Bartle, Curtis and Nichols was centred on MUDs, which, by that point, had existed for almost two decades, and they received little academic recognition for, in retrospect, important foundational work. This was also a time when MUDs were in a state of flux. Graphical representations of MUD play were beginning to emerge with the inception of *Neverwinter Nights* (Stormfront Studios, 1991), and Lucasart's *Habitat* (1988). Later, the template for the modern MMORPG was established with the release of *Ultima Online* (Origin Systems, 1995).

It was not until the early 2000s, as the success of *Everquest* (Sony Online Entertainment, 1999) drove MMORPGs towards the mainstream, that academia began to show interest.

## EVERQUEST AND THE EARLY 2000s

The first and possibly most influential MMORPG researcher of this era (and arguably of any era) was Edward Castronova. His paper, *Virtual Worlds: A first-hand account of Market & Society on the Cyberian Frontier* (2001), catapulted MMORPGs into serious discourse amongst members of the academic community. Released at the height of *Everquest*'s popularity, the sheer weight of the compiled data from Castronova's broad economic analysis of the virtual world housed within, Norrath, was profound. He discovered that MMORPGs had transcended the traditional conceptions of frivolity within games, and, much like what was required to motivate any other economic system, the systems within MMORPGs had "...[begun] to mean a great deal to large numbers of ordinary people..." (Castronova, E., 2001, p.2).

At that time time 60,000 players were inhabiting Norrath at any one time; over 23% of the approximately 400,000 strong subscriber base spent more time working on their representative self within Norrath (commonly referred to as an *avatar*) than on paid work in their physical reality; revenue generated by *Everquest* for Sony Online Entertainment was projected to pass USD\$1.5 billion by 2004; and, the prevalence of currency trading (despite its dubious legal status) meant that the exchange rate of Norrathian currency against the US dollar eclipsed the value of several real currencies at the time, including the Italian Lira and the Japanese Yen.

Castronova's work typified the kind of research that was published during this era, at the cusp of the genre's meteoric rise to the forefront of popular culture. His observations were coloured by sheer amazement, and his conclusions, while tentative, were ebullient. He



postulated that, as methods of communication achieved higher fidelity, and virtual worlds began to naturally merge with the physical, as he had already described, it would become “... one of the most important forums for human interaction ...in that role, they may induce widespread changes to the organization of Earth society.” (Castronova, E., 2001, p.37). In essence, he saw MMORPGs as potentially being an important and uniquely networked *third place* (Oldenburg, R., 1999), a sentiment echoed much later by Ducheneaut, Moore, and Nickell (Ducheneaut, N., et. al., 2004, 2007), and Williams and Steinkuehler (Steinkuehler, C.A., 2005; Williams, D., Steinkuehler, C.A., 2006).

Surprisingly, beyond Castronova, very little (if any) research of a similar economic focus (quantitative analysis of a virtual economy) has been done since. Most of the focus within MMORPG research at this time centred on analysing and deconstructing and/or reconstructing the concept of the “Player”, building on what had already been done by Bartle and Turkle. While similar in focus, the difference between researchers of the past and the researchers that were beginning to come to the fore was that this was a generation who had the perspective of having grown up with MMORPGs – participant observers who were *native* to MMORPG culture. Two of the first to emerge of this cohort were Nick Yee and T.L. Taylor.

T.L. Taylor’s seminal work *Play Between Worlds* (2002) explored the blurring of divisions between the real and the virtual in the person, their avatar, and the combined relationships.

As a participant ethnographer in Norrath (the virtual world encapsulated by *Everquest*), T.L. Taylor documented her journey from MMORPG neophyte to her involvement with MMORPG player groups and activities, which began to extend out from the bounds of

virtuality the more deeply embedded she became. She continuously argued that this blurring not only occurred in social interactions but also through gaming conventions and spaces, distorting what could be considered a game or not, and what could be considered real or not. In a similar fashion, she argued that boundaries between differing player types were not as clear cut as originally conceived by Bartle (1996). According to Taylor, identity formation and exploration were much greater factors in determining a play style than pre-existing psychological dispositions.

Taylor also explored the complex matrix of influences and social groups that comprised the modern MMORPG. Firstly, she looked at the historical development of MMORPGs, likening the evolution of mechanics as actualizing a chain of Althusserian interpellations mirroring real world interpellative iterations. She argues that, much like a policeman hails a civilian; the game hails its players who are obligated to act on certain social cues. Over time, as more and more players are interpellated by the game, a complex network of social obligations emerges. Secondly, she was an early observer of what is now commonly referred to as *power gaming*. Briefly, she described *power gamers* as players who engaged with the virtual world as an object for statistical mastery, blurring the lines between the Bartle player archetypes. Ultimately, Taylor views them as a positive part of the social network, as she considered them essential repositories of knowledge within MMORPGs. Thirdly, Taylor expanded on her argument for blurring realities by briefly discussing emergent phenomena spawned by the interactions between MMORPG worlds and the physical reality that surrounds them. In particular she focused on the Real Money Trade (RMT, this will be discussed in more detail, later), the concept of labour within MMORPGs, and fan culture within the spaces surrounding MMORPGs. Her final conclusion was that both players and developers were equally responsible for the creation of virtual worlds. While an important contributor to the

advancement of MMORPG studies, her arguments here would not factor greatly into the explosive debate over virtual property rights that would emerge later in the decade.

However, Taylor's most detailed discussions centred on women within MMORPGs. Viewing the concept of identity in much the same way Turkle (1996) did, Taylor hypothesised that, despite being regularly marginalized by often hyper-masculine advertising, women were still interested in games of this kind for the social aspects and fluidity of identity. Taylor explained that experiences within MMORPGs were often attractive to female players as they were faced with threats that gender had no bearing on, as opposed to the real physical world, where gender biased threats were infinitely more common.

Taylor's work marked an important milestone in MMORPG research. Up to that point, both the development of and reaction to MMOPRGs was dominated by simplistic and inflated gender stereotyping. Developers tended to marginalise women by promoting hyper sexualised imagery catered to the masculine perspective. The feminist "pink" gamer movement on the other hand called for the design of games to be gender specific i.e. designing games specifically for women, implying an inherent incompatibility in the disposition of female players with the current conception of games (Taylor, T.L., 2003; Kafai, Y.B., Heeter, C., 2008). The importance of Taylor's work lay in her acknowledgment that gender was complex and fluid within the equally complex genre of MMORPGs. She called for a more informed understanding of female players by developers, while rejecting the simplistic view that females could not connect with anything within the entirety of the gaming landscape.

The only criticism, perhaps, was that Taylor's work did not stray far from the foundation provided by Turkle (1996) nearly a decade earlier, who also discussed and hypothesised the problems that had or might have emerged due to the blurring of boundaries between the real, and the virtual, and the ambiguity and fluidity of gender and identity in these environments. But Turkle was writing about MUDs in an era when persistent networked virtual environments were relatively rare, in comparison, Taylor's research was conducted within *Everquest*, a breakthrough MMORPG franchise with hundreds of thousands of active subscribers at the height of its popularity, and that point of difference the critical mass of participation provided means Taylor's work remains a core text within MMORPG studies.

Another academic who continues to be at the core of the development of MMORPG studies is Nick Yee. Yee, like Taylor, was fascinated by the *Everquest* phenomenon, and, as a psychologist, the online construction of an identity. His earliest paper discussed how a player's choice of race might affect their subsequent social interactions (Yee, N., 1999) and his later series of papers on the *Proteus Effect* would explore this in greater detail (Yee, N., 2007; Yee, N., Bailensen, J., 2007; Yee, N., Bailensen, J., Ducheneaut, N., 2009). His first major contribution to MMORPG research, though, was *The Norrathian Scrolls* (2001). It has since been revised several times between 2001 and 2005, but was the first paper to provide a large array of quantitative, as well as qualitative, data to accompany some of the findings and hypotheses of previous theorists, who, up to that point, had largely engaged in qualitative data collection.

With over 4000 participants completing over 25,000 forms over a five month period, Yee's data provided information on the demographics of *Everquest* players, their relationships both within and external to the virtual world, and the dynamics of group formation, both on a

temporary and more permanent basis (this included player groups known as *guilds* within Everquest, but this common feature has since had many different names under different franchises).

Much like Turkle before him, Yee also explored the factors contributing to virtual identity formation in great detail, particularly the phenomenon of virtual “gender-bending”.

Surprisingly, male players were significantly more likely to participate in and accept it than females. This contradicted the assertions of previous theorists (Turkle in particular) that female players were likely drawn to virtual worlds such as MUDs and MMORPGs partly due to the flexibility of gender, and the fact that challenges within these environments were gender neutral, unlike many physical circumstances. In fact, Yee found in many cases females saw gender-bending as abhorrent and the player inhabiting the avatar less trustworthy. This was clearly as much of an obstacle in virtual environments as female players may have experienced in physical environments.

This synthesis of staggering amounts of data would come to characterize the type of work Yee would eventually do along with his counterparts, Nicholas Ducheneaut, Robert Moore and Eric Nickell, at the Palo Alto Research Centre (PARC). Of particular note, and most highly cited, was Yee’s largest body of work, *The Daedalus Project* (Yee, N., 2006c). Over the course of six years, he surveyed over 40,000 players from a wide variety of MMORPGs. He would eventually compile this data in *The Demographics, Motivations and Derived Experiences of Players of Massively Multi-User Online Graphical Environments* (Yee, N., 2006d). He would also present an alternative model for classifying players on attributive motivational factors in *Motivations for Play in Online Games* (Yee, N., 2006b). Yee was highly critical of Bartle’s taxonomy of players within MUDs (Bartle, R.A., 1996),

particularly of Bartle's assumptions that a preference for one type of play suppressed others, and the fact that Bartle never (nor did he ever intend to) empirically test whether this was indeed the case. Using a factor analysis approach on the answers of 3000 MMORPG players to a forty item questionnaire based on Bartle's Player Types, Yee created a matrix of three major components comprised of ten sub-components that described player motivation factors. He described the three major components as *Achievement*, *Social* and *Immersion*. Interestingly, despite Male players scoring higher in the achievement components than female players, and female players scoring higher than Male players in the relationships sub-component of the Social Component, Yee found that age better explained these differences than gender, and that, in fact, Male players socialized as much as females, but often to different ends. It was also noted that problematic usage (those players in the 99.9<sup>th</sup> percentile of hours played per week) was often linked to pre-existing mental illness. However, despite the nuance with which Yee was able to classify player types, Bartle's model continues to be a significantly more popular method of analysing the motivations for play among MMORPG players. Nevertheless, the data generated by Yee and his PARC colleagues proved to be one of the major catalysts for the current growth in MMORPG research.

#### CONTEMPORARY MMORPG RESEARCH POST-*WORLD OF WARCRAFT*

Another major catalyst for the growth in MMORPG research was the explosive popularity of MMORPGs in the mid-2000s predominantly due to the phenomenal success of *World of Warcraft* (Blizzard Entertainment, 2003). With twelve million active players at the height of its popularity (Van Geel, I., 2012), *World of Warcraft* (often referred to as *WoW*) embedded

the MMORPG genre into popular culture and mainstream media. As the virtual began to entwine with the physical/real academics from various fields of research began to afford it more serious attention.

### *IDENTITY & COMMUNITY*

There continued to be researchers who performed the type of participant ethnography pioneered by Taylor in understanding the nature of identity and the behaviour of communities within the MMORPG environment. Three of the most prominent researchers to emerge in this period have been Celia Pearce, William Sims Bainbridge, and Bonnie Nardi.

As a games designer, Pearce had an affinity for the emergent play that sandbox environments engendered, the identity of the player in these spaces and the conception of narrative within a game environment. In her earlier works Pearce straddled the narratology versus ludology debate and commented on the meta-theoretical implications of others assertions (Pearce, C., 2005). It was only in 2006 that Pearce's own ideas began to gain traction with her book *Communities of Play: Emergent Cultures in Multiplayer Games and Virtual World* (Pearce, C., 2009).

Divided into four *books*, Pearce's work follows her involvement with multiple virtual communities stemming from her experiences with members of the defunct *Uru Prologue* (Cyan Worlds, 2003). Using her avatar, Artemesia, as the conduit through which she acted as a participant observer, Pearce focused on the reactions of her avatar compatriots (compatriots in that they all had a shared sense of cultural identity that would be akin to a national identity

(she also labels them the “Uru Diaspora”)) following the collapse of *Uru Prologue*, and their attempts to maintain contact through multiple virtual environments. The most notable facet of Pearce’s work, though, was her insistence on making clear the methodology she employed in each book. In particular, Peace developed a theoretical continuum to provide a useful means of analysing how a player’s emergent behaviour could be shaped by the affordances and constraints placed upon them by the environment’s maker. On one end of the spectrum, where content creation is predominately developer driven, she labels the world *fixed-synthetic*, an example would be *World of Warcraft*. On the other end of the spectrum, where user-created content is encouraged, she saw the world as *co-created*, an example would be *Second Life*.

All of this provides a useful blueprint for the study of communities within virtual worlds. Pearce, like her previous works concerning the narratology/ludology debate, explains that there should be no predilection for neither quantitative nor qualitative research when looking at virtual communities, although she has primarily employed qualitative research methods through her own academic body of work.

Another theorist who has almost exclusively used qualitative data in his exploration of MMORPG society and culture is William Sims Bainbridge. A theologian and sociologist, Bainbridge’s fascination with advanced technologies led him to become an avid participant of World of Warcraft and, eventually, write about his experiences.

In *The Warcraft Civilization* (Bainbridge, W.S., 2012) Bainbridge argues that *World of Warcraft*, and the world encapsulated within it, Azeroth, is an example of “Gesamtkunstwerk”, or a “total work of art”, mirroring aspects of Western society, such as



history, religion and social structures. Large emphasis is placed on the lore that contextualises the “Azerothian” society and Bainbridge, through painstakingly detailed thick descriptions and historical references, broadly describes almost the entirety of the virtual environment. He describes striking similarities in structure between religious and spiritual events and institutions within Azeroth and our physical reality and posits that the possibility of virtual “life after death” could evolve to replace the existential need that religion currently fulfils in many people’s lives. Bainbridge also sees *World of Warcraft* as a rich experiential learning environment both from a pedagogical and social ethnographic perspective. Though simplistic (Bainbridge makes immediately clear his distrust of traditional economic methodology (p.143)), he attempts to explore the economy from the perspective of a crafter (equivalent to a self-employed manufacturer of goods), including the fractious issue of gold-farming (often conflated with real money trade (RMT), which will be discussed later in this chapter, although the practice of gold-farming itself, is the act of efficiently generating a large amount of virtual currency). However, Bainbridge’s conclusion could be perceived as naïve, for although he acknowledges that it is an inadequate representation of economies of the physical world, his main contention is that the millions of participants within Azeroth might come to impact real world economies by expecting them to function similarly to virtual economies (which are largely closed economic systems).

Interestingly, Bainbridge, in his chapter regarding virtual cooperation, chose to focus on roleplay during player to player and player to non-player character interactions, their effect on larger player groups and the interfacial, technical and design barriers to full cooperative play within the parameters of role-play. Despite forgoing the more fashionable route of exploring high-level competitive play, often referred to as “raiding” (Nardi, B., 2010), that has become a trademark peculiar of many contemporary MMORPGs, Bainbridge still

provides an important contribution as one of the only theorists to have delved deeply into the nature of roleplaying in fantastical environments since Gary Alan Fine's *Shared Fantasy* (1983, 2002).

Another theorist who followed suit in producing a book-length monograph on their experiences within an MMORPG virtual world, but perhaps has been the best example, so far, of synthesizing the ideas first brought up by Bainbridge and Pearce, is Bonnie Nardi, who, in 2010, published *My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft*.

Echoing the sentiments of Castronova, Nardi suggests that in the face of increasing globalization and the disappearance of virginal cultures, virtual worlds offer humanity a new frontier for scientific exploration. Using a Leontievan activity theory framework Nardi approaches her analysis of virtual worlds in a problem-centric manner. She attempts to clarify *play* within virtual worlds, and dispel popular myths that mainstream media encumbered MMORPGs with. Using a Deweyan characterization of aesthetic experience to provide the parameters for defining the *activity* of play, Nardi attributes the success of virtual worlds such as *World of Warcraft* for its many opportunities for “performative mastery”, an idea well established within MMORPG studies (Yee, N. 2006a, 2006b; Ducheneat, N., Yee, N., Moore, R.J., Nickell, E., 2006; Steinkuehler, C., 2004), stating, “...the marriage of performance and stimulating visual experience impels players to spend long, dedicated hours engaged in activity in game worlds” (p.88). However, she is careful to avoid condemning this time-intensiveness as indicative of addiction.

Nardi, in her unique capacity as an interaction designer, also pays particular attention to the value of rules within MMORPGs. Similar to Pearce, she describes the two ends of a continuum as player-centric and designer-centric, where player-centric paradigms see mechanics as subordinate to player agency, and designer-centric paradigms afford developers authority as the primary creative force. While Nardi places herself somewhere in the middle ground, she highlights that rules created by developers are not obstacles to the Deweyan aesthetic activity of play, rather they are “...resources preserving good design...” (p.74). Here she takes a turn to existentialism, arguing that in *Second Life* (Linden Labs, 2003), despite Linden Labs giving residents almost limitless freedom on travel, creativity and interactivity, it has devolved into spaces largely dominated by consumerism and sex.

Where Nardi would make her most unique contribution, though, would be in her observations of MMORPG play in China. Nardi resists the temptation to make broad sweeping conclusions are cultural differences, rather she describes the sociality of different spaces for play, and the different perceptions of the economy regarding player participation and the economy within MMORPGs. Surprisingly, MMORPG play amongst Chinese participants, according to Nardi, is almost entirely gender neutral, or absent. She attributes this to the entrenched cultural logic of competitiveness.

Nardi demonstrated that to understand player experience researchers needed to take into account the *location* of play, *who* the person is that is initiating the activity of play, and *why* that person might be doing so. Similar to the views of Taylor (Taylor, T.L., 2008), Nardi noted that the virtual world experience does not occur in an uncontaminated vacuum. This understanding of the growing enmeshment of the virtual and the physical lead other

researchers to ponder its implications and possibilities, asking a more diverse array of questions than had been contemplated before.

### *INSIDE AND OUTSIDE THE VIRTUAL*

For the most part enquiries have been brief and exploratory. These have revolved around the idea that MMORPG societies, as relatively organic and complex microcosms of human society might provide accurate testing grounds for experimentation that would otherwise be impossible on human subjects.

Bradley and Froomkin (2004) argue that MMORPGs could provide an avenue to test the design of legislation, and more objectively inform policy makers of possible ramifications of harmonization, whether due to regional influences, lobbyists, or ideology.

Balicer (2007), and Fefferman and Lofgren (2007) all commented on the September, 2005 virtual pandemic that occurred in World of Warcraft commonly known as the *Corrupted Blood incident*, which was caused by a mechanic displayed by a new boss at the time. Upon attacking, that boss (known as Hakkar) would cast a debilitating spell on players, their pets and minions that was highly contagious and would drain health points (causing virtual death if said health points reached zero). It was supposed to have been contained within the confines of the raid Zul’Gurub, but, due to an unintended error in programming, was allowed to be carried out by pets and minions spreading quickly to highly populated areas and drastically changed gameplay. During those ten days players evacuated cities, Blizzard attempted to quarantine the areas affected, some players with the ability to, volunteered their

healing abilities, while others took advantage of the situation. All three epidemiologists noted the realism of the population response and Blizzard's attempts to control the plague, realism that Fefferman asserted could not be captured by traditional modelling (of the dispersion of infection diseases). She argued that human behaviour was simply "...very hard [to] predict." (Orland, 2008). However, Fefferman was not without her critics. They argued that the behaviour displayed by players during this period was flawed as it hinged on the fact that death was significantly less problematic in virtual environments (Smith, G., 2007). Balicer and Fefferman were also hampered in their attempts to obtain data by Blizzard's commercial sensitivity stating that World of Warcraft was "...first and foremost, a game..." (Ahmed, M., 2008).

Nevertheless, MMORPGs have shown that they have the potential to impart real benefit to the external physical world, and one of the most promising areas currently being research is in the area of education.

### *LEARNING THROUGH MMORPGs*

J.P. Gee was perhaps one of the first to look deeply at the pedagogical potential of video games in a holistic sense in his book *What Video Games Have to Teach Us about Learning and Literacy* (2003). Gee saw effective practices of learning as a product of design, and learning itself as semiotic, situated and cyclical. However, Gee's focus was largely on the individual, not touching on socially situated learning environments until the final chapter of

the revised 2007 edition, making brief reference to *Everquest*, *World of Warcraft* and Cryptic Studio's now defunct *City of Heroes* (Cryptic Studio, 2004).

The greatest advocate in the past decade for the beneficial employment of virtual worlds in education, though, has been Constance Steinkuehler. To Steinkuehler MMORPGs encapsulated much more realism than their escapist and fantastical worlds tended to evoke. She argued that success within an MMORPG is cognitively demanding. It required "...exploration of complex, multi-dimensional problem spaces, empirical model building, the negotiation of meaning and values within the relevant gaming community, and the coordination of people, (virtual) tools and artefacts, and multiple forms of text – all within persistent virtual worlds with emergent, sociological characteristics of their own..." (Steinkuehler, C., 2005, p.5)

In her earlier research she found that new players learnt through full participation in game play related activities with more experienced players who mentored along the way. Genuine expertise was developed through activity focused collaborations supplemented by information. The system itself and other players provided immediate, clear and tangible feedback, for example, failure and success might have been rewarded with death or experience points, respectively, and, less tangibly, affect social standing. Failure was relatively easy to recover from, and performing at the limits of one's current competency level not only seemed to sustain engagement, but also developed social cachet (Steinkuehler noted the desire for players to be known as *hardcore*). This, combined with socially sanctioned precociousness, the basest instinct underlying scientific enquiry, produced an effect on players that Steinkuehler observed motivated them to aggressively seek out more

complex tasks (Steinkuehler, C., 2004), in other words, players were participant-observers of each other's *performance mastery*.

She concluded that the learning practiced during gameplay in virtual worlds was contingent on the game not only as a designed object, but also as a social practice (Steinkuehler, C., 2004, p.527), that an environment conducive to learning was not solely determined by the right curricular materials, but also a matter of getting the emergent social structures surrounding the curricula “right”, as well. What she was less sure about, though, was how to leverage these MMORPGs as learning environments. That would not be advanced until 2007.

Steinkuehler was highly critical of those who attempted to draw a causal link between videogame play and falling literacy levels in the United States (Steinkuehler, C., 2007, 2011). It is perhaps this, and the nudge provided by an editorial in the New York Times (Solomon, A., 2004) that spurred her into developing the concept of MMORPGs as a *constellation of literary practices*.

She argued that interaction with even the most mundane of MMORPG spaces was an exercise in developing “literacy” as defined by the New London Group (1996) – that “literacies crucially entail sense-making within a rich, multi-modal semiotic system, situated in a community of practice that renders the system meaningful” (Steinkuehler, C., 2007, p.191). Furthermore, even when based on the restrictive traditionalist definition of literacy as the ability to read and write, Steinkuehler argued that MMORPGs, far from displacing literary practice, were, in fact, a literary practice in their own right. In later studies published in 2011 she incorporated external texts into her definition of MMORPGs as a constellation of literary practices out of which she determined there were five main types of text:

informational resources, open community discussion forums, resources for established social groups (guilds and similar player groups), resources concerning the user interface, and player produced resources, such as fan-fiction and artworks, and non-fictional resources such as tutorials and guides. These texts were densely multimodal, complex and employed academic literary practices (Steinkuehler, C., 2011, p.13). Participants of the three studies, regardless of pre-diagnosed reading ability, were able to read texts up to eight grade levels above their ability with over 94% accuracy. This was evident in struggling readers as well, pointing to virtual worlds as having the potential to be an important part of reversing falling literacy levels in the United States (and other countries with similar trends in education) (Moje, Overby, Tysvaer and Morris, 2008). Steinkuehler attributed the alarmist, reactionary behaviour surrounding MMORPGs and their effect on literacy levels to ingrained technophobia and ephebiphobia within sections of the wider community (Steinkuehler, C., 2011, p.13-14).

While Steinkuehler has largely focused on literacy when discussing the pedagogical potential of MMORPGs, her recognition of the importance of MMORPGs as *communities of practice*, that the environment learning is situated within is as important as the content of study, has also played a part in research that has focused the possibilities of MMORPGs assisting the development of social and leadership skills.

As part of the Daedalus Project, Nick Yee (Yee, N., 2006c) found that almost half of his 2804 respondents felt that they had learned either a little or a lot across four key leadership skills he had identified. These key areas were mediation and de-escalation of group conflict, persuasion, motivation and leadership. Neither gender nor whether the respondent had a leadership role in their physical lives had any major impact on the findings, rather, age was



the deciding factor: younger respondents felt that they had gained greater insight into leadership skills than older respondents.

While Yee acknowledged the potential for MMORPGs to be involved in developing complex social skills, and/or used in screening situations to determine how respondents dealt with stressful group situations as a decision maker, it would be his PARC colleagues who delved further into the implications MMORPGs social environment had on the development of social skills.

Following on from Taylor and Jakobsson's (Taylor, T.L., Jakobsson, M., 2003) observations, Ducheneaut and Nickell (Ducheneaut, N., Nickell, E., 2005), noted that, while a significant amount of learning was required to navigate the virtual environment and user interface, this was only enough to account for what many others had observed, which was the mindless and iteratively more complex repetition of tasks (what Gee (Gee, J.P., 2007, p.68) and other educators would refer to as a cycle of automatization of skills through practice). What Taylor and Jakobsson (Taylor, T.L., Jakobsson, M., 2003), and Ducheneaut and Nickell (Ducheneaut, N., Nickell, E., 2005) saw was that the additional social layer that MMORPGs introduced created an infinitely more complex experience. Players spent much more time communicating than running around and killing things and the development of social capital was as important as the accrual of experience (points) if not more so. They both pointed to quests in *Everquest* as an example. Often they were too difficult for players to complete by themselves. Hence, success was generally determined by the ability of the player to develop the social skills that would allow them to persuade others to form groups with them to accomplish tasks, to fulfil an instrumental role within the player group's matrix of responsibilities, to mediate complex and divergent agendas and to motivate the player group.

These are skills that Yee (Yee, N., 2003) had earlier outlined, and practices that are consistent with Gee's (Gee, J.P., 2003) pedagogical concept of *communities of practice*.

The later work of Sourmelis, Ioannou and Zaphiris (2017), is consistent with this. Through a meta-analysis of MMORPG literature between 2010 and 2016, they also found that, up to this point, there was a strong focus on communication within MMORPG studies. They, however, did note that there were still a number of important skills, when considering the needs of future employment, that had been understudied. Some of the interesting recommendations that they made in addressing the ability of MMORPGs to help develop, what they termed, *21<sup>st</sup> Century Skills* included formally considering MMORPGs as *Personal Learning Environments*, that is, a fluid, personally directed learning environment where players are developing skills related to information literacy as they advance their avatars; more thoroughly investigating the leadership, communication and collaboration skills developed within *expert guilds*, which Sourmelis et. al., considered as, arguably, better structured than in real life professional environments or workplaces; and, finally, Soumelis et. al. argued that there was enough potential educational value demonstrated in past studies that MMORPGs should be included as a useful tool in the matrix of evolving practice within the sector of formal education.

For the most part, academics, researchers and educators who have looked at MMORPGs and virtual worlds in detail have been in accord that they are complex social and literary spaces, which have the potential to significantly contribute to richer learning experiences. However, not all facets of MMORPG studies have been as uniformly positive as in the area of education. There have also been the much more public, controversial and divisive matters of virtual property rights and the concept of MMORPG addiction.

*TWO CONUNDRUMS: VIRTUAL PROPERTY AND VIRTUAL ADDICTION.*

MMORPG addiction is considered a niche of Internet addiction. As such, much of the research done in this area has hinged upon the work of Kimberly Young. Young's framework for evaluating Internet addiction was first developed in 1998 (Young, K.S., 1998, p.237-244) by adapting the model for assessing pathological gambling, with diagnosis determined by a brief eight item questionnaire. In part of her findings Young determined that MUD players had the highest ratio of dependant to non-dependant players (28% of respondents reported they were dependant on MUDs, while only 5% said they were entirely non-dependant) (Young, K., 1998) although the granularity of the rest of the study did not get finer than a distinction between dependants and non-dependants. Despite this, Young's findings were seized on by theorists seeking a causal link between MMORPGs/MUDs and addiction, most notably by Ng and Wiener-Hastings (2005).

Where the idea of MMORPG addiction gained most traction, though, was in Taiwan, particularly through the works of Wan and Chiou (2006a, 2006b), and Hsu, Wen and Wu (2009). Both groups of researcher's works stemmed from the government sponsored study published by Lin and Tsai (1999) who determined male adolescent players were most susceptible to Internet addiction, alleging that their dependence on the Internet was augmented by the tendency to seek out pleasurable sensations, and, thus, suggesting a link between the practice of addiction and chemical addiction. Lin and Tsai's work legitimized the moral panic surrounding the increasing prevalence of the Internet and this mindset in many Taiwanese has largely continued today.

Wan and Chiou's original hypothesis was that addiction through MMORPGs could be explained by seeing MMORPG play as a vehicle through which players could fulfil the Maslowian hierarchy of human needs, and achieve a "flow state"(Wan, C.S., Chiou., W.B., 2006a), in other words, achieve self-actualisation and transcendence of identity through a continual state of optimal experience. However, in the two studies they conducted, Wan and Chiou found that participants classified as addicts according to the *Internet Addiction Scale for Taiwanese High Schoolers*, developed by Lin and Tsai (1999), and peculiar to Taiwan, did not obtain a high level of flow experience, and, consequently, flow state could not explain addiction. They also found that, while compulsive use did alleviate dissatisfaction, it did not promote satisfaction amongst players classified as addicts (Wan, C.S., Chiou., W.B., 2006a, p.323).

Not satisfied with the inconclusive findings of their original quantitative studies, Wan and Chiou immediately launched a qualitative study (Wan, C.S., Chiou., W.B., 2006b), interviewing ten subjects who spent more than 48 hours per week within MMORPGs. Based on the data collected from the subjects they found four major needs that MMORPG filled within the subjects: entertainment value, as an emotional coping mechanism, the provision of challenges (*performative mastery*), and an avenue for escapism. They also asserted that it was likely most of the subjects interviewed were in a mentally depressed state, had a poor perception of their physical self-image, and saw MMORPGs as an anonymous way to achieve a sense of control (Wan, C.S., Chiou., W.B., 2006b, p.765).

This was somewhat contradicted by Hsu, Wen and Wu (Hsu, S.H., Wen, M.H., Wu, M.C., 2009), however. Out of a total matrix of eleven factors, they determined the factors of "challenge", "fantasy", and "control", three of the factors Wan and Chiou explicitly referred

to in their second study, as well as the factors of “competition”, “cooperation”, and “recognition” poorly correlated to a high likelihood of MMORPG addiction (as defined by the metric outlined by Lin and Tsai (1999) referred to above). Hsu et. al. then argued that the onus was on developers to create MMORPGs that minimized player’s exposure to factors that they found did correlate to a high likelihood of addictive behaviour: “rewards”, “community”, “belonging and obligation”, and “role-play”, which, of course, would mean taking the MMORP, out of MMORPG (Hsu, S.H., et. al. 2009, p.996-998).

Both Wan and Chiou’s, and Hsu, Wen and Wu’s conclusions are problematic, however. Their studies had narrow subject selection criteria and both research teams laboured under the view that MMORPG play led to dependence as a priori (volunteers were between the ages of 16 and 24 in Wan and Chiou’s first study, gender was not divulged (Wan, C.S., Chiou., W.B., 2006b, p. 319). Volunteers were aged between 18-25 in Hsu, et. al.’s study, and were overwhelmingly male (73.4%) (Hsu, S.H., et. al. 2009, p.994)). There have been few counterpoints to this. One of them was the work of Lee, Yu and Lin (Lee, I., Yu, C.Y., Lin, H., 2007, p.212-213), who acknowledged that the phenomenon of *Internet addiction/dependence* was a complex interplay between usage habits and real/physical situations; although the scope of their study limited the amount of analysis they could perform.

Amongst Western academics the perception has been vastly different. The most commonly cited study was authored by Ng and Wiemer-Hastings (2005). To them, although it was clear that MMORPG players spent significantly more time playing than those who primarily played single player games, much of that play was concentrated on the social aspects of the MMORPG, which many found more pleasant and satisfying than the physical world.

However, players did not seek to improve their self-esteem through MMORPG play, nor did they suggest they would get anxious from abstaining for one day. This ran counter to the assertions of Wan and Chiou (2006b), and would seem to suggest that on the whole MMORPGs did not elicit patterns of usage as to indicate addiction. Rather, Ng and Wiemer-Hastings repositioned the argument and suggested that, MMORPG players simply had an alternative conception of what it was to socialise virtually, and that if MMORPGs did not exist they would likely simply engage in online social behaviour on a different platform.

While Ng and Wiemer-Hastings rejected the notion of MMORPG addiction, more recently MMORPG studies heavyweights Scott Caplan, Dmitri Williams and Nick Yee (2009) did acknowledge the issue of problematic Internet use (PIU). Using a combination of self-reporting surveys and data collected from the servers of *Everquest 2* (Sony Online Entertainment, 2006), the first time that raw data has been released by the developer of a large scale commercial MMORPG (although CCP UK regularly releases economic data from its flagship MMORPG franchise, *EVE Online* (CCP Games, 2003)), Caplan, Williams and Yee determined that, although the reasons for playing MMORPGs, coupled with the amount of time spent playing an MMORPG were statistically significant factors, they were actually very small contributing factors to the manifestation of PIU. They found overwhelmingly that the prevalence of PIU was more strongly associated with a participants psychological profile, and amount of time spent simply being online, with perceived loneliness being the single most influential predictor of PIU. Caplan, Williams and Yee argued that emphases on internal MMORPG related factors distracted from the more fundamental issues that most strongly correlated to PIU and were external to MMORPGs (Caplan, S., Williams, D., Yee, N., 2009, p.1318).

However, discourse surrounding MMORPG addiction has largely remained muted and fragmented, partly due to the opposing arguments separated into different markets of ideas, and partly because the positive sentiment surrounding MMORPG studies, especially amongst Western academics, has relegated discussion regarding addiction to near taboo.

At the other end of the spectrum the most highly contested area of research within MMORPG studies for the last decade has continued to concern virtual property rights. It is a debate unique to MMORPGs due to the ontological difficulties defining what property *is* within virtual environments, and has polarized into two opposing, but equally and (currently) legally valid camps. On one hand developers see virtual environments in their entirety as bits of code, and subject to their ownership under End User Licensing Agreements (which are also created by developers). On the other hand players see virtual chattels under their virtual control as tangible assets and End User Licensing Agreements (hitherto known as EULAs) as contractually unfair, and overly onerous. Amongst the confusion and debate, trade in virtual property, sometimes referred to as the *Real Money Trade* (RMT) has become a burgeoning grey market. Figures are difficult to assess due to its questionable legal status, but as an indicator, the largest China-based virtual e-commerce platform, 5173.com, reported a trading volume of over USD1.37 billion for 2007 (Xiang, Y., Guo, L., 2013, p.2).

Lawrence Lessig (Lessig, L., 1999, p.9-13) was one of the first to note the ambiguous nature of virtual property when he documented a protracted dispute over a virtual dog and its' unfortunate contact with a neighbour's deathly poisonous flowers in a MUD called LambdaMOO (Curtis, P., 1990). Later, Raph Koster was one of the first to take a somewhat complicated position on the matter which he explained in *Declaring the Rights of Players* (Koster, R., 2006). Koster did not outline his philosophical foundations when he referred to

two “theories of rights”: the theory that rights were not intrinsic, but, rather, decided by the cultural norms of a populace, and the theory that rights were intrinsic to all people, regardless. He attributed each theory to both perspectives of the virtual property debate, the first to developers and the latter to players. Though he was careful to state his reluctance to take either side, Koster took the step to extricate the concept of the *avatar* from either the control of developers or players, rather he treated it as a separate entity with its own set of rights and responsibilities, and in that way, oddly enough, came to a position that lay closer to advocating rights for players, than not. Koster recounted a rancorous response from fellow developers upon the release of the first *A Declaration of the Rights of Avatars* (Koster, R., 2000). He later reworded the document to conform to the perspective that it would make retaining a player base easier, and while the content was largely the same, developers were that time, much more accommodating of such reforms, although what Koster had previously referred to as “rights” had been transformed into the weaker “code of conduct”.

Koster had trouble defining the “player”, “developer” and “avatar”, and experienced firsthand the difficulty in dealing with the loaded concept of “rights”. These conflicted conceptions have remained largely unresolved today despite many theorists calling for a resolution, some, calling for compromise, as the status quo had become untenable (Slaughter, J.B., 2008; Castronova, E., 2006; Fairfield, J.A.T., 2005; Blazer, C. 2006; Westbrook, T.J., 2006). However, the most influential voices (including players and developers) within this debate have remained steadfast.

Lastowka and Hunter (Hunter, D., Lastowka, F.G., 2003, 2004), were two of the first to define and advocate player property rights, and, arguably, started the current contest of ideas. They justified the significant real value of virtual property based on three major normative



theories that concern property rights. Under Lockean theories of property, they argued that a player was entitled to limited property rights within virtual worlds, much like the rights they would have been afforded over chattel in physical reality, and that the Lockean proviso was irrelevant in such environments. Regarding Hegelian personality theories on property, Lastowka and Hunter asserted that conditions within virtual worlds inherently fulfilled the theory's requirements, as it had been long accepted that avatars, their possessions and actions were inextricably linked to a player's sense of *self*. Also, while Lastowka and Hunter rejected Bentham's Utilitarian account as a means to allocate virtual property rights, they did accept its value in justifying the creation of said virtual property rights. Finally, Lastowka and Hunter predicted that, as virtual and earthly realities became more entwined, and as people started to use virtual spaces for work education and socializing, along with play, it would become increasingly likely that courts would reject the punitive restrictions many EULAs placed on the interests of players, and that proving the legitimacy of a EULA in their current form would become a much harder thing to do.

This is a position also taken by Slaughter (Slaughter, J.B., 2008), who saw neither current property law, nor current contract law, able to effectively govern virtual property. He argued that the best solution would be an amalgamation of both laws that took both stakeholders into account, a process he termed *virtual easement*. Slaughter acknowledged that this would have to overcome some challenges in implementation, however. For example, virtual worlds and MMORPGs are transnational by their very nature, and, hence, Slaughter argued, they would also require a transnational response. However, due to geopolitical complexities surrounding global, or even regional, legislative harmonization, he saw this as an unlikely scenario. Nevertheless, Slaughter appreciated the great economic potential of currently encumbered virtual worlds, and therefore, endorsed a move toward a more balanced attribution of virtual

property rights. Oddly enough, this essentially utilitarian position was partially rejected by Lastowka and Hunter, although it was supported by another early proponent of a more egalitarian distribution of virtual property rights, Josh Fairfield (Fairfield, J.A.T., 2004).

While never achieving the visibility that Lastowka and Hunter received, Fairfield did much more to attack the fundamental arguments of those who rejected virtual property as a concept. He argued that the standard arguments were unconvincing; that control of virtual property was still possible without prohibiting private property rights; that commodification was a non-issue as virtual objects were commodified from their inception; and that, far from threatening online communities, Fairfield argued that prohibiting the sale of virtual properties unfairly locked players into an environment they possibly felt uncomfortable within.

It is likely that Fairfield's arguments were directed at the first to see the concept of virtual property and the rights associated as destructive, Richard Bartle. Bartle (Bartle, R.A., 2004) railed against what he labelled as commodification following the virtual trade experiences of Julian Dibbell (Dibbell, J., 2004) in *Play Money*. He asserted that the relationships players engaged in and around MMORPGs were fundamentally non-commercial and that any allowances for commercial behaviour could only be sanctioned and actualized by that developer (as vendor).

Bartle formulated five key *pitfalls of virtual property*. He rejected the notion of virtual property essentially on the grounds that it would break the bounds of the *magic circle* (Huizinga, J., 1938) surrounding MMORPGs, and that EULAs were the legal structures that held these boundaries intact, restricting the distribution of property rights to end players, hence arguments otherwise were philosophically or legally invalid. This was, of course,

assertions based on the assumptions that the *magic circle* surrounding MMORPG play was non-porous, long dismissed, most clearly by Taylor's (Taylor, T.L., 2002) work in *Everquest*, and that EULAs were incontestable, a legal fallacy. The other reasons Bartle presented to discredit the concept of virtual property were that developers would be encumbered with the responsibility to maintain the value of player's virtual property, and that players would resent them if they did not do so. However, as Fairfield (Fairfield, J.A.T., 2004) pointed out, much of Bartle's arguments were reactionary, simply unfounded and/or buttressed by weak reasoning and poor justifications. Bartle's sentiments, though, were supported by other theorists who put forth much more reasoned arguments against the entrenchment of virtual property.

Castronova (Castronova, E., 2004) acknowledged the porousness of the magic circle that surrounded MMORPGs; however, he argued that the legitimization of virtual property would only serve to weaken the circle further. He posed the question, if virtual property was to be governed by common law, then in what jurisdiction should it apply, and what further impositions would these jurisdictions apply? Castronova, in fact, argued for the strengthening of EULAs so as to maintain virtual worlds as spaces of play, and *net neutrality*, arguments, which he packaged into the concept of "the Right to Play". These were much the same arguments presented by Balkin (Balkin, J.M., 2004) and Dibbell (Dibbell, J., 2003); that EULAs, while far from perfect, were currently the only tools preventing judicial and governmental interference.

More recent discourse surrounding virtual property rights has turned to the EULAs themselves. In the context of MMORPGs, EULAs have never truly been contested in a court of law (Dibbell, 2006, p.138-139), but legal theorists such as Radin (Radin, M.J., 2000) and

Meehan (Meehan, M.M., 2006) suggest that if EULAs were to be subjected to scrutiny in a court of law they would likely be found invalid on the grounds of procedural and substantive unconscionability. They argued that the players adhering to a EULA were unlikely to have read or understood it; that it was likely that developers would have engaged in thousands more EULAs than players; that it was almost certain that players had no negotiating influence on the formulation of a EULA; and, that the terms were so onerous that they were unlikely to be the result of buyer's choice (Radin, M.J., 2000, p.1149).

Meehan, instead, suggested the separation of the often conflated virtual representation of properties, and their underlying code and hardware, and distributing rights accordingly, a concept that Meehan referred to as the "protection of bits in context" (Meehan, M.M., 2006). This closely aligned with the arguments of Slaughter (Slaughter, J.B., 2008), and his concept of "virtual easement".

## WHAT WE KNOW ABOUT WHY PEOPLE PLAY MMORPGS.

The body of research within MMORPG studies has grown rapidly since the mid-90s thanks in a large part to the work of the academics discussed previously, and whose views continue to shape the evolution of continued research. However, since 2011 where the number of active players peaked at just over 22.5 million users, it has been slowly declining (Van Geel, I., 2012). Industry Six now lists the total population of MMORPG players at just under 12.5 million active players as of September, 2018. While academics have continued to debate the

social, pedagogical, economic and legal implications of virtual worlds, few have sought to ask why people play or leave an MMORPGs.

While the concept of players leaving online services, typically termed *churn*, is not a new one, Richard Bartle (Bartle, R.A., 2004, p. 142-3) was the first to recognize it as an issue within MMORPGs, albeit, at the time, not a major one. He also recognised the difficulty of obtaining data relating to churn, as it could be seen as commercially sensitive information. Bartle's perspective was informed by his role as a MUD administrator and argued that successful, established virtual worlds should aim to have churn rates of under 5% per month, citing his own experience with *MUD2*, which, in 2003 had a churn rate of approximately 4% per month (Bartle, R.A., 2004, p.143). However, in cases where churn was not so easily controlled, he emphasised that attracting new players was of greater importance than the retention of existing players, citing the success of *Everquest* (Sony Online Entertainment, 1999), which at the time had a churn rate of approximately 12.5% per month.

However, the landscape of MMORPG play has changed dramatically since, and the argument for prioritising the acquisition of new players has become considerably weaker. Jaideep Srivastava, along with Jaya Kawale and Aditya Pal (Srivastava, J., et. al., 2009) were instrumental in first attempting to model churn prediction within MMORPGs, recognizing that retaining existing players was not only more economically sound than attempting to attract new ones, but that the failure to retain existing players negatively influenced the churning intentions of their neighbours, ironically, based on 6213 data points obtained from *Everquest II* (Sony Online Entertainment, 2004) in the month of August, 2006. Using a social influenced based approach, network analysis showed a cascading/energy-propagating effect when comparing a player's probability of churning versus the number of neighbours who had

churned, from a base probability of approximately 19% per month when two or less neighbours had churned, to an elevated probability of approximately 33% per month when 12 neighbours had churned (Srivastava, J., et. al., 2009, p.425). This was only part of the data analysis that they published, but is most pertinent to the aims of this thesis.

A later paper that more explicitly engaged with the question of players leaving MMORPGs was co-authored by the team of Debeauvois, Nardi, Schiano, Ducheneaut and Yee (Debeauvois, T., et. al., 2011) aptly titled *If You Build It They Might Stay (Retention mechanisms in World of Warcraft)*. From the population of *World of Warcraft*, the most popular MMORPGs of the last decade (Van Geel, I., 2012), 2865 players voluntarily participated in a series of surveys and were grouped according to the attributive model of player types based on motivation factors developed by Yee (Yee, N., 2006b). While emphasis was placed on player retention in this paper, of particular note, especially pertinent to the aims of this thesis, was the percentage of people who had, during the course of the study, stopped playing for a period of time, what the researchers referred to as the *stop rate*. On the whole, the stop rate was significant at 77% (of players within the study), 14% of which had stopped for at least a year (which included those that had left altogether). Importantly, they found that various external influences contributed to the likelihood of a player stopping, and players from different backgrounds, at least on a very broad level, had different stopping tendencies. Players from East Asia tended to play more hours per week, but were significantly more likely to stop than their Western counterparts. Those who self-classified themselves as *hardcore* played almost twice as many hours per week than those who self-classified themselves as *casual* (Debeauvois et. al. described *casual* players as players who preferred ease of play, as opposed to *hardcore* players who sought efficient strategies to combat challenges) and they had a stop rate significantly below the mean. Formalized social

groups, such as guilds (as was the case in World of Warcraft), were also an important factor in affecting a player's stopping tendencies. Players not in a guild were more likely to stop play than those within one, and this difference was even more pronounced when compared to players who led these guilds. This would seem to suggest social relations within virtual worlds were a major determinant of one's stopping intentions, but, oddly, when the researchers looked at more intimate social relations, such as players who had either made new friends or partners, and that ended up meeting them outside the virtual world, this was not the case. One group they noted that were often overlooked by other researchers (although Pearce (Pearce, C., 2009) is one who did a great deal of work with them) were those aged over 45. Players classified as such exhibited the lowest stop rate of any player group identified (53%).

What should be noted, though, in regard to the researcher's measurement of *stop rate* within such a monolithic virtual environment, is that Blizzard, as the developers for World of Warcraft, had significant resources with which to continually release new content and promote it effectively. This is a capability that most other MMORPG developers do not have, and still do not share. What was not explored was whether the infusion of new content was a significant determinant of player's intentions of returning following a period of stoppage and would they have returned at all if content was not changed so drastically. This new content could be in the form of, often, freely downloadable patches that augments existing content, or purchasable expansion packs that drastically changed or added to existing content.

Ultimately, Debeauvois et. al.'s findings were inconclusive. What was determined was that the reasons for a person to stop playing were varied, often unexpected, hard to determine, and for reasons not necessarily confined to the virtual.

Another important paper was one that was authored by Wu-Chang Feng, in conjunction with CCP Game's David Brandt, and IBM's Debanjan Saha (Feng, W.C., Brandt, D., Saha, D., 2007). It looked at the long term trends in player population behaviour within the space MMORPG, *EVE Online* (CCP Games, 2003) over a period of almost three years. What they found was also significant and similar to the results obtained by Debeauvois et. al (Debeauvois, T., et. al., 2011). A month after the release of *EVE Online*, 30% of the player base had stopped participating. Within 18 months 70% of the original player based stopped, and newer players exhibited less intention to continue over time. Within 24 months, three out of every four new players would leave within a month of first participating. Introducing new content was found to have a limited impact on existing players. Feng et. al. postulated that the inability for CCP Games to retain players over time was due to the persistent nature of the virtual world, which allowed a stratified power structure to emerge, "...new players often come in at a severe disadvantage to those who have played from the game's launch ...virtual wealth and power, the disparities in ability, often discourage new players from continuing to play..." (Feng, W.C., et. al., 2007, p.21). This was likely exacerbated by the uniquely competitive and laissez-faire nature of the EVE Online environment, where new players could be pressured into acting on other, more powerful player's behalf, in the process experiencing real losses in wealth while protecting those interests. However, the researchers failed to provide any evidence to confirm their hypotheses that socio-economic disparities created such pressure as to cause new players to leave, or even whether this socio-economic disparity existed. Despite this, Feng et. al.'s (Feng, W.C., et. al., 2007) findings were significant for the fact that, firstly, this was the first paper that analysed big data retrieved directly from a developer's infrastructure, and, secondly, the results obtained were consistent with Debeauvois et. al.'s (Debeauvois, T., et. al., 2011) findings that would seem to indicate this problem transcends individual franchises, and concerns a fundamental flaw in the way



MMORPGs are conceived, which have become highly genre-fied and derivative for the last two decades (Bartle, R.A., 2013).

Hou, Chun, Chen and Chen, (Hou, A.C.Y., et. al., 2011) analysed the behaviour of players leaving MMORPGs as human migration using the methodological framework of push-pull-mooring (PPM) where push factors were described as detractors that would deter a reasonable person from staying in a particular location, such as war or poverty; pull factors were described as the positive aspects of an intended destination that would seek to draw emigrants such as lifestyle, and/or economic opportunity; and mooring factors were described as anything that would seek to impede migration, such as cultural, social or economic influences, for example, one's family or owning a business. This was pivotal as, not only was this a novel implementation of a uniquely applicable methodology, but PPM was able to take into account both the relative numbers of people leaving as well as broad factors that influenced that decision. They found that players intentions to either switch to another virtual world or the leave altogether were most strongly influenced by mooring factors with pull factors also being a significant influencer. Inversely, push factors were found to have a negligible effect on player's switching intentions. In MMORPG population migrations, the most powerful factors within the mooring framework were the perceived cost of leaving including forgoing accumulated economic and social capital, the perceived variety of content within the virtual world inhabited, and whether or not they had nomadic tendencies i.e. whether or not a player had left a virtual world before (they are sometimes referred to as *content locusts* (Parsely, I., 2012)). In terms of pull effects, the most attractive aspects of potential destinations was their perceived level of potential enjoyment, perceived levels of customer service, and lower upfront costs. This has perhaps contributed to the growing prevalence of free to play subscription models, that is subscription models that, instead of

relying on the more traditional model of players paying an ongoing fee for the ability to access a virtual world (usually on a per month basis), provide an initially free service, and allowing players to pay to unlock more features and/or content. Part of the findings by Hou et. al. (Hou, A.C.Y., et. al., 2011) within the mooring framework, however, contradicted major assertions by Feng et. al. (Feng, W.C., et. al., 2007), additional content *did* seem to have a substantial impact on players leaving a virtual world. This contradiction could be explained, though, by further exploration of how the addition of different types of content affect a player's mooring factor. Hou et. al.'s , (Hou, A.C.Y., et. al., 2011, p.1901) suggestions that developers provide additional support for players to be able to retain accumulated capital when migrating between different virtual worlds also runs counter to Feng et. al.'s (Feng, W.C., et. al., 2007, p.21-22) hypothesis that it is, in fact, this accumulated capital that hinders the sustainability of a virtual world. There would also be logistical, ontological and economic difficulties with this transference of capital, one would have to ask the question, what is an asset from one virtual world worth in another?

### *RECENT DISCOURSES AROUND PLAYERS AND MMORPGS*

With the continued decline in prominence of the MMORPG genre, few have continued to contemplate the players and MMORPG play. The last significant wave of research concerning this subject was largely published between 2014 and 2016.

The most prominent of this wave of research was a meta-analysis of twelve previously expounded player typologies by Hamari and Tuunanen (2015). Their attempt to combine the

typologies resembled, in large part, the meta groupings that Yee had come up with nine years prior, a testament to the influence he had on the researchers that came after him attempting the same thing. Similarly, Hamari and Tuunanen (2015, p.44-45) also had misgivings about the categorization of players into archetypes, which they saw as a simplification (in other words, a reified understanding, or in the context of this work, punctualized) and explained through the following six points.

Firstly, they argued that these categorizations were too often discussed as dichotomous groupings, when, they argued, in fact, they should be seen on a continuum or “as scales”. Secondly, they saw the concept of player typologies as doubly “simplified”, that they do not refer to any concrete “player” but rather a set of motivations or behavioural patterns. Thirdly, that the player typologies were created within different virtual environments, and whether these typologies were transferrable across environments was yet to be explored. Fourth, that classification was, perhaps, a useful aid, was counterproductive to the investigation of player experience in richer detail, in essence, it encouraged simplification. Fifth, player typologies are, inherently, subjective, and, hence, they argued that their use was limited, as they could be interpreted in any number of ways. Sixth and finally, Humari and Tuunanen questioned whether player typologies were needed at all, and why traditional frameworks from the larger concept of psychology couldn’t be used.

Humari and Tuunanen’s conclusions about player typologies and how their arguments evolved throughout the text are perhaps the closest to mirroring the central thesis of this particular study and text, *that MMORPG play has been misunderstood* and that there is still further research to be done.

However, research into *the sustainability of MMORPG play and players* is currently thin and over the last decade has remained so. From what research has been published, however, we arrive at three conclusions. First, we don't really know. Second, so far the factors determined to contribute to the intentions of a player leaving a particular virtual world are wide ranging, inter-connected, and multi-faceted. Thirdly, that the current tools and levers that developers employ in an attempt to retain players often detract from the long term sustainability of a virtual world's population.

So far all the research that has been published has been largely quantitative in nature, and no one could argue that the amount of data collected and analysed has been found wanting (multiple research teams, tens of thousands of respondents and years of collecting). But the findings deduced from these massive data sets have proven to be inconclusive and solutions proposed have been contradictory. Their approaches inform the methodological approach that this thesis will be taking.

### *ACTOR NETWORK THEORY AND VIRTUAL ETHNOGRAPHY*

Based on what has been previously discussed within this chapter, MMORPG researchers do not yet clearly understand how any factor; whether that is social, psychological, economic, or otherwise, impact on the intentions of a player to leave a particular virtual world. So, like the flat nature of this literature review, this thesis is able to and should draw on Bruno Latour's framework of Actor Network theory (ANT). Latour conceived ANT as an anathema to what he saw as a fashionable tendency to presuppose theoretical and ideological perspectives when

conducting research seeking (Latour, B., 2005). In ANT terms, the imposition of external perspectives was to engage an additional actor-network that would act on the original actor-network that was supposed to be analysed, thereby increasing complexity (Latour, B., 1996, 1997). Fruitful analysis could not occur outside of the actor-network itself. Based on what has emerged so far (Feng W.C., et. al., 2007; Bartle, R.A. 2013; Hou, A.C.Y., et. al., 2011), this has clearly been a problem with current research into *why players leave MMORPGs*.

While ANT may seem appropriate to employ a variant of network theory to analyse, what is essentially a manifest networked digital reality, ANT cannot be conceptualised in terms of traditional network architecture. Rather, it is dimensionless and not strictly sociological, though it can inform an understanding of the social. A key benefit of employing ANT is the equal attention that is afforded to the human and the non-human, and the technological and cultural, which is foundational to the construction of all MMORPGs.

T.L. Taylor provides an example of building on this in her investigations of how user-created softwares (often called *mods*) were powerful actors within the raiding environment. It was through ANT that she developed the notion of *assemblage of play*, that diverse components well beyond the game software itself co-constituted the experiences within these spaces (Taylor T.L., 2009; Boellstorff, T., Nardi, B., Taylor, T.L., Pearce, C., 2012, p.164).

Taylor is also instrumental in the blueprint construction of the means through which the retracing of connections can be done. Taylor, along with Boellstorff, Nardi, and Pearce (Boellstorff, T., et. al. 2012), recently codified a new form of ethnographic research practice, *virtual ethnography*. Building on field-based anthropological ethnography first demonstrated by Malinowski (Malinowski, B., 1978), virtual ethnography goes beyond viewing

MMORPGs as a cultural artefact, but as fully-fledged world in themselves (additionally, Boellstorff, T., et. al. notes clearly that an MMORPG needs to be viewed holistically as it cannot be assumed parts of it reflect experiences within physical reality (Boellstorff, T., et. al., 2013, p.6-8)). Virtual ethnographers, in obtaining deep, longitudinal and empirical data, seek to engage with and immerse themselves within the everyday of MMORPG life. A central component of that research is to engage in participant ethnography, with the researcher becoming a player, and analysing the practice from a research perspective. Similar to ANT, virtual ethnographers, beyond picking the virtual field-site, and selecting the scope of the player groups they seek to engage with, have no presupposed hypothesis to prove or disprove.

Outlined above are the approaches this thesis aims to take, which will be expanded on in a later chapter specifically concerning methodology. While this thesis cannot view that the player is a wholly more or less important actor-network throughout the research, the point of entry for this thesis will be the process of unpacking it. The only way that an understanding can organically emerge is through the qualitative research that the practice of virtual ethnography can bring. By retracing the connections that constitute the constellation of actor-networks within the player and that the player is part of, this thesis aims to discover the outcomes of moments of translation that have led to systemic breakdowns in the MMORPG player actor-network.

This leads to the next question of how exactly this might be accomplished.

## CHAPTER TWO: METHODOLOGY

The previous chapter of this thesis established that MMORPGs have become increasingly visible in academic discussions, however, since 2009, only a small amount of that research has engaged with the nature of the increasingly prevalent phenomenon of players leaving MMORPG. Furthermore, very little of that research has sought to understand MMORPGs and MMORPG play itself.

Research that has been published has been inconclusive. As previously discussed, factors found to contribute to the intention of a player joining or leaving a particular virtual world have been wide-ranging, inter-connected, and multifaceted, and solutions proposed, haphazard and contradictory. Similarly, so far developers have been unable to create conditions that both allow them to retain players, without detracting from the long-term sustainability of a virtual world's population. This is, perhaps, not unexpected, as research has hitherto been conducted within mooring itself to an understanding of the fundamental constructs of MMORPG play and the MMORPG itself.

This chapter aims to outline the methodological approach of this thesis in drawing the reader to a greater understanding of how we may have misunderstood MMORPGs and the MMORPG player. It will first provide a brief outline of the methodological framework being employed, including how it has been utilized in previously published research. Secondly, this chapter will outline the methods through which this will be achieved - including a description of the site selection, sampling and data collection strategies - as well as ethical considerations; what research tools are to be employed and how they will be used.

Researchers and theorists have yet to reach agreement or determine whether an essentialist consensus can indeed be reached at all. To be clear, this thesis does not aim to provide such a conclusion. However, it will not seek to impose external theoretical/ideological perspectives that have been developed by past research either.

It is hoped that, through describing and mapping these translation errors, it may better allow the collective player entity to express momentary answers to the question of *how have we misunderstood MMORPG play?*

To do so, this thesis will draw on Actor Network Theory (ANT), which was first iterated upon by T.L. Taylor in her development of the concept of the “assemblage of play” (Taylor, T.L., 2009). It is important to keep in mind, also, that ANT cannot be viewed as a prescriptive framework, as to do so would, ironically, violate one of its central tenets. Rather, this thesis aims to accept the nebulous that previous researchers have already alluded to - that the reasons for someone leaving a virtual world are, wide-ranging, inter-connected and multi-faceted. For every moment, a player’s intention to leave is uniquely translated and, the most apt perspective to engender understanding is in the actors-networks at play themselves.

This thesis will also draw heavily upon some of methods created by Taylor in conjunction with Boellstorff, Pearce and Nardi (Boellstorff, T., et. al. 2012) collectively known as *virtual ethnography*. Of particular relevance is the use of participant observation, which will form the majority of the research output within this thesis. This facilitates adherence to the commitment to qualitative empirical study required of both ANT practitioners and virtual ethnographers.



Where virtual ethnography breaks from ANT though is with analysis. While this cannot occur beyond the network when strictly adhering to core tenets of ANT, virtual ethnography allows for the act of retracing the connections between actor networks to be explained outside of the network. It is not seen as lacking in fortitude, as Latour would argue (Latour, B., 2005). The densely packaged encapsulated MMORPG allows for a constant stream of data to bombard the player/participant, some of which is conceptually foreign, and still requires prying apart into their elemental actor-networks. The moments of interpellation between actor-networks still need to be retraced and connections between sites of commonality will need to be made.

Where this thesis will pay particular attention to, though, will be the moments of translation error concerning the player actor-network entity, and the interactions and interpellations that arise out of these moments. Taylor's concept of the assemblage of play (Taylor, T.L., 2009) could not have occurred if she had not allowed for explanation outside the actor-network of the third party software modules within MMORPGs, also known as *mods*. There is always the need to be careful, however, to avoid unnecessary complexity and risk translation error within the process of unpacking and explanation.

## ACTOR NETWORK THEORY

Actor Network Theory (ANT) had a particularly tortuous upbringing; partly due to its ontological complexity. It was difficult to define, summarize and explain, because the very

act of defining, summarizing or explaining went against its central ethos, a perplexing contradiction that many students of ANT have struggled with,

“P: So ...I take it that you are a bit lost?

S: Well, yes. I am finding it difficult, I have to say, to apply Actor Network Theory to my case study on organizations.

P: No wonder! It isn't applicable to anything.

S: But we were taught . . . I mean . . . it seems like hot stuff around here. Are you saying it's useless?

P: It might be useful, but only if it does not 'apply' to something.

S: Sorry, but are you playing some sort of Zen trick here?” (Latour, B., 2005, p.141)

The development of ANT is largely associated with three writers from the tradition of Science and Technologies Studies (“STS”): Bruno Latour, Michael Callon and John Law, who were the first writers to label their approach to enquiry as such (Callon, M., 1998; Callon, M., Law, J., 1997; Latour, B., 1987; Latour, B., 1996; Latour, B., 1997; Latour, B., 1999; Latour, B., 2005; Law, J., 1992; Law, J., 1997; Law, J., 1999; Law, J., 2009). While they drew upon elements of Foucault's theories on power, and the literary sensibilities of philosopher Michel Serres, the intellectual predecessor their work most resoundingly identified with was that of Thomas Kuhn (*The Structure of Scientific Revolutions*, 1962).

However, as a mode of enquiry that was best performed rather than explained, for much of its early history, attempts at describing it were largely abstract and ephemeral.

It was not until 1996 that Latour, frustrated with what he saw as the misinterpretation and misuse of ANT, decided to synthesize the sensibilities of the “theory” as developed by his colleagues within the field of STS. He decided to “systematically introduce” (Latour, B., 2005) the intellectual framework at the Louvain-la-Neuve and in the article *On Actor Network Theory: A Few Clarifications* (Latour, B., 1996). Latour would continue to expand his definition of ANT in *On Recalling ANT* (Latour, B., 1999), and, finally, albeit most irreverently, in *Reassembling the Social: An Introduction to Actor-Network Theory* (Latour, B., 2005).

Methodologically, Latour stated that an ANT practitioner approached their field of study with a sense of “newness” or naivety, as opposed to seeing it as “ready-made” (Latour, B., 1987). This is a pivot on Kuhn’s conception of the “pre-paradigm” (or “pre-science”) period prior to scientific consensus (Kuhn, T., 1962), where the investigation of phenomena has yet to be encapsulated by the context of a defined paradigm.

What this entails then is a deeply empirical description of the primary site, followed by the painstaking process of seeking out and following the most densely bundled “actor-networks”. Painstaking in that the researcher in his or her naïve state cannot assume to know which actors are relevant and highly networked until the process of tracings its network associations has been substantially completed. It is through this somewhat brute-force process of unpacking these actor-networks (sometimes referred to as “de-black boxing” if the actor-network concerned has consolidated its form, or become “punctualized”) that an ANT

practitioner can allow for an understanding of its component effects to arise. As Law wrote of Thomas Hughes, influential within STS, “[...] he does not spell out a method. He simply uses one. What he does is follow Edison and other system-builders wherever they go [...]” (Law, J., 1992, p.11).

## CHARACTERISTICS OF ACTOR NETWORK THEORY

While ANT’s commitment to empirical research and the rejection of linear models of network construction are not unique, there are several distinct concepts peculiar to it.

The first and most immediate of these distinctions is the seemingly oxymoronic term, “actor-network”. An object is referred to as such because, at its most basic level, whether it is seen as a self-determining actor or a network of a confluence of effects is dependent on perspective, and it is not reducible to neither *just* an actor nor *just* a network. As Callon described, “An actor is simultaneously an actor whose activity is networking heterogeneous elements and a network that is able to redefine and transform what it is made of [...]” (Callon, M., 1986, p.93).

As a universal unit, within ANT, there is no distinction between human and non-human objects, as Latour stated, “[...] an actant can literally be anything provided it is granted to be the source of action [...]” (Latour, B., 1996, p.373). In other words, an object, an actant, an actor-network, can only be defined by its associations with other objects, actants, actor-networks. This is a nod to the post-structuralist sensibilities of Foucault, where power and meaning, projected by signs, is dependent on their relation to other signs (Foucault, M., 1977).

To overcome the deeply ingrained duality between the human and non-human, ANT practitioners consciously employ the concept of “generalized symmetry” (Callon, M., 1986) – the ontological flattening of all objects that lend effect to the construction of the actor-network.

In isolation, it can be recognized that the social is partially comprised of non-human heterogeneous objects, and that the technological is partially comprised of heterogeneous human elements, but, often, consideration for this confluence is overlooked.

“[...] in practice, we bracket off non-human materials, assuming they have a status which differs from that of a human. So, materials become resources or constraints; they are said to be passive; to be active only when they are mobilized by flesh and blood actors. But, if the social is really materially heterogeneous then this asymmetry doesn’t work very well. Yes, there are differences between conversations, texts, techniques and bodies, of course. But why should we start out by assuming that some of these have no active role to play in social dynamics?” (Callon, M., Law, J., 1997, p.168)

Herein lies the first source of uncertainty. As ANT is the study of associations between heterogeneous actors, a network within the ANT intellectual framework cannot be conceptualized as a conventional sociological nor technological structure. Where networks as they are commonly understood exhibit a degree of homogeneity and dimensionality, actor-networks are spatially and geographically dimensionless, and heterogeneous in nature. As Callon and Law explained, ANT practitioners are not so concerned in how individuals interact with each other, as more orthodox social science might be, but rather how actors

“[...] define and distribute roles and mobilize or invert others to play these roles [...]”

(Callon, M., Law, J., 1997, p.285).

In ANT, the above-mentioned associations make up the entirety of a practitioner's work. Consequently, and another of ANT's radical concepts, everything – humans, groups, organizations, nature, machines, government – are the result of heterogeneous actor-networks. This is considered to be one of ANT's radical concepts. Therefore, “cause” is lost and there are only effects. There are no essentialist explanations.

Hence, how large, powerful or influential an actor-network may be can only be viewed through the prism of their associations. Power, therefore, *is* inter-connectivity. An actor-network cannot be said to be “more powerful” than another, rather, it is simply bound to more associations,

“When you simply have power in potential – nothing happens and you are powerless; when you exert power – *in activ* – others are performing the action and not you[...] an effect, but never as a cause[...]” (Latour, B., 1986, p. 265)

How an actor-network expands, influences, consolidates and defends itself is through the process of “translation”. Its conception is borrowed from the philosophy of Michel Serres. At the most superficial level translation is the way in which an actor-network overcomes arbitrary divisions, and mobilizes sometimes disparate political, economic, technological, scientific, and other, elements, and their histories (Brown, S. D., 2002). ANT takes this a step further. Translation is still a process whereby relevant actors from these disparate fields are identified and mobilized, but, the associations are negotiated, and always in danger of

succumbing to oppositional effects, resulting in “translation error”; success is finite, always subject to movement, and the process actualized in fora that are established and defended. As ANT is an intensely empirical approach to research, the process or act of translation is also contingent, localized and subject to variability.

Despite being bound to context, there are seminal works demonstrating ANT in practice. One of the most widely read is Michel Callon’s ‘Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay’ (Callon, M., 1986, p.196-233). Published in ‘Power, Action and Belief: A New Sociology of Knowledge’ (ed. Law, J., 1986), Callon’s investigation on the re-population of scallops in St. Brieuc Bay demonstrated four overlapping “moments” of translation.

The first of these moments he termed “problematization”. During this moment, an actor identifies a problem or point of contention and formulates questions in order to both determine the identities of necessary actors, and define the problem in such a way as to establish itself as an indispensable conduit within the forming network. To do this the questions posed become obligatory passage points - the central initiating actor reinforces within the actors it has identified a sense of mutual benefit, whereby the answers to the questions cannot be obtained alone.

The second stage in the translative process Callon referred to as “interessement”. So referred to because it is at this point that the central actor asserts its interest, “[...] to be interested is to be in between (inter-esse), to be interposed [...]” (Callon, M., 1986, p.204). More specifically, the central actor attempts to solidify associations with the actors it had identified previously. The robustness and validity of the problematization is tested, and the strength of

the associations between each of the actors is negotiated. Each associated actor can either submit to being integrated, or define its own identity, its goals and motivations in an incompatible manner. However, this is not a binary event, nor is the outcome certain and free from contestation. As previously discussed, ANT is better understood as a continuous process, rather than a static intellectual framework. Translation is no different. The actors identified during problematization, as networks themselves, are subject to and negotiating the effects of problematization from other actor-networks external to the boundaries set out during this stage. Hence and likewise, the boundaries, the identity of the initiating actor-network, and the problematization being prosecuted, are also subject to negotiation, and continual reformation and re-adjustment. Consequently, problematization does not and cannot occur in isolation, independent of *interessement*.

Hence, no matter how strongly reinforced the case for problematization is made the associations between actor-networks is never guaranteed. In other words, the next stage of translation, “enrolment” is a continual process reinforcement (*interessement*) and tenuous arrangement. Enrolment, as described by Callon as “[...] the group of multi-lateral negotiations, trials of strength and tricks that accompany *interessement* and enable them to succeed [...]” (Callon, M., 1986, p.207-211), is a difficult stage within translation to pinpoint. As Callon notes in his investigations of the St. Brieuc Bay scallop researchers, the negotiations of associations to bring about a state of enrolment are constantly thwarted by interjecting associations, which must be dealt with first.

The sought outcome of this nexus of “moments” remains, however, whereby the central actor-network continues to attempt to bring the actors it has identified as relevant into agreement with the problematization. In the case of Callon’s subjects (the researchers of St



Brieuc Bay), their questions of whether scallops anchor in the first moments of their existence, through the process of readjustment and negotiation of associations, slowly transform into more certain statements – yes, the scallops do anchor in the first moments of their existence, and the fishermen of St. Brieuc Bay do want the bay to be restocked. In the case of interpreting the central thesis of this work, “how can we reconceptualize the understanding of MMORPG play”, would, as associations are retraced and more certainty can be placed in such statements, ideally become, “this MMORPG *is* misunderstood, and both the developers, the communities, and other stakeholders of this MMORPG *do* want to better understand.”

As the certainties become more established and the associations between actor-networks more defined, an alignment of interests occurs and an assemblage begins to emerge (an example was referred to earlier in Taylor’s assemblage of play (Taylor, T.L., 2009)). It is at this point that the assemblage, adequately stable, begins to engage a wider range of connected, but until now, dispassionate, actor-networks seeking to mobilize them into action so that they might also assume the role of “spokesperson”, seeking out their own associations to reinforce the central construct, which, in themselves, also requires process of translation. Hence, this final stage in the translative process is referred to as “the mobilisation of allies” (Callon, M., 1986, p.208). With the active support of its allies behind it, the central actor-network that conceived the original problematization then assumes the role of “[...] a sole and ultimate spokesperson [...]” (Callon, M., 1986, p.212).

Though, as a conceptual framework, this is the end of the four moments of translation, as noted previously, these moments are overlapping, fleeting, and the alliance created, brittle. The represented actor-networks are momentary, and through the course of mobilization and

movement over time, exist only as long chains of representatives and equivalencies, their identities constantly subject to re-negotiation. Consensus by its very nature creates a tightly constrained network of associations, which can be contested and broken with increasing likelihood the longer the assemblage persists. Translation error is, in the end, inevitable. Whether it is during its fraught creation, or the slow degeneration of associations, all actor-networks, assemblages, are always inexorably travelling towards their own demise.

There are many instances, however, where the results of translation are durable enough that over time, with repeated association, the actor comes to be seen as a single entity, the network or association that it is comprised of, implicitly aligned and, hence, invisible.

ANT practitioners refer to these appearances of unity, and the disappearance or obscuring of the network as “punctualization”. While it is an accepted part of ANT that all phenomena are the effect of heterogeneous networks, the human mind is often unable to detect network complexity, much less comprehend it on an infinite scale. In order to cope (mental shortcuts, if you will), patterns of association that are widely and commonly performed are more or less taken for granted,

“[...] the process of punctualization thus converts an entire network into a single point or node [...]” (Callon, M., 1991, p.153)

In essence, the punctualized series of networked associations becomes a “black-box”. This is a term that is not unique to ANT, but it is oft-used because, in its original usage within the Information Sciences (IS), black-boxing referred to intentionally making opaque the inner

workings of technologies so as to reduce the complexity of comprehending it to its inputs and resultant outpoints.

Much like how black-boxed technologies are utilized in wider applications in IS, the punctualization of an actor-network into a black-box, a point, or a node, allows it to be comprehended and utilized as a resource in other larger, and more complex actor-networks. This further illustrates the indivisibility of the actor from the network, and the network from the actor, as whether it is seen as one or the other is dependent on one's perspective.

Punctualization, however, is a highly precarious state. As heterogeneity is the overarching factor, in employing the punctualized object, one cannot expect it to work in exactly the same way, or at all, each time an association is performed. The reason being associations of the heterogeneous networks encapsulated within the black-box are not suddenly rendered immutable and unchanging post-punctualization. They continue to be performed, and subject to renegotiation and readjustment. There, as always, remains the risk of subversion, and the encapsulated network of associations degenerating into a mess of naked, failing networks.

## INTERSECTING VIRTUAL ETHNOGRAPHY

From the previous description of ANT, one might characterize it as a theory intensely focused on empirical observation, where researchers are compelled to produce entirely descriptive accounts. Indeed, one of the criticisms of ANT is that it fails to take into account intangible social processes, such as values, norms and morality (Radder, H., 1992, p.145-146). Another criticism by others within the STS community, particularly from Collins &

Yearley (of the “Epistemological Chicken debate” fame) (Pickering, A., 1992, p.301-326), has been the possibility for the tracing of associations to degenerate into endless relativist regress.

However, as several of its key proponents have stressed since its inception, ANT never assumed the role of a prescriptive framework, rather, as Law repeatedly stated, it is more a set of sensibilities (Law, J., 2007, p.157). Even Bruno Latour, most credited for defining what ANT is, is famously loathing of its label as a theory, referring to ANT as “[...] perfectly fit for a blind myopic, workaholic, trail-sniffing and collective traveller [...]” (Latour, B., 2009, p.9)

That is not to say that ANT does not have basic precepts, but its ontological flatness allows the incorporation of methods that cross intellectual boundaries. It is here that ANT allows the opportunity to intersect with Virtual Ethnography. Both methodological approaches seek to bring to attention non-human actor contributions to the construction of the social and both strongly adhere to empirical observation.

This is not the first instance in which ANT has been incorporated in an analysis of MMORPGs. As briefly described earlier, T.L. Taylor used elements of ANT in conjunction with her ethnographic sensibilities in the development of the idea of the “assemblage of play”. Her notion of the assemblage aimed to bring parity between human and non-human actors – that the performance of each moment of play is the result of numerous associations.

“[...] games and their play are constituted by the interrelations between (to name just a few) technological systems and software (including the imagines player embedded in them), the

material world (including our bodies at the keyboard), the online space of the game (if any), game genre, and its histories, the social worlds that infuse the game and situate us outside of it, the emergent interior lives, personal histories, and aesthetic experience, institutionalized structures that shape the game and our activity as players, legal structures, and, indeed, the broader culture around us with its conceptual frames and tropes [...]” (Taylor, T.L., 2009, p.332)

In other words, Taylor understood the MMORPG she was a part of and observed, ‘World of Warcraft’ (Blizzard Entertainment, 2004), as more than simply a static, boxed product of leisure. Rather, she viewed it as a lived, playful artefact each ephemeral moment a culmination of many negotiated meanings and contested associations. In doing so, Taylor had avoided the narratology/ludology divide, and structuralist sensibilities that had consumed much of the discourse within games studies during the early to mid-2000s (Jakobssen, M., Taylor, T.L., 2003; Steinkhueler, C., 2005; Yee, N., 2001; Castronova, E., 2001, 2006) – as Latour would say, Taylor did away with the, “[...] ready-made science [...]” (Latour, B., 1999, p.19). Certainly, her conception of the assemblage of play is an ambitious notion as it embraces the complexity that inevitably accompanies contemporary video games (consider the size of the workforce and the man hours required to create something like ‘World of Warcraft’ (Blizzard Entertainment, 2004); then consider the complexity of the emergent effects created by the tens of thousands of avatars occupying dozens of virtual worlds, interacting with millions of objects and tens of thousands of non-playable characters; and, this is only a most superficial view of the virtual). This is a complexity that is often ignored (punctualized), perhaps an effect of its construction and the accepted model of consumption (that is, consumption without contemplation, and an overwhelming emphasis on superficiality, both aesthetically and conceptually).

While Taylor would not explicitly cite the influence of ANT until later (Boellstorff, T., Nardi, B., Pearce, C., Taylor, T.L., 2012, p.164), the parallels were readily apparent in her ontologically flat and strongly empirical observations of the profound effect a non-human actor, the third-party software add-on (or mod), CTRaid Assist, had on the play experiences of challenging boss encounters (commonly referred to as raids). These concepts were later amalgamated and further developed in conjunction with Tom Boellstorff, Bonnie Nardi and Celia Pearce, all prominent virtual ethnographers in their own right, in *Ethnography & Virtual Worlds: A Handbook on Virtual Ethnography* (Boellstorff, T., Nardi, B., Pearce, C., Taylor, T.L., 2012).

This thesis will draw heavily upon the methods described within the above-mentioned handbook (and will be further elaborated upon in later sections of this chapter), as well as the work of T.L. Taylor in arriving at her conception of the “assemblage of play”. As the result of current research addressing the question of *why players leave MMORPGs* has been contradictory and inconclusive, the aim of this thesis will not be to provide an essentialist grand theory, rather, informed by the sensibilities of ANT, and rejecting the historical discourse, the “ready-made science” that has led us to this point, this thesis looks to present moments in which effects of associations within and surrounding an MMORPG may have led to a breakdown in the “assemblage of the player”.

The following sections shall define, and describe the research methods deployed as conceived by Boellstorff et. al. (2012), the group of player subjects followed, and the field site observed.

## ETHNOGRAPHY: A BRIEF HISTORICAL ACCOUNT

However, before discussing the methods to be deployed it is important to note that Virtual Ethnography, as its name suggests, is an adaptation of one of the oldest forms of research practice, ethnography, and modified to suit the peculiarities of virtual worlds.

While it was not always called ethnography, even from the earliest pictographs, humans have, in some form or another, reflected on their cultures and the cultures of others. Despite its Greek etymology (*ethnos* meaning people, and *graphein* meaning writing), the term “ethnography” itself was not seen until the period of German Romanticism (Vermeulen, H.F., 2008; Bunzl, M., 1996). It emerged out of discontent with the ideals of Enlightenment – standardization, derived from the Comtean tradition of Positivism.

Where positivists sought to create generalized nomothetic encyclopaedic compendia of all human knowledge, ethnographers have typically sought to create detailed, idiographic, situated accounts of culture, which reflected the perspectives and sensibilities of the culture being observed.

It is then no coincidence that Virtual Ethnography, arising from the ethnographic tradition, and ANT exhibit such similarities. While ethnography was, chiefly, a reaction to the prevalence of positivism, ANT was a reaction to the essentialism that the prominence of quantitative research had bred amongst scientists, and the Kuhnian sensibility that “generalized theory” was only unified within certain contexts or until the next paradigmatic shift.

Where Thomas Kuhn could be considered, in some ways, as the progenitor of ANT, in the case of ethnography and ethnographers, that figure would be Bronislaw Malinowski (Kuper, A., 1996). While Malinowski cannot be credited for inventing ethnography, the unification of the previously segregated roles of “field worker” and “theorist” to create the method that would come to define the singular modern ethnographer, participant observation, was largely a result of his work on the Tribal Islands of Papua New Guinea between 1914 and 1918.

Malinowski’s ideas have, in most cases, been superseded (Bunzl, M., 2004), however, he did spark the growth of a generation of modern ethnographers both in Europe (at the London School of Economics) and in America (at Yale). Among the most prominent from the 20<sup>th</sup> century was the symbolic ethnographer, Clifford Geertz, who defined the meanings of “etic” and “emic” understandings of culture (Geertz, C., 1983, p.55-70). Geertz viewed the external analysis by an ethnographer of a subject’s life (the “etic” understanding) to be distinct from the subject’s own understanding of its life (the “emic” understanding), and it was a flawed position to confuse the researcher’s conclusions with that of the subject’s.

In the case of the subject matter contained within this thesis, it could be argued that the incongruity of current research has been a result of either the confusion surrounding the “emic” and “etic” understandings of why players may want to leave an MMORPG, or the lack of consideration for the “emic” (player’s own) perspective. For instance, the signs of this type of flawed approach can be found in a paper by Lin, Yu and Li (2007), ‘Leaving a Never-Ending Game: Quitting MMORPGs and Online Game Addiction’, in which the concept of addiction is treated as an underlying presumption symptomatic of MMORPG play, despite the varying statements provided by interviewed subjects and an admission that a variety of factors make



both the actions of the player and the decision to leave a particular MMORPG much more complex than simply a singular negotiation with addiction.

However, ANT, if incorporated into an ethnographic framework, would mean there would be a need to eschew external (etic) explanations altogether. As Bruno Latour once said to a particularly confused student,

“[...] A case study that needs a frame in addition, well, it is a case study that was badly chosen to begin with [...]” (Latour, B., 2005, p.143)

In other words, the description of the subject should be self-explanatory (the actor should be able to speak for itself), and failing that, further tracing of associations is required. Should tracing uncover few associations with the intended subject then it was a poor actor to follow to begin. As stated earlier, ANT is concerned with effects, and only effects, that coalesce into the actor – there is nothing outside of the heterogeneous network.

The methodological tool that an ANT practitioner deploys to do this is another concept popularized by Clifford Geertz (1973, p.3-30). It is also widely used in Virtual Ethnography. Derived from Gilbert Ryles work on Ordinary Language philosophy, “thick description” refers to observational accounts that provide rich context. Ryle illustrates the importance of contextual embedding within a thick description the second volume of his collected papers (‘Collected Papers Volume 2: Collected Essays 1929 – 1968’, Ryles, G., 1980).

“Consider [...] two boys rapidly contracting the eyelids of their right eyes. In one, this is an involuntary twitch; in the other, a conspiratorial signal to a friend. The two movements are,

as movements, identical; from an I-am-a-camera “phenomenalistic” observation of them alone, one could not tell which was a twitch and which was a wink. Yet, the difference, however unphotographable, between a twitch and a wink is vast [...] The winker is communicating in a quite precise and special way [...]” (Geertz, C., 1973, p.4)

Although there are limits to the fidelity with which an actor can be represented in the virtual realm due to the need for interface translation, these types of contexts continue to exist digitally, and, due to the designed nature of an MMORPG, it is important to note that the practice of cool, dispassionate observation typical of the pre-1960s “gentlemanly ethnographer” (Boellstorff, T., et. al., 2012, p.17; Bunzl, M., 2005, p.188), would fail to provide the richly detailed context required for the effective deployment of deep description. For example, Taylor could never have understood how important third-party software additions (mods) was to the raid experience had she not allowed herself to become fully invested in the participation of such raids, herself (Taylor, T.L., 2009).

To “go native” was a phrase that was coined by Malinowski (1922, p.107). In order “[...] to grasp the native’s point of view, his relation to life, to realise his vision of his world [...]” (Malinowski, B., 1922, p.209) Malinowski was a strong advocate of researcher participation. While, within the context of ANT and this thesis equal attention is also paid to the non-human actors, the principle remains the same, that in order to catch a glimpse of the subject’s “gaze” one must immerse themselves within its culture.

Despite Malinowski’s historical prominence, the contemporaneous view was that he was considered a fieldworker, one of many “informants brought back from some primitive tribe” (Freilich, M., 1970, p.viii). This meant that it would not be until the rise of the civil rights and

feminist movements that his ideas would challenge the predominant classic assumption of the “self” and the “other”. The increasing presences of people of varying race, gender, ethnicity, and sexual orientation, religious and cultural backgrounds studying their own communities made the traditionally negative perception of the “native” ethnographer problematic.

The crux of this negative perception seemed to lie with the assumption that in the relationship between the scientist and the subject objectivity and subjectivity was irreconcilably dichotomous, with the realm of objectivity exclusively reserved for the “outsider” (Tedlock, B., 1991, p.71; Gold, R.L., 1958, p.217-223).

This segregation of scientist and subject, however, has been roundly rejected, for example, Victor Turner, in commenting on the work of Bennetta Jules-Rosette, write that “[...] to each level of sociality corresponds its own knowledge, and if one wishes to grasp a groups deepest knowledge one must commune with its members, speak its essential we-talk [...]” (Turner, V., in Jules-Rosette, B., 1975, p.8).

By “we-talk” Turner was referring to Jules-Rosette’s communicative practice as neither objective nor subjective, rather, it occupied a space of “human intersubjectivity”. Aside from an emphasis on human actors, Turner’s analysis is a close simile to the structure of enquiry the retracing of associations an ANT practitioner would use.

Similarly, this retracing of associations goes beyond the objective and subjective. As previously discussed, ANT takes its lead from Khunian philosophy, as such, the monopoly on objectivity scientific enquiry typically assumes is only objective so long as its paradigmatic context holds. Should that break or degenerate due to cumulative translation error, objectivity

is lost, and, hence, was an illusion, never as such to begin with. ANT, therefore, acknowledges that all acts of knowing are constructivist.

Boellstorff, Nardi, Pearce and Taylor (2012, p.29-51) also rejected emphasis on the externally developed hypothesis driven model of scientific research. In forming Virtual Ethnography they stated,

“[...] Subjectivity is an inescapably condition of science; no pure realm of objectivity exists in which the interests, biases, predilections, concerns, attitudes, dispositions, conceits, judgements, axioms and presuppositions of investigators are absent and without impact. Rather than pretend a “God’s eye view” of the world is possible, it is more scientific to realise that science generates situated knowledge (Kuhn, T., 1962; Latour, B., 1993) that is a complex product of what is already known (whether what is known is accepted or challenged) and the contemporary world view shaping interests and attitudes [...]” (Boellstorff, T., et. al. 2012, p.41)

They further asserted such is the all-encompassing nature of subjectivity that “[...] to build an adequate view of a total society and of its components [...]” (Mills, C.W. 1959, p.221) an understanding of intersubjectivity has become a vital part of modern ethnographic rigor. That is, to understand an ethnographic encounter as not simply interaction between two people, but, rather, the result of a flow of multilayered densely connected and continually negotiated meanings, where objectivity lies only in the understand that all actors are subjective.

Developing intersubjective understanding, then, is analogous to Latour’s concept of retracing associations, in that, as an ethnographer (virtual or otherwise) or ANT practitioner, primary

to building a comprehensive understanding, the process of de-black boxing or unpacking “the social”, is the navigation of these spaces between human, and also non-human in the case of ANT, actors.

This leads to the next section in this chapter where the question of how this was done and what tools were deployed will be discussed.

## RESEARCH PRACTICE

Part of the difficulty in explaining ANT is that, methodologically, ANT approaches the site of a study as a process, a confluence of actors shaping and reshaping the space. Its dictum, “follow the actors”, then, becomes confusing with such a broad range of actors, some of which are so ephemeral one can barely glimpse a network before it disintegrates. So, the question becomes, “which actors?”

Fortunately, ethnography, or in this case, virtual ethnography to be more specific, can provide the framework that allows the prototypical deeply descriptive, rambling, narrativistic accounts to emerge, such that the ANT practitioner allows the intended reader to be a future interlocutor, unpacking and negotiating meaning through the consumption of the text.

The methodological toolkit available to ethnographers is vast. It includes everything from interviews, both individual and in group situations, formal and ad-hoc, historical research, analyses, surveys and questionnaires. There is, however, one method that is, above all others, essential to ethnographic research such that a study that does not employ it cannot be

considered ethnographic. Crucially, it informs the use of other methods and particularly so in the case of ANT, when avoiding presuppositions is required. That method is “participant observation” (and its variants). According to Boellstorff, Nardi, Pearce and Taylor, “[...] participant observation is the embodied emplacement of the researching self in a field site as a consequential social actor. We participate in everyday life and become well known to our informants [...]” (Boellstorff, T., et.al., 2012, p.65)

While participant observation has sometimes been viewed as if it were a quantum of ethnographic practice, where at one extreme the researcher is a complete participant, and at the other a complete observer (Gold, R.L., 1958, p.217-223), there are some problems with this view.

One of them, that within heterogeneous networks of intersubjective actors, objectivity is illusory, has already been discussed. The second is that, while Boellstorff, Nardi, Pearce and Taylor argue that full participation is unnecessary on the grounds of pragmatism (they use the example that “[...] it is not necessary to become a brain surgeon to study brain surgeons [...]” (Boellstorff, T., 2012, p.81)), it should be argued that full participation (in other words to “go native”) affords the possibility of the most informed, highly nuanced account (arising from the ability to use, interpret and negotiate in Turner’s “we-talk”), as they would later state of the virtual ethnographers creed,

“[...] Everything is important and worth of being documented until proven otherwise [...]” (Boellstorff, T., et. al., 2012, p.82)

Similarly, the flat ontology of the ANT perspective demands this of the researcher (Latour once stated that the output from an incomplete retracing of associations on the grounds of practicality was simply a lack of fortitude and not a work of ANT at all (Latour, B., 2005)).

However, that is not to say embracing participation precludes the researcher from groups outside of the native's grasp. The very nature of virtuality allows for flexible, multiple identities (Turkle, S., 1995) through projected embodiment within an avatar, which affords the researcher the ability to assume role both as an outsider investigating other actor-networks, and a native within the subject group. In fact, Tom Boellstorff was able to inhabit both roles simultaneously during his research into Second Life (Linden Labs, 2003) by "dual-boxing" (the technique of using multiple accounts on multiple clients to enable a user to control two avatars at once, often in the same virtual world) (Boellstorff, T., et. al., 2012, p.83).

In addition to field notes, research within virtual worlds also afford the ability for the researcher to readily record events within incredible fidelity, and at real time, while maintaining a naturalistic frame of reference that, perhaps, the obtrusiveness of a camera might not project.

This is done through audio-visual screen recordings (screen captures), screen shots (still captures of what is on the screen at the time), and the recording of chat logs, which, when viewed in conjunction with each other at a later date, allows the researcher access to a rich, holistic overview of the original event (almost as if it were a multimedia form of thick description), although the repercussions of the event over time, and the effects it projects on actors can only be thoroughly interrogated through longitudinal participant observation.

In the ways described above, virtual worlds (and MMORPGs by extension) can allow a researcher to engage in ethnographic practice where, to a degree, participant observation and time can be reduced to singularities.

## RESEARCH METHODS

The journey into MMORPG research began long before it was decided to formally document it in this thesis. Unlike the vast majority of ethnographers, social anthropologists, and curious academics, the approach is not to fulfil a desire to explore strange environs, and foreign cultures (Nardi, B., 2010; Pearce, C., 2009; Castronova, E., 2001). A sense of “newness” and wonderment is something that has not been experienced since the first days stumbling about the world of Vana’diel (*Final Fantasy XI*, Square Enix, 2002) and running away from sword brandishing goblins. Like the anthropologists of the feminist and civil rights movements, the author very much identifies as a native of the MMORPG community.

This work is a personal account of a journey with a group of subjects through which genuine personal connections have formed. Coming from the “inside”, one cannot pretend to be a coolly detached observer, rather, as a long time participant of the MMORPG who later decided to formally document those experiences, one can see oneself as part of a vanguard of digital natives who now, more than ever, have begun to dissolve the illusory barriers between the virtual and non-virtual, subjectivity and objectivity, and joining the growing prevalence of virtual ethnographers who have moved away from the mainstream view virtual



environments as interesting, quaint, but nonetheless frivolous and alien (Boellstorff, T., et. al, 2012, p.26), to seeing them as lived realities.

This thesis subscribes to the philosophies and practice of ANT, discussed earlier. Such rigorous tracing of associations between actors-networks necessarily requires lengthy engagement with the network, and an equally expansive generation of qualitative data, which largely fits with the most elemental drive of an ethnographer in an exotic environment – that of exploration. This type of approach, the collection of a wide gamut of materials: audio-visual recordings, texts and chat logs, observation and virtual artefacts, is the basis from which a deep understanding of the contexts, constructions and associations of the player actor-network, essential to the central question of this thesis, can be engendered.

Similar to the approaches of Nardi (2010), Taylor (2006) and (eventually) Pearce (2009), (Boellstorff, T., et. al., 2012, p.76-82), the methods for generating the data in this thesis are strongly participatory. As an ANT practitioner, the notion of intersubjectivity that accompanies strongly participatory accounts resonates with the process of translation, where, in this case, the construction of the player actor-network is the result or effect of the negotiated relations of associated actors (who are, themselves, the effect of an endless chain of negotiations between nearby and distant actors - ripples within the wider network). Borrowing Taylor's term this thesis unpacks the "assemblage of the player".

However, unlike Taylor's "assemblage of play", this thesis will not be investigating the effects and translation process that brings about a successful assemblage, rather, this thesis investigates how the "assemblage of the player" degenerates and breaks down, where the translatable process is erroneous, and the once tangible punctualization found to be illusory.

As Callon (1986, p.15) notes, nothing is conclusive or static. Over time the countless ways in which controversies and betrayals can occur eventually breaks from the narrow definitions of negotiated associations that originally led to the effect of the appearance of unity, a result of the translative process. All the inner machinations are laid bare.

It is important to note, however, the breakdown in the player actor-network or assemblage is not static either. Part of the interest in finding out why players leave MMORPGs, and why the notion of the “player” breaks down over time, is also linked to why they are often reconstituted again.

## SAMPLE AND SITE SELECTION

A tangible benefit of MMORPG research is that, beyond the technical requirements for an adequately powerful computer system, and a stable broadband internet connection, it has a relatively low barrier to entry. It is unlike most ethnographic fieldwork, where physical travel is required, and sometimes it is necessary to leave one’s home to live in a difficult, remote environment for many months at a time. In the case of this thesis, the MMORPG ‘Final Fantasy XIV: A Realm Reborn’ (FFXIV) (Square Enix, 2010) and the North American server known as ‘Faerie’ was chosen as the site. In terms of monetary outlay, the client itself cost approximately \$60 (AUD), and an ongoing subscription fee of \$12 (AUD) per month was required to maintain open access. There was no need for a research grant, and basic communication in other languages was provided with the included auto-translate function,

although, as it seemed, the server was predominately inhabited by an English-speaking population so the auto-translate function was rarely needed.

The reason for the choice of FFXIV was threefold:

Firstly, it was an MMORPG that one had already been part of since October of 2013, hence, the initial period of interfacial and cultural acclimatization typically required for new participation was not required, nor was there the need to reach the highest experience level in order to fully access the world, it's objects and the avatar groups.

Most, if not all, MMORPGs have an experience level requirement with a completely new avatar starting at level one. In 'World of Warcraft' (Blizzard Entertainment, 2004) the maximum level an avatar can reach is 100, while in FFXIV that maximum is 50.

The avatar a player effects control over is limited in the amount of things it can do, and areas it can access (safely, if at all), with those limitations incrementally reduced the higher an avatar's level until, at maximum level, it is, in a sense, fully functional, and additional improvements are sought.

This is a period of play where the still developing player also develops the comfort and fluidity of motion to manipulate the interface with sophistication, a necessary skill if negotiating the challenges of raiding like Nardi and Taylor performed in their ethnographic journeys. Nardi managed to gain entry into the "theory-crafting" community, where players would attempt to decode game mechanics and strategize how best to overcome them in

typically highly complex diagrammatic and mathematical calculations (2010, p.137-151).

Taylor referred to this style of play within MMORPGs as “power gaming” (2006, p.67-92).

The play experience at maximum level is typically referred to as the “end game”, and it can take a period of weeks if not months to reach on some MMORPGs. Cultural acclimatization could be best summarised from previous work,

“[...] Unlike single player experiences, or experiences relating to the other sub-genres of MMOGs, full immersion and socio-cultural acceptance necessitates undergoing a cultural acclimatization.

This can include understanding the jargon used in conversation, creating an income stream for the character, memorising the physical landscape of the world and understanding the social landscape/meritocratic hierarchy of a particular server. Importantly, a player must also accept a departure from the player centric nature of the single player experience - the avatar is not the player embodied as *deus ex machina* in this environment come reality.

Understandably, this can be an almost dehumanising experience, and not all players arrive at its completion [...]” (Li, R., 2011, p.23-24)

Secondly, there was already strong rapport established with a number of leaders within the community my avatar circulated. As gatekeepers for several interconnected player groups, they were crucial to initializing the task of retracing associations.

Finally, FFXIV had a particularly tortuous beginning. This incarnation of FFXIV is actually the second, with the first version published in September of 2010. It performed so poorly that, while aesthetically similar to the first version, an entirely new MMORPG was made with nearly an entirely new development team, and released in August of 2013 to replace it (Nutt, C., 2014).

Consequently, the current development team has shown itself to be highly communicative. Director, Naoki Yoshida, has released monthly letters addressing player concerns and hints regarding future developments since assuming the role, and has indicated his willingness to provide support for FFXIV for at least a decade (Corriea, A.R., 2015). This is not unprecedented, as Square Enix's previous MMORPG, 'Final Fantasy XI', has been actively supported since its release in 2003, and genre defining titles such as 'Everquest' (Sony Online Entertainment, 1999) and 'World of Warcraft' (Blizzard Entertainment, 2004) also continue to be supported.

This is atypical of most large (a player base of over 200,000) MMORPGs, where commercial sensitivity defines rhetoric, and communications are generally left to be managed by a team of community managers with no connection to the executive. This was a particular problem when previously attempting to gather data from Blizzard Entertainment regarding their flagship MMORPG, 'World of Warcraft' (Blizzard Entertainment, 2004).

Yoshida's commitment to long term development support also meant that it was largely assured that FFXIV would continue to be active for the duration of this study, so the unfortunate instability that Celia Pearce (2009) had to contend with when her chosen field site (*Uru Live*, Cyan Worlds, 2003) was abruptly cancelled during its development, re-

released in 2007, cancelled again, and then released yet again in 2010, need not be encountered.

The entry points to the field site were through three different computers. Two of them were desktop computers located in my office space, and at home. The third was a high-powered “gaming” grade laptop (it had an independent graphics card, the most powerful processor available at the time, and a large amount of memory. The downside of all this largesse was that it weighed almost four kilograms). All of the computers had mirrored (identical) copies of the required software, client, and ancillary files so the experience on each, from a technical perspective, was largely the same.

This, of course, was not essential to the fieldwork but it did allow one to be in close proximity to entry points at all times. Despite being able to conduct research from the comfort of a padded chair in air conditioned rooms, there was no sense of detachment from the environment, reflecting the experiences of other researchers who had conducted similar research. As Nardi noted of her own research in *World of Warcraft* (Blizzard Entertainment, 2004),

“My entry point to the field site was a computer on my dining room table where I sat in a comfortable chair and played for many hours. And yet, this fieldwork was nearly as immersive as the field work I conducted in Western Samoa or Papua New Guinea [...]”  
(Nardi, B., 2010, p.29)

In addition to accessing the field site for at least 12-hours per week (although, often much more), content from social networks, online message boards, and official websites, the most

popular of these are the FFXIV sub-reddit, which provided valuable insight into understanding the cultural landscape, and the official FFXIV website. Of particular interest was the theory-crafting culture, a real-world example of a translative dialectic in action.

The research methods used are part of standard research practice within Virtual Ethnography: participant-observation, interviews and day-to-day conversation, and textual analysis of related online content. It is important to note that interviews were conducted in an informal manner. While questions can facilitate communication with subjects, it is argued that a meandering, unhurried conversation, where interesting and often unexpected ideas are explored, yield the richest output, and also adhere to the ANT sensibility of avoiding external input in research practice.

Interviews were all conducted online through a group voice-over-IP (VoIP) service in password protected virtual rooms, via Discord and Teamspeak; the audio was recorded, and, later, transcribed, with all identifying names, pseudonyms, and player groups modified to maintain subject anonymity.

The way the field site is described is both an application of theory, and the laying out of a multitude of events and details to create a richly textured pastiche of the lived experience within an MMORPG. As John Law explained (Law, J., 2009, p.141), ANT, despite its designation as a theory, is not a theory in the sense that it does not make a claim or try to explain anything. It is descriptive rather than foundational, and better understood as a collection of tools that provide space for actors to generate their own interesting accounts of messy, subjective and negotiated associations.

The avatar chosen was (the embodied presence of a player, or participant, within the virtual world) a sturdy, red-headed, androgynous, Roegadyn Sea Wolf named Edana Kellan, and she called the free company (the term given to formally organized and registered player groups) Holy Knights, her home. A diverse group of over 170 players made up the Holy Knights, including engineers, lawyers, retirees, and students. Most of the members lived in the United States, reflecting the North American regional designation given to the server.

The reason for choosing a somewhat uncommon combination of race, gender, and ethnicity (for each of the four playable races within FFXIV, there is the combined choices of the two traditional genders (female and male), and two ethnic groups) were twofold.

Firstly, that the combination was rare enough to be memorable, and allowed an easier propagation of the understanding within the player group of who was “the researcher”. Secondly, minor variations in the fortitude, strength, intelligence and agility of this race/ethnic combination made it the most versatile of all combinations.

One of the differences between ethnographic research performed in physical reality and MMORPGs is its strongly participatory nature. This was a characteristic that was also recognized by both Nardi and Pearce (Nardi, B., 2010, p.35). Pearce suggested the term “participant-engagement” to reflect this form of deep immersion (Pearce, C., 2009, p.210) where a researcher’s very appearance lends an immediate degree of separation from the subject group, in the physical world. In the virtual realm, an avatar is an avatar, and the researcher is very much included as a player. Play dominates so much of an MMORPG that the act of participation, for all practical purposes, is also engaging in the act of play. In ANT



terms this research through play is consistent with the philosophy of description within the network.

Within the FFXIV universe Edana was a full participant. Edana (almost always referred to as “Ed”, except in the most exasperating situations) was engaged in the same activities as any other avatar might have been. She was fortunate enough to have a strong rapport with influential members within the community, and was considered skilled enough to form part of the lead progression raiding group within the free company.

In the case of FFXIV, a raiding group consisted of eight players with varied responsibilities tasked with overcoming the most difficult enemy encounters. In the experience of Edana, it was not uncommon to spend four to five hours at a time dying (commonly known as “wiping”) over and over to the same enemy, with incremental progress (hence, the term “progression”) measured in single digit percentages considered a victory. This in itself came with unique dynamics, and responsibilities, which will be elaborated upon throughout the course of this thesis.

While the subjective lived experience (or be a “native”), was embraced in this thesis, it is not the only way to conduct field research. For every researcher like T.L. Taylor (2006) and Bonnie Nardi (2010), who preferred blending into their respective communities (although they did still make it known to their subjects their intentions and background), there are those who follow paths similar to that of Tom Boellstorff (2008) and Celia Pearce (2009), who both chose to overtly identify themselves as researchers to the viewing community.

In order to better illustrate the MMORPG experience, the next section will provide the reader with a personal account of a day in the life of an avatar within FFXIV. So begins the journey to unpack the “assemblage of the player” and *reconceptualize our understanding of MMORPG play and players*.

**CHAPTER THREE: WHO NEEDS FRIENDS?**

It's 8:02pm. The glowing blue aetheryte crystal spins serenely in darkness as I await to assume the life of Edana, albeit temporarily.

As the darkness gives way, I notice a mass of avatars milling around her. Some are running around in circles, some are jumping and others seem to be directing obscene gestures at everyone else.

'What's going on guys' I type into the chat box.

'Amax just left' replied Phiur.

'Again' added Admike.

I checked our free company logs and, just as they had said, there it was: *Amax left the free company*.

'He's gone to some Korean MMO' Admike continued.

'But wasn't he the one that got you guys into *FFXIV*?' I replied.

'Meh, he always does that and then leaves us hanging. OK, this pug [pickup group] just filled up, we gotta go. Cya [sic].'

And without so much as a wave goodbye they both disappeared into the distance. Edana turned around to face the nearby target dummy. Time to practice rotations.

## FRIENDS AS OBJECTS WITHIN THE MMORPG PLAYER ASSEMBLAGE

*“He is usually, out of my friends, the one that's always looking for the next new game. I remember we actually started playing this game, he did at least before the big 2.0 Realm Reborn update. He was like ‘You know guys, the game is going to change so much. We got to get into this now.’ He got a few of our friends to start playing it right on Realm Reborn... It's usually, my friend ... is always like ‘Hey man, let's play this game’ and we all just jump on it.” – Admike (2016)*

The above exchange to effect and initiate the translation of the player assemblage would seem not unusual. In fact, in many MMORPG studies, it has been assumed to be a common norm (Cole, H., Griffiths, M.D., 2007; Jakobssen, M., Taylor, T.L, 2003; Munn, N.J., 2011; Martoncik, M., Loksa, J., 2015).

“[...] participation in immersive virtual worlds, or MMORPGs, and in World of Warcraft in particular, is capable of providing the kind of shared activity that is required for the development of friendships.” (Munn, N.J., 2011, p.9)

But is this a premature assumption to make?

The current hypotheses on the significance of friends in the translation and construction in the player assemblage are often overstated. This chapter will discuss how the findings derived from the research conducted for this thesis reshape the understanding of the position that friends hold within the player assemblage and how they align with the findings within earlier studies.

## THE CURRENT UNDERSTANDING

It is seen in a myriad of forms throughout a number of MMORPG titles. Both *World of Warcraft* (Blizzard Entertainment, 2004) and *Final Fantasy XIV* (Square Enix, 2010, 2013) have a Recruit-A-Friend program; *Lord of the Rings Online* (Turbine, 2007) has a Refer-a-Friend program; *Everquest* (Sony Online Entertainment, 1999) has an Invite-a-Friend program; and *EVE Online's* (CCP Games, 2003) Recruit-A-Friend Program is intrinsically interwoven into its virtual economy. All of these referral programs have the same intention: leveraging current players to bring in their existing network of friends outside of the MMORPG.

From a business case standpoint, this would seem an obvious marketing strategy, however, limited research has been conducted on how successful these programs actually are.

Debeauvois et al. (2010) described Blizzard's Recruit-a-Friend feature in *World of Warcraft*, which allows players to invite fellow family members and friends, and act as a sponsor throughout their integration into the MMORPG. The material benefits to the player are evident. Sponsored avatars can immediately gain 30 levels, they're able to summon each

other from anywhere in the virtual world, and both the sponsoring avatar and the sponsored avatar are able to level three times faster than normal.

*Final Fantasy XIV*'s Recruit-a-Friend program, similarly, incentivizes players to invite others by providing exclusive material awards, such as currency towards rare virtual items and equipment, and trinkets, which increase experience earned. *EVE Online*'s Recruit A Friend program rewarded points that players could allocate to skills and currency, which *EVE Online*'s publisher and developer, CCP Games, explicitly used as a "faucet" to increase the money supply within its virtual economy.

Williams et al. (2009) noted that there were some limitations around the use of such programs to recruit new players, particularly when it came to player's psycho-social responses. For instance, females were happier playing with their partners than males, and the males found themselves to be more aggressive when playing with their partner. Debeauvois et al. (2010, p.8) surmised that this might be counterproductive in that the heightened aggression would threaten the "playful atmosphere" of the MMORPG, and "[...]degrade the game experience."

In investigating how MMORPGs are introduced to players as part of the Daedalus Project, Nick Yee (2005) found that 40.8% of male players and just 23.8% of female players out of a sample size of 1,778 and 420, respectively, found themselves playing an MMORPG without any assistance from a friend, family member or romantic partner.

Cole and Griffiths (2007) conducted a similarly quantitative study. Of 912 self-selected participants, 80.8% stated that they enjoyed playing with real life family and friends, and that

76.2% and 74.7% of male and female participants, respectively, had developed friendships online. 67.4% of participants believed that MMORPGs had a positive effect on the relationships of those within the game.

Nicole Lazzaro's (2004) extensive exposition of the four games design keys she believed were paramount to maintaining and promoting the engagement of players included the "social experience". She notes that many of the participants within her study stated that their enjoyment centered on playing with others, whether inside or outside of the virtual environment. One participant noted that it was "...the people that are addictive, not the game." (p.32)

For Jakobsson and Taylor (2003), their personal shared experiences in *EverQuest* led them to determine that socialization was one of the most important aspects of the game. In fact, they believed the existing vehicles that facilitated social interaction, for example, formalized "clubs" or "guilds", and raiding parties (groups of players who temporarily band together in pursuit of a shared goal), were not adequate and that it was "...clear that increasingly sophisticated models for interaction and relationships will need to be developed." (p.21).

However, it is at this point there is a disconnect between what developers and researchers expect to happen and what actually does.

Despite such a high percentage of MMORPG players being introduced to games through an existing relationship external to the MMORPG, the influence of that existing relationship on MMORPG play dissipates rapidly from there. In a number of recent studies into MMORPGs,

quantitatively, friendships originating from outside the MMORPG environment have repeatedly shown low correlation to a players attachment to the MMORPG environment.

In the study by Cole and Griffiths (2007) referenced previously, some discrepancies arise. Nearly 40% of participants stated that they would discuss sensitive issues with their friends online that they would not reveal to their friends in an offline realm. One would expect a similar number of participants to state that their online friends were more trustworthy than their real life friends. However, only 4.8% of participants indicated that was the case.

Cole and Griffiths theorized that this could be attributed to the relative anonymity of the MMORPG environment,

“The appeal of discussing issues such as sexuality lies in the ease and anonymity with which online seekers can obtain advice and reassurance, particularly regarding sensitive topic”  
(p.582)

This brings up two points of contention. Firstly, the participants of this study were self-selecting, that is, they were players who, by their mere choice, were inherently more likely to disclose sensitive issues, and this is supported by the discrepancy between the proportion of the study’s participants who stated that their online friends were more trustworthy than real life friends, and the proportion of people who disclosed sensitive information that they would not have told their friends in real life. Secondly and consequently, if the vast majority of players who self-disclose do not do so because of an intimate level of trust of others, then can this truly be regarded as friendship, or more a form of cathartic release or even simply an *audience* to perform in front of, which leads to the work of Ducheneaut, Yee, Nickell et. al.



(2006), who, although from different fields of study, foreshadowed this very concept a year earlier.

Ducheneaut, Yee, Nickell et. al. (2006) described *World of Warcraft* as widely considered as a social experience stating that “what makes a difference for many is apparently the shared experience, the collaborative nature of most activities and, most importantly, the reward of being socialized into a community of gamers and acquiring a reputation within it.” (p.407), referencing Koster’s emphatic statement within his widely referenced *A Theory of Fun for Game Design*, “MMORPGs are COMMUNITIES. Not games” (2005). However, what Ducheneaut et. al.’s research demonstrated that this did not hold true, in fact, *World of Warcraft*, popularly considered one of the most social games in existence, seemed distinctly “unsociable” – a “virtual Skinner box” (Yee, N., 2001) goading players from reward to reward.

Despite the different types of player archetypes, or classes, being designed to fit with one another, they found that the most consistently popular classes were the ones that required little interaction with others to complete tasks, or the most “soloable” ones.

And although the Ducheneaut, Yee, Nickell et. al. state “guild membership encourages players to play more and to group more”, in the very same set of observations they note only a 10% participation rate in joint guild activities and a high churn rate (p.414). Paradoxically, despite the conclusion that sustaining groups of any significant size in MMORPGs was a difficult task, they were also cited as a source of addition because of the sense of social obligation they created.

For the most part, they found that joint activities were not particularly prevalent among the subscribers of *World of Warcraft*. Most players stayed outside of grouped situations for most of their tenure. They speculated that the fundamental nature of MMORPGs, whereby disparities in power are encouraged, served to undermine social cohesion in larger formalized groups such as the aforementioned “guilds”, as, despite the size of *World of Warcraft*, the distinct lack of “grouping”, they could not attribute to play styles.

They did describe a novel concept within MMORPG studies, however, that players perhaps mistook sociability for – often referring to the nebulous “social factor” when referring to why they had taken up *World of Warcraft*: Social Presence (2006, p413). They describe it as a player’s sense of being witnessed by an *audience*, being a spectacle.

As an example, Ducheneaut, Yee, Nickell et. al. (2006) point to the “general” chat channel broadcast to all players within a particular region, and the “guild” chat channel that is broadcast all throughout the virtual world, but only to the select group of players within the same guild group. This leads to a sense of Social Presence, which they state, “may at first appear unrealistic”.

However, from the Actor Network perspective, this is an entirely realistic notion. When the urge to elevate the human actant is removed, one can see that it is not only “humans” that create the effect of a living, breathing society, but also the technological actants, in this case, chat boxes.

When Ducheneaut, Yee, Nickell et. al. refer to a large fraction of the population using these channels to build a “critical mass” of interaction, from the perspective of the player, this is

distilled into a small chatbox in the corner of his window, the level of interaction defined by the velocity of the text flying upward. The faster the text is moving, the greater the sense of “Social Presence”. In this way, and in this example, this “chatbox” plays a critical role in effecting the player assemblage as though it were being observed by an audience. There isn’t really an audience to witness the spectacle of the player, though, just a chatbox, *goading* the player along. This is, effectively, the interpellation of an important non-human actant, the chatbox, ambiguously hailing players, as if to say to all of them, *you’re being watched*.

The example of Social Presence that Ducheneaut, Yee, Nickell et. al. (2006) provide, and the contradictory conclusions of Cole and Griffin (2007) indicate a dissonance in research of MMORPGs and the actions of developers hint at an element of truth, that has perhaps, until now, been obscured by the focus on the human elements of an MMORPG as opposed to the non-human.

This is where Actor Network Theory finds itself particularly suited to analysis.

This chapter will explore the existing literature surrounding friendship in MMORPGs, how it effects the construct of the player assemblage, and how the concept of MMORPG friendship has been effected into being by academia – how is its meaning defined by the actants connected to it, and what are those actants?

This chapter will then dissect, or, in other words, trace, the accounts of participants within this study; how friendship has effected the way that MMORPG play has been translated for them; whether the actant of friendship can be considered an obligatory passage point; and how densely connected is friendship to the successful translation of MMORPG play itself.

The above analysis will then be compared against the current understanding of friendship in MMORPGs to answer the question of whether friendships really matter. Are they as densely connected or as essential as previously thought?

The purpose of this chapter is not to hypothesize a new understanding of what friendship means when concerning MMORPGs, rather this challenges the existing monolithic understanding of friendship and sociality being the sole *raison d'être* for the existence and popularity of MMORPGs.

## EXISTING LITERATURE

The earliest literature surrounding friendship in an environment similar to MMORPGs emerged from the contemplation of Multi-User Dungeons or MUDs, built off digitizing the framework first popularized by *Dungeons & Dragons* (Arneson, D., Gygax, G., 1974) and the progenitor to modern MMORPGs, as social worlds.

Pavel Curtis (1993) the creator of LambdaMOO (1990), an early MUD, was the first to understand them as a “[...] new kind of social sphere [...]” (Curtis, P., 1993, p.16). While he did not delve deeply, it is fascinating how prescient his final comments in *Social Phenomena in Text-Based Virtual Realities* were in relating to the lines of enquiry that eventually formed out of studying MUDs, and MMORPGs,

“It thus behooves us to begin to try to understand these new societies, to make sense of these electronic places where we'll be spending increasing amounts of our time, both doing business and seeking pleasure. I would hope that social scientists will be at least intrigued by my amateur observations and perhaps inspired to more properly study MUDs and their players. In particular, as MUDs become more widespread, ever more people are likely to be susceptible to the kind of addiction I discuss in an earlier section [...]” (Curtis, P., p.17)

Perhaps, the first social scientist to study MUDs seriously was Sherry Turkle (1994) who illustrated what she saw as the *expansion of social reach* with the story of Peter (Turkle, S., 1994, p.161-162), a 23-year-old physics graduate at the University of Massachusetts. Peter logs into MUDs for at least 40 hours a week, building a life online that seems more expansive than his physical self, so he can talk to people. Through MUDs, Peter had morphed from someone who had “[...] known little success with women [...] to a courtship in which he is tender and romantic, chivalrous and poetic” (Turkle, S., 1994, p.162).

However, despite Turkle’s intensely personal and vivid description of Peter’s life within MUDs, one cannot escape how fundamentally intertwined the MUD, the machine and the software are with that.

Turkle places technological actants “[...] directly in the service of the development of a greater capacity for friendship, the development of confidence for a greater capacity for intimacy.” (Turkle, S., 1994, p.163)

In Actor Network Theory terms, Turkle has punctualized and subjugated technological actants to serve as an object for Peter's social development. However, one has to ponder if Peter's social development is really at the center of this densely connected actor-network, if all the supporting actants were really mobilized to crystallize his ability to relate to others. If this really was the case, why did this not transfer to Peter's physical life and self?

As it did not, it should, consequently, be argued that the development of his online identity into somewhat of a virtual Casanova was being mobilized not for Peter's own social development, but rather in support of the player assemblage. Turkle's focus on human actants, and deprioritization of non-human actants provides an early example of where friendships within a virtual environment, in this case MUDs, are erroneously afforded prominence, and reflect Latour's argument that science had, for too long, favored the human over the technological when making assumptions (Latour, B., 1988, p. 153-157)

As noted in the Literature Review, Richard Bartle was another theorist who powerfully influenced early studies into MUDs. In one of his earliest works, a draft recreation of a study from the University of Twente, *When studying MUDs, a form of Role playing game on the InterNET, it is clear that there is a society* (2003), Bartle states,

“The pose and feeling commands in particular offer players a medium through which to substitute for the non-verbal cues that we take for granted in everyday life. By using them players may shrug, laugh, smile demonically, frown in anger, and offer hugs and kisses to fellow players. By using each of these commands MUD players are able to string a web of communication which ties each player to a social and virtually physical context, a shared web of verbal and textual significance's that are substitutes for, and

yet distinct from, the shared networks of meaning of the wider community. This unique method of communicating is the set of solutions devised by MUD players to meet the specific problems that they face, and which binds them into a common culture.”

(Bartle, R., 2003, online)

While he does not elaborate, he goes on to add,

“Everyone also agreed that there was an increase in friendliness and intimacy on the MUDs more than in some parts of regular life. [...] The safety of MUD and friendships increases their worth, and players can, ironically, become extremely dependent upon such relationships. The lack of factors inhibiting intimacy, and the presence of factors encouraging it, can induce deep feelings of attachment in players toward their virtual friends.” (Bartle, R., 2003, online)

Reading this one could very easily conclude that MUDs were a very powerful amplifier of the inherent social tendencies of its players, and yet,

“Their means of expression are severely limited by the technology on which MUDs are based, but instead of allowing that to restrict their communication they have devised methods of incorporating socio-emotions into pure text. They use text (normally such a restrictive medium) to make up for what they lack in physical presence. On MUDS, there is no lack of emotions expressed, in fact it is in some ways more obviously reflected than in real life. MUD’ders want their expressions conveyed so therefore they do find ways for this to happen.” (Bartle, R., 2003, online)

The above passage, clearly defines the primacy placed on the human, minimizing the technological actants mobilized; indeed, it's as if the technological actants are incidental, replaceable, without any agency or contouring effect. In this context, from an Actor Network Theory perspective, the very act of a message being communicated between players is not simply mediated by technological actants, as if an object. Rather, the translation of a message through a MUD from one player assemblage to another, leverages a complex network of technological actants that ends up creating a heterogenous sociotechnical assemblages. Players may refer to these as “friendships”, but, as this very paper acknowledged, this is dissimilar to physical representations of friendship, and, more than anything, contributed, and is mobilized, to support the almost “Skinner box” nature of the MUD, and sustain the player assemblage, as a technological actor network. This was the MUD acting on players, as intended, “Some would insist however that 'MUD' does in fact stand for Multi Undergraduate Destroyer, in recognition of the number of students who may have failed their classes due to too much time spent MUDding [...]” (Bartle, R., 2003, online)

More recently study has centered upon MMORPGs, most visibly, the franchises of *Everquest* (Sony Online Entertainment, 2003), with studies published by Edward Castronova (2001) and T.L. Taylor (2006), among others, and *World of Warcraft* (Blizzard Entertainment, 2004), with a prolific amount of research published by Ducheneaut, in partnership with Moore, Nickell and Yee (2004, 2006).

In Jakobssen and Taylor's (2003) forays into *Everquest*, they argued that there were two distinct layers to social interactions within MMORPGs. The first being by association, for example, “[...] being in a group entails lowering your guard somewhat and trusting the collective to treat everyone fairly.” (p.5), where a common goal requiring co-operation aligns



player's intentions. The second is association through a real life (or RL) connection, in the case of Jakobssen and Taylor, this was a fellow player's husband, who, after dying in an unsafe area, elicits an almost immediate response from his wife's fellow group members (p.7-8),

Beastlord 'Man my husband just got killed in a bad place and cant get to his body or rezzed' NewMagician 'Where is hubby [beastlord]?'

Beastlord 'Asking'

Beastlord 'Hmm hes upset'

Warrior 'Why?'

Beastlord 'Not talkng atm [at the moment]'

Beastlord 'Cause he may not be able to get his body back'

NewMagician 'Where did he die?'

Beastlord 'Hes not saying i know its near bur[n]ing woods'

NewMagician 'Could a 60 ranger get it'

Beastlord 'He was 52 i think he lost his lvl [level]'

Warrior 'If he needs help i can summon his corpse' [implies having access to a necromancer or shadowknight]

Beastlord 'Might'

NewMagician 'Got a 57 cleric too'

Beastlord 'He thinks he got 1'

NewMagician 'K well i can rez him with my son's cleric and probably drag with my ranger'

Beastlord 'What lvl clewric?'

NewMagician '57'

Beastlord ‘Okay I told him’

Beastlord ‘Our puters are not in the same place so we talk thru tells too lol’

They liken this rapid response to a mafia-esque “made man” rule, i.e. just as the mafia tended to base trust on the closeness of one’s blood bond (Laippalainen. T., 1993), real life friends and family playing *Everquest* (Sony Online Entertainment, 2003), tended to be afforded an additional level of trust based on closeness.

In fact, Jakobssen and Taylor refer to the *notion of sociality* (p.21), the idea that social processes are central to a player’s success, referring to the comments of Brad McQuaid (Aihoshi, R., 2002), one of the designers of *Everquest*,

Players won’t be drawn in and there won’t be anything there to bind them. The key to creating community, therefore, is interdependence. In *EverQuest*, we forced interdependence in several ways and although we’ve been criticized for it, I think it’s one of a couple of reasons behind our success and current lead. [...] By creating an environment often too challenging for a solo player, people are compelled to group and even to form large guilds and alliances. All of this builds community, and it all keeps players coming back for more and more (Aihoshi, R., 2002).

While Jakobssen and Taylor use this passage to illustrate the point of *Everquest* being an example of an MMORPG with an ideal implementation of explicit embedded socialization processes, when one understands that, within this text, they have sought to establish *sociality* as central to the success, it can be seen that Jakobssen and Taylor, have, in fact, mis-used McQuaid’s statement. Actor Network Theory provides a full account of its meaning.

From the Actor Network perspective, one can see that friendship and socialization did not underpin the design of *Everquest* (Sony Online Entertainment, 2003), even from the developer perspective. Rather, the actor networks within the MMORPG effected players in such a way as to mobilize friendship for the ongoing successful translation of the player assemblage, i.e. “[...] it all keeps players coming back for more and more [...]” (Aihoshi, R., 2002).

In this instance, far from sociality being central to the successful and continued translation of the player assemblage, the appearance of friendship was a byproduct of its mobilization to support that translation.

Perhaps the most prodigious group of researchers to investigate sociality in MMORPGs is the group of Nick Yee, Nicholas Ducheneaut and Robert J. Moore (2004, 2005, 2006, 2006, 2007, 2007, 2009).

Ducheneaut and Moore, in particular, over time evolved their understanding of sociality to, perhaps, the closest reflection of how Actor Network Theorist might view sociality.

In partnership with Nickell, they first noticed the poor sociability in MMORPGs in 2004, when they examined the, effectively, virtual “third places” in *Star Wars: Galaxies* (Daybreak Game Company, 2003),

“[Third Places] do not set formal criteria of membership and exclusion. [...] the charm and flavor of one’s personality, irrespective of his or her station in life, is what

counts [...] beyond the contexts of purpose, duty, or role” (Oldenburg, R., 1989: p.24-25)

Here it is worth noting that *SWG's [Star Wars: Galaxies]* design runs exactly against this principle.’ (Ducheneaut, N., Moore., R., Nickell, E., 2004, p.7)

What they found was that while cantinas, Star Wars’ version of a bar, did attract a large proportion of the population in *SWG*, only a small fraction of visitors used them as a means to genuinely interact with others. The vast majority used them as “grind halls” (p.11), where players only visited because their certain class required them to in order to gain experience and “level up”. Visits were short and transactional. Rather than being a “third place” as Oldenburg would have likened it, these virtual bars reflect the same characteristics observed above, in MUDs, and in a more modern MMORPG like *Everquest*, that they are a form of positive feedback loop or a “virtual Skinner box”, that “[...] keeps players coming back for more and more [...]” (Aihoshi, R., 2002).

Ducheneaut, Moore, and Nickell, along with Yee, further developed the argument in “*Alone Together?*” *Exploring the Social Dynamics of Massively Multiplayer Online Games* (2006) that MMORPGs were less social environments or communities, and more carefully crafted systems that expertly ramped up difficulty with reward to reinforce player commitment,

“Players are always on the edge of opening up new abilities, of discovering new content. The increase in playing time right before new abilities become available illustrates how easily players can be driven by such rewards.” (p.7)

This led Ducheneaut et. al. to ask several important follow-up arguments and questions that were, ultimately left unanswered.

They argued that the defining factor in the popularity of an MMORPG was in its design of that positive feedback loop; that the smoother that gradient of progression in reinforcing player commitment was, the less of an intensive “grind” it would seem,

“This shows that, as the multiplayer games market gets bigger and more choices become available, players might favor good game designs over rich social environments.” (p.7)

This was the reason, they argued, for *World of Warcraft* (2008), the test environment within this study, being so popular and being seen as “accessible”, while, in no way, less demanding of a player’s time or energy, when compared to the earlier studies Ducheneaut, Nickell and Moore had conducted in *Star Wars Galaxies*,

“The importance of game design versus the community features of MMORPGs might be best illustrated by comparing WoW to one of its competitors, Star Wars Galaxies (SWG). The latter was explicitly designed to emphasize the more social aspects of multiplayer gaming, but was also widely criticized as having one of the most intensive “grind” of the genre (Ducheneaut, Moore, 2004, p.360-369) – in other words, a player’s progress was nowhere near as smooth as in WoW. And SWG, targeting the same audience as WoW, never reached the massive number of subscribers WoW attracted within the first few months of its launch (it is estimated

that SWG's population peaked at around 300,000 subscribers (Woodcock, B., 2007).” (p.7)

In essence, this describes the system of progression within an MMORPG, not the aesthetic design, nor its human actants, as being the most strongly connected actant in effecting the widespread successful translation of player assemblages at scale, and it, most certainly, would be considered technological as opposed to human.

They also questioned whether player interactions were truly social in nature, whether it was really about making friends or engaging in community building.

Their data showed that the vast majority of players within *World of Warcraft* spent most of their time outside of groups, which contradicted earlier studies emphasizing the importance of time within groups and joint activities (Jakobssen, Taylor, 2003). Rather, Ducheneaut et. al., argued that they observed players were more likely to use others as an audience, both to effect a sense of “social presence”, and as a reason to create a “spectacle” (p.7), than seek support and camaraderie.

They defined “social presence” as the *feeling* of a social environment,

“[...] while playing WoW [*World of Warcraft*], one is always surrounded by background chatter in the general or guild channels. This gives a strong impression of playing in a world inhabited by other people, even if these people are not immediately visible.” (p.8)

However, I would argue that they have, again, prioritized the human over the technological and one could argue that it's not "other people" effecting this feeling of social presence, rather it's the technological actant, the chat box itself, that is effecting it. For example, if the chat box was filled with chatter, not from human players, but from non-human bots, would that feeling of social presence be any different if the contents of the chat box would effectively be the same?

Finally, they also defined MMORPGs as a "reputation game", where players equip powerful items to broadcast their sense of achievement, so from an Actor Network Theory perspective, those pieces of "equipment" are the technological actants mobilized to translate into "reputation", and, hence, are an obligatory passage point to the formation of a player's identity within MMORPGs. In other words, they are a crucial part of the player assemblage, and MMORPGs are as much, if not more, about how "gear" interacts and is networked with the virtual world as the human actants within it. Consider, what motivates, or effects, players to group with one another in an environment where, as Ducheneaut et. al. have observed, for the vast majority of time, they choose not to?

Ducheneaut, Moore and Yee would depart from this line of inquiry after this publication.

And so, while this has been a somewhat brief overview of research conducted on friendship, community and sociality within MMORPGs, it can be seen that, since the era of Curtis and Turkle, prominence has been afforded to human actants, perhaps, overly so. This has led to the punctualization and calcification of notions of friendship, community and sociality before they were given the chance to be properly understood as a construct of both the human and technological, and unlike the formation of friendship and community in the physical sense.

It's elevation in status within the study of MMORPGs as an obligatory passage point has led to lines of inquiry that have been pursued for decades. Despite this focus, it has led to little insight into the commercial sustainability of MMORPGs.

Even, in instances where researchers have sought to argue against the traditionally defined notions of friendship, community and sociality within MMORPGs, because they have hitherto failed to account for technological actants, contrary arguments have had little follow through, and those traditional notions continue to occupy a mythologized position within both the study, play and development of MMORPGs.

This chapter seeks to unpack these notions and trace the technological actants that form such a crucial part to their formation in an effort to reveal the truly techno-social nature of relations within an MMORPG environment.

## IS FRIENDSHIP THE RIGHT WORD?

As can be seen from the above analysis of existing texts, the examination of the concepts of friendship, community and sociability, have, thus far, been inadequate, contradictory and inconclusive. A failure to take into account technological actants, in other words, observe generalized symmetry, has meant a failure to fully account for the techno-social nature of relations within MMORPGs.

From the research for this text, it was found that, despite “friendship” or notions of it being described by at least eight of the fifteen participants as being part of the translation of their



player assemblages, in none of the cases could it be considered as an obligatory passage point. In fact, in many cases, the connection to a “friend” was not even the most densely connected actant to a participant’s player assemblage. They were found to be unstable, short lived and easily substituted – friendships were often mercenarily formed, relations of convenience, mobilized to support the translation of another assemblage.

“That game [*Black Desert Online* (Pearl Abyss, 2014)] was probably just because one of my friends was like ‘This game is going to be super hyped. Let's get it.’ I gave it chance and I really liked the combat of that game. It's really fast-paced, really fun combat. But there's just nothing to do really at the end unless you're trying the no-life hardcore grind and be in the top percentage when you get to PvP [Player versus Player] [...] Some of my friends stopped playing and it was just again down to me and a different one of my friends playing. [...] I just felt that the game was kind of becoming a responsibility rather than having fun playing.” (Interview with Admike, 2016)

“The reason that I got interested in Final Fantasy XIV is because one of my really good friends at the time was playing it, and I just wanted to mess around with them, so I made a free trial account and I followed them around. And then I actually started to like the game. [...] She talked to me about the game... Yeah, it seems like three months before I actually started getting interested in it. [...] When I meet someone in this... It's because I want to be a funny person, too.” (Interview with Cole, 2016)

“I had a friend that I was talking to for a long time. She was like my art buddy, and she played Final Fantasy on and off. And it was just, I guess she wanted us to do

something more together. She was like, "Hey, we should all play this game." So it was me and another girl, and we started to get into it. And they fell out, and I've just stayed." (Interview with Helion, 2016)

As one can see from the descriptions of play by study participants, relations within MMORPGs do not follow the standard notions of *sociality*, for example, as defined by Jakobssen and Taylor (2003). Relationships and friendships developed in the real world (or RL) do not always easily translate to the virtual. While, that isn't to say that the real and the virtual are bifurcated realities (it is clear that they effect each other), but, when translating friendship within an MMORPG environment, there are simply more interceding actants that increase the likelihood of translation failure. For example, in communication, a player is both communicating through a vessel, the avatar, and using a sub-optimal form of communication, that is text, through technological mediums, that is, keyboards, mice, the local network and the wider network, the screen, the chat box, the font, and different user interfaces, amongst a host of other technological actants that need to be mobilized in order for the message of "hi" to transmit. Something that, at first glance, when punctualized, seems like such a simple interaction, upon deeper tracing or unpacking, requires an intricate web of actor network relations in order to successfully translate. If we take each of those actants, both technological and human, there are a number of opportunities for interceding actants to cause translation failure. For example, from something as simple as the human on the other side looking away and missing that message, to a network failure in a datacenter somewhere halfway around the world, to the "h" key not working on the keyboard that has been mobilized,

“[...] the five senses aren't all there. You just have to base off of what they say. And it's really difficult, because you don't know if someone is just messing around or if maybe they are just having a bad day, but you can't tell, because it's text. You just have to spend a lot of time with someone to really know what kind of person they are. And then running stuff with them, adding them to your friends' list and saying "hi" every two weeks. [...] I would say it's exactly like texting with a cell phone. You don't get instant feedback. You just send it and hope they get the message, that your intentions are made clear.” (Interview with Cole, 2016)

Equally, there are many other actants that are more densely connected, mostly technological and often fantastic in nature. While this will be explored in more detail in later chapters, for illustrative purposes, many participants felt that their translation of the player assemblage was more densely connected to the network of technological actants, for example, graphical assets, that contributed to the translation of *Final Fantasy XIV*'s aesthetic, than any human actant,

“You don't have to be stuck in whatever armor they give you, so I can go around in a bikini because I want to. I can just run around in a neon colored pink suit. It's my choice. I can have a man who wears no pants. [...] I don't dress up in real life. I guess it's just my way of playing dress up.” (Interview with Helion, 2016)

“First impressions were the game's visual aesthetic was really appealing. It's just an amazing game visually. Like, it's a piece of art. [...] And just every single class is amazing, fluid animations, and the particle effects for things and the spells. [...] Like, certain spells, like, Summoner's Shadow Flare, like, the Monk has this little aura

around them where it's like lightning, because you're going really fast, and they are really pumped up and charged up, and they have this really cool aura that goes around them. I really geek out about stuff like that.” (Interview with Cole, 2016)

In fact, for some participants, their friends were equally responsible for the translation failure of the player assemblage, or, from the inverse perspective, the successful translation of their exit from MMORPGs,

“Once most of my friends have left the game, I too will leave the game. That's always just been a characteristic of us. Some of our other friends that don't play these MMOs with us will always look at us, they'll be like, we're not going to buy a game that you tell us to buy because you guys are just going to leave in three months. That's always just what we've done.” (Interview with Admike, 2016)

“I got my friend to play. It was little bit better. Then she quit after about a day because she just didn't... She couldn't do the controls and she didn't enjoy it. I trundled along for a while. It was like, no, I'm sad here, so I left.” (Interview with Shae, 2016)

From the above examples, it can be seen then that friends, at least when viewed through the lens of traditional sociality, can be poorly suited to being the obligatory passage point through which a player assemblage is translated.

Yet, as described earlier in this chapter, MMORPG publishers and developers have made referral, or “recruit-a-friend”, programs an intrinsic part of their player recruitment strategy.

From an actor network theory perspective, the idea very concept of “recruit-a-friend”, such that it has even developed an MMORPG specific moniker, is a punctualized one. When one unpacks and traces the notion that, in order for it to be fully translated, friends need to play together, it can become an absurd interaction with the MMORPG.

For instance, imagine a player has recruited a friend into World of Warcraft using Blizzard’s Recruit-A-Friend program (Blizzard Entertainment, 2018). In order to fully leverage the rewards of that program, which amounts to faster experience accumulation of experience points, rare pets, and mountable animals, both the player and the friend are required to play together,

“Play together with unique benefits like friend-to-friend summoning, bonus experience, and more. [...] Summon each other once every 30 minutes for fast grouping. [...] Group together and enjoy 50% bonus experience for faster levelling. [...] For every two levels your recruits gain, they can grant one level to your character.” (Blizzard Entertainment, 2018)

If one’s play, or translation of the player assemblage, is purely predicated upon the play of another, for example, one would only log in when the other did, one would only complete a quest or adventure through a dungeon, with the assistance of the other, and one would only socialize through the other’s network of connected avatars, you can imagine then that this would not be a particularly durable translation of the MMORPG player assemblage, and that, the “recruit-a-friend”, or referral, program could be counterproductive for publishers and developers, if the intent was to retain new players. This type of translation error could explain Debeauvois et al.’s (2010, p.8) notion of the degraded game experience arising from referral

programs within MMORPGs. The failure to properly mobilize the correct actants to support the translation of a new player assemblage leads to the failure of both that assemblage, as well as the actor-network, of the referral program itself.

Tracing it more thoroughly, however, a referral strategy isn't really about leveraging friendship or notions of sociality at all.

“For referrals to happen, players have to be given incentives. In terms of in-game rewards, game companies should, at the first glance, reward the sponsoring player so that he does it again.” (Debeauvois et al. 2010 p.8)

What Debeauvois et al. is saying, and what can be observed in the way referral programs are constructed, is that without the virtual rewards, without the rare trinkets, mountable animals, special equipment and experience point bonuses, the referral program, and, by extension, the recruitment of new players, fails. In essence, what this means is that the actants that are most densely connected are technological, rather than human, that they are, and should be, the obligatory passage points that the translation of a new MMORPG player assemblage need to mobilize in order for sustained successful translations. The intention of forcing the ongoing involvement of a human actant, by publishers and developers, to get access to rewards, to falsely mobilize them as a mandatory obligatory passage point, leads to the sub-optimal formation of fragile MMORPG player assemblages. However, why they choose to force this human involvement, and why this occurs is not surprising. It reflects the widely held belief within both commercial and academic spheres, that the importance of friendships and the social, overshadows the technological actants that often have as much to do with the MMORPG player assemblage as the human.

As discussed previously, prominent MMORPG theorists Jakobssen and Taylor see an ongoing focus on sociality as the future for MMORPGs,

“As the genre develops it is clear that increasingly sophisticated models for interaction and relationships will need to be developed.” (Jakobssen, M., Taylor, T.L., 2003, p.21)

This was a similar conclusion that Ducheneaut and Moore came to in their earlier work on social interaction, specifically with *Star Wars: Galaxies*, before their understanding evolved to encompass more nuance,

“SWG is one of the first attempts at encouraging social interaction in specific game locations. This recognition of the social character of multiplayer games is certainly a step in the right direction [...] Our observations of interaction patterns [...] however, reveal that some progress remains to be made for these places to be completely successful.” (Ducheneaut, N., Moore, R., 2004, p.10)

There are also a number of widely cited studies on sociality and social interaction in MMORPGs that have built on Jakobssen and Taylor’s, and Ducheneaut and Moore’s findings, that yet to be touched on. In particular, Vivian Hsueh-hua Chen (Chen, V.H.-H, et al. 2015; Chen, V.H.-H, Duh, H. B.-L., 2007) is, perhaps, the most recent academic to publish work that has been prolifically cited, concentrating on social interaction within MMORPGs, which she has placed great emphasis on, stating,

Social interaction within MMORPGs is of paramount importance, influencing both the enjoyment and the level of engagement that a gamer has. [...] Enjoyment is greatly enhanced when the game provides opportunities for pleasurable social interactions such as grouping and socializing, resulting in the formation of social ties. [...] Especially important is the link between social interaction and engagement. Non-engaged gamers found social interaction a waste of time and a hindrance to their game play. Conversely all engaged gamers valued social interactions within the game and stated that it was both important and enjoyable. [...] Anti-enjoyment factors include the experiential states of apathy and anxiety, negative social interactions [...]" (Chen, V.H.-H, et al. 2015, p.265-266)

Chen et al., however, do not elaborate on why they concluded this was the case – that pre-eminence be placed on social interaction, and that social interaction was the causal link between players that were engaged, and players that were not engaged. And yet, at the same time, Chen et al. acknowledged that there were several additional factors they discovered, which also had an effect on the enjoyment and, hence, engagement, of player's interactions with MMORPGs,

"A reinforcing stimulus is built into the game design, through the random nature of drops and rewards. This built up of anticipation for future rewards as gamers are never sure when the next essential item will be dropped, adds on to their enjoyment and tempts gamers to game even further. [...] Real world contextual factors such as interference by family members or disturbance through phone calls can also disrupt gamers' gaming experience. In addition, enjoyment of the game is also compromised when technical problems crop up, such as hacking, bugs and game lag." (p.266)



Chen et al., in essence then, is referring to the MMORPG tendency to closely resemble a Skinner box, which MMORPG theorists have previously identified (Ducheneat, N., et al., 2006), and acknowledges, albeit briefly, that non-human actants can have an effect on the translation of the player assemblage, whether that is in mobilization to support, or interceding to elicit failure/licit support for the successful translation of a different actor network.

When Chen et al. refer to the “game design”, a punctualized term meant to encompass the broad overall design of an MMORPG game, they are referring to the very definition of an actor-network, both technological and human in construction, and an assemblage that can’t successfully translate without one or the other. When they refer to the “[...] random nature of drops and rewards [...]” building up “[...] anticipation for future rewards [...]”, this is a clear demonstration of a technological actant effecting a human one, one that “[...] tempts gamers to game even further [...]”. When they refer to the “[...] enjoyment of the game [...]” also being “[...] compromised when technical problems crop up, such as hacking, bugs, and game lag [...]”, this also a demonstration of technological actants effecting a human actant, albeit in ways that serve to interfere with the successful translation of the player assemblage.

So, what does this all mean in relation to the understanding of MMORPG player assemblages?

## FRIENDSHIPS AND SOCIALITY IN RELATION TO MMORPG PLAYER ASSEMBLAGES

Chen, is not the only MMORPG theorist to gloss over how intrinsic technological actants are to the successful translation of player assemblages, or, for that matter, MMORPGs themselves. As mentioned earlier, almost all theorists, from the time of MUDs to contemporary MMORPGs, from Turkle (1994, 1995) to Jakobssen and Taylor (2003), and from Cole and Griffiths (2007) to Ducheneaut and Moore among others, (2005) have, at some point, been guilty of anthropocentrism, with Chen only being one of the latest to, almost, inadvertently reference technological actants, while focusing on the human and the social.

This is an approach that has effected, mobilized, and punctualized repeatedly between the academic sphere and the commercial sphere, starting with Curtis (1994) and Bartle (1990, 1996), and most recently effected by Yee (2006). For instance, Bartle's easily understood model of player typology (1996) is still regularly referenced in contemporary games design and gamification educational literature (Kumar, J., 2013), a typology that was consciously untested and derived from Bartle's own observations and discussions with fellow MUD players, which will be explored in greater detail later in a later chapter.

What this means is that the prevailing network of perspectives, or bias, that the MMORPG player assemblage is predominantly human centered has been continuously translated and reinforced within commercial sector for the last two and a half decades. It has resulted in an incredibly densely networked and punctualized assemblage. Unsurprisingly then, within the contemporary MMORPG industry, it is a generally held assumption that publishers and developers are required to lean upon human networks as the ultimate ideal when recruiting

more players i.e. prompting the translation of new player assemblages, at scale (perhaps this is related to the often used business term “network effect”).

This is a flawed understanding of how new MMORPG player assemblages are translated and perpetuated. It fails to take into account the tremendous effects of densely connected technological and non-human actants, which are essential to the successful translation of such an experience.

For example, even the most widely played MMORPG in history, *World of Warcraft* (Blizzard Entertainment, 2004), has had to contend with a complex, densely punctualized and opaque regulatory system when launching in China, at several points having to delay and suspend service, due to censorship requirements (Parrish, K., 2009). This is not to mention the translated and regionalized interface, the reinvention of the subscription model, and having to contend with interceding actor-networks such as an unstable distributor ecosystem, and a bottle necked Internet infrastructure (Andrews, S., 2014).

All of this in an effort to spur the creation of new MMORPG player assemblages in China. It is a complex interpellation between the technological and human, one that requires a wide range of heterogenous, seemingly disparate global actor-networks to be mobilized in order for even a single player to enter their username and password into a log in screen and begin pressing WASD to direct their virtual vassal, or avatar (vassal is a consciously used term in that an avatar has mutual obligation to the player).

The fact that it often occurs so seamlessly, with millions of player assemblages successfully translated every day, is exactly why there exists the danger of punctualizing the MMORPG

experience as wholly driven by human or social actants. It is thus, unsurprising the predilection for academics, developers and publishers to veer into anthropocentrism, and a focus on human social networks, sociality and friendship, whether that is in the study, development or marketing of them. But as has been demonstrated throughout this chapter, *friends aren't really central to the formation and translation of the MMORPG player assemblage.*

The MMORPG player assemblage is a technosocial construct, the technological and human effect one another, and successful translation cannot occur without mobilization of both. This is generalized symmetry in action, which brings us to the next chapter in this thesis.

**CHAPTER FOUR: THE MECHANOIDAL FRONTIER**

It's 7:58am. Bleary eyed from an early morning raid on a dungeon, I let Edana hack away at the last of a few globs of yellow goo, their jelly-like forms burst as they perish.

I hear the crackle of a voice channel switch on,

'That's the last of them', says Rah, 'let's keep goin', this is taking forever.'

'Well, we would have been done ten minutes ago if Ed hadn't DC'd at the last boss', Dryst replied, laughing while his own voice channel hissed in the background, as if the illustrate its displeasure at Edana.

Raven, the last member of our group sprints towards the tunnel in front of us, and we follow.

As our avatars round the corner it opens up into a cavernous underground lagoon. Upon a wooden stage in front of us, what can only be described as an oversized axe-wielding zombie pirate warlord cackles. But, our avatars weren't there to gawk at the sites,

'Pull!', barks Rah.

Edana runs headfirst towards the zombie pirate,

'Pulling', I reply as Edana lobs her shield.

Nothing happens. Now standing in front of it, Edana slashes wildly but, still, nothing happens. The zombie pirate warlord shuffles his feet slightly and continues to cackle sporadically.

‘What are you doing Ed?!’ Dryst and his hissing voice channel clearly seem to be losing patience.

‘Kite it Raven! Ed’s DC’d again’, Rah shouts, with the confidence of an experienced raid leader, the din of battle can be heard over his voice channel.

On my screen all I could see is Edana still flailing to no avail. Everything else is frozen in place, as if time had stopped.

I continued to mash at my keys, trying influence anything I was seeing on my screen, when all of a sudden there is a flurry of activity. Everything happens so quickly I can barely decipher what was going on. Before I knew it, I’d snapped back to reality.

Edana lies motionless on the ground. In the distance I can see Rah, Dryst and Raven polishing off the last of the still chasing zombie pirate warlord.

Their avatars walked over to Edana,

‘Ed, are you back with us?’ Rah asked.

*‘Yea, sorry about that.’* I typed into the chat box, too sheepish to speak.

‘All good, you’re just fighting the lag monster’ replied Dryst as his avatar begins resurrecting Edana’s virtual body.

## THE HUMAN AND NON-HUMAN ARE INSEPARABLE

“Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert.”  
(Haraway, D., 2016, p.11)

It has now been established that friendships, and sociality, in other words, human actants, are suboptimal obligatory passage points for the translation of the MMORPG player assemblage, and that a long held bias towards the importance of human actants to both the translation of MMORPG player assemblages and MMORPG play itself has meant that little effort in both the academic and commercial spheres have gone into tracing the, often, technological actants that effect translation error on the MMORPG player assemblage.

Ducheneaut and Moore (2004), in their study of Star Wars Galaxies (Daybreak Game Company, 2003) determined that the shortcomings they found in the social spaces of the virtual world, could be explained as being *not social enough*,

“We believe this stems in great part from a lack of incentives for players to actively engage in non-instrumental interactions in these two locations. In particular, SWG’s powerful macro system automates the performance of instrumental action while stripping away any reason to converse with other players. Some shortcomings in the architecture of the game’s social spaces, as well as the lack of important awareness data, also compound the problem. We propose that game designers could use social interactivity data, similar to the one we described in this paper, to go beyond this problem and reward the players who make these locations truly social environments. This would allow instrumental and social players to successfully cohabit within these new, expanding online worlds.” (p.10)

When we trace their statement above more closely, we can see that there are important technological actants that effected a distinctly unique construct of sociality within Star Wars Galaxies, demonstrating the equal importance of the technological and human in the translation of social interaction within MMORPGs. What Ducheneaut and Moore are arguing for then is, essentially, more technological intervention so that avatar interactions within MMORPGs better ape the social interactions we’re more familiar with in the real physical world – effectively, they are asking for the mobilization of interceding *technological* actants to effect the translation error of this technosocial construct or assemblage, in the vain aspiration of making it more *human*.

In recent history MMORPG makers have, largely, obliged. It is now common practice for MMORPG play to be bifurcated into two distinct and sequential parts: firstly, leveling, where players complete quests and tasks by themselves to gain experience points; and then, the “end-game”, where players have gotten the maximum amount of experience points allowed,



but now must engage in large-scale, often grouped quests and activities in order to improve their avatar's virtual equipment, such as armor and weapons. MMORPGs such as *World of Warcraft* lock much of its content behind the end-game (Royce, B., 2014), "[...] *World of Warcraft* players were trained to level mostly solo from 1 to 60, doing a 5-man dungeon here and there along the way, and then bam: Welcome to the raiding endgame! It's nothing like the rest of the game, and if you don't participate, your gear will be crap, you will look like a newbie, and you will be destroyed in PvP!"

This is unsurprising as the modern day makers of MMORPGs often prioritize developing content and mechanics for it (Townesley, G., 2013), as Jeremy Gaffney, the executive producer of *Wildstar* (Carbine Studios, 2014), explained,

"There are several ways to set fire to a hundred-million dollars and lose it. Probably the best way is not spending time developing your endgame. Leveling is awesome, but it goes by quickly and then people leave. It's even worse if your hardcore players report back to the general public that there is nothing to do and that the game sucks. It's about what you get to as much as it is about getting there.

Right now, 50 to 70% of our team is dedicated to elder content. We need a lot of it, and it has to be replayable. A huge chunk of the coolest stuff is happening in the elder content because that's when it has to pay off."

This curious bifurcation of the MMORPG play experience and de-emphasis on leveling is reflected in the way many more established MMORPGs have evolved. For example, *World of Warcraft* now allows new players to skip thirty levels when invited by an existing player;

Guild Wars 2 (ArenaNet, 2012) allows players to skip to level 80 after purchasing expanded content; and within Final Fantasy XIV, players now able to purchase their first 60 levels.

These are just some of the means with which MMORPG developers have allowed players to skip leveling as an incentive to join, under the assumption that the most compelling part of an MMORPG is it's other players, whether that's your friend (as previously discussed, not as essential to the translation of MMORPG play), others that players come into contact with during grouped activity or within designated areas of sociality.

Effectively, from the Actor Network perspective, this means many newly translated and still brittle player assemblages are thrust into connecting with an environment containing much more well established, densely connected, and, in the vast majority of cases, punctualized, player assemblages and translations of MMORPG play. It is then assumed that these new player assemblages will be able to simply substitute the process of repeated translations that these established constructs have already undergone, whereby the actants and networks making up the player assemblage are given time to iteratively reinforce the construct through the continuous problematization, interessement, enrollment and mobilization or deployment, sometimes substitution, of allied actor-networks, by *connecting* with them. In practice, it is not so simple,

“It felt very lonely in the game. Again I just like across characters. I would have people higher level than me just run around and be a nuisance and block me from clicking on something which was obnoxious. It felt very negative. But I was thinking it was more that I just didn't understand it and I couldn't get into it and I didn't understand where to go from one place to the other. That may have just been my

inexperience probably with my experience with any kind of MMO. I just got stuck. I didn't really enjoy it enough to figure out even though it would have probably been easy to figure out.” (Interview with Shae, 2018)

But, the elevation of human actants to prominence was not always the predominant model of inducing the translation of player assemblages. In the embryonic early stages of the MMORPG genre, technological innovation, the translation of new non-human actants, was, often, as important, if not more so, than the mobilization of human actants to support the MMORPG, and translate play.

Meridian 59 (3DO, 1996) is commonly considered the first true MMORPG (Achterbosch et al., 2008; Koster, R., 2017). It featured the first fully three dimensional representation of a MUD; it was the first to be described as a “persistent world”, used by 3DO in their release press material; and it was also the first to feature a monthly charging system, what came to be known as a subscription, as opposed to the hourly rate that was commonly used up until that point.

“Until Meridian 59 launched in 1996 and UO launched in September of 1997 with flat monthly rates, billing for commercial MMOGs was mainly on a per minute/hourly basis (with a brief period of free access to AOL’s games from 12/96 to about 7/97). Thus, the number of total subscribers was less important than how long you kept your hard core players (the top 10%) in game.” (Mulligan, J., 1996)

The monthly subscription model allowed Meridian 59 to build up a player base of thousands during its open beta stage of testing. Tiny by today’s standards, but, in 1995 Meridian 59 propelled the genre from a niche, somewhat tribal, play experience, into the territory of being

*massively* multiplayer. In effect, the creation of the MMORPG genre was spurred into existence by a non-human, technological actant, Meridian 59's payment system, acting as the obligatory passage point.

The goal of this chapter is to trace and describe the other non-human and technological actants that have effected the way contemporary MMORPG play and player assemblages have been translated.

It will begin with a brief overview of one of the core tenets of Actor Network Theory, generalized symmetry, to provide context as to why it is important to acknowledge non-human actants, and how, failing to do so risks illustrating an incomplete picture when tracing an assemblage. This chapter will then discuss previous accounts by theorists who have traced other non-human actants with MMORPGs, and how they saw them effect the translation of MMORPG play and the player assemblage.

Finally, the chapter will trace prominent historical non-human and technological actants that have had a profound effect on the way that contemporary MMORPGs have been translated, before tracing contemporary actants that have, in parts, effected the way that the subjects within this study have translated their own assemblages of play.

#### GENERALIZED SYMMETRY – THE ABRIDGED VERSION

As briefly discussed previously, in order to overcome the powerfully ingrained duality between the human and the non-human, Actor Network Theory practitioners consciously

employ the concept of “generalized symmetry”, wherein, all of the actants and objects that lend effect to the construction, or translation of an assemblage or actor network, are treated as ontologically equal.

The term was first coined by Michel Callon in 1986 when observing the laboratorial origins of the electric vehicle, but was consciously employed and developed, in other words, repeatedly translated, between the 1980s and early 1990s through the empirical observations of Callon, Latour and Law (Callon, M., 1986; Callon, M., Law J., 1997; Latour, B., 1988, 1996, 2005). The three most influential progenitors of Actor Network Theory saw that the environments of science and research as holding the power to revolutionize society, the factories for Kuhnian paradigm shifts, but the source of that power was largely obscured behind the construct of the “scientist”, much like, in past centuries, the power of the Church was obscured behind the construct of the amicable “priest”, “If laboratories and research sites are to the twentieth century what monasteries were to the twelfth, then the sources of their power and efficacy remain a mystery.” (Callon, M., 1986, p.1)

Past anthropological studies into the activities of these loci of science found nothing exceptional to explain their effects on the wider society, so they started looking at the rest of the actants within the lab environment. Though philosophically radical, they determined that both texts and technologies, as well as humans were equally important in the construct or assemblage of scientific discovery, which necessitated the ontological leveling that came to be called generalized symmetry. We all recognize that the social is, in parts, technologically heterogenous, and that the technological is, equally, in parts, socially heterogenous – these are all, one and the same, sociotechnical assemblages or actor-networks. Callon, Law and Latour’s contention, and the reason for explicitly designating the term generalized symmetry

to the act of ontologically flat observation, was because, even though it was recognized, in scientific inquiry, it was rarely practiced,

“Often in practice we bracket off non-human materials, assuming they have a status which differs from that of a human. So materials become resources or constraints; they are said to be passive; to be active only when they are mobilized by flesh and blood actors. But if the social is really materially heterogeneous then this asymmetry doesn’t work very well. Yes, there are differences between conversations, texts, techniques and bodies. Of course. But why should we start out by assuming that some of these have no active role to play in social dynamics?” (Callon & Law 1997, p.168).

This question posed by Callon and Law over two decades ago, continues to be a valid one. As mentioned in the previous chapter, human actants have continued to be emphasized by researchers in the field of MMORPG studies. To trace deeper interactions beyond the individual, Actor Network Theory calls for the study of the network of associations between heterogeneous actors, how each actor effects another, and how these associations are proposed, attempted, interceded and/or successfully translated. There is nothing else, from an Actor Network Theory perspective, than these associations, effects and translations.

This text will be no different. To unpack how the contemporary assemblage of MMORPG play came to be, this chapter will be tracing the broad network of actants that have effected it over time, how they came to be successfully translated, or failed to do so; how they have been mobilized and substituted over time; and how this has effected the current assemblage of the MMORPG player itself.

## ROLE PLAY: AN EARLY HISTORY IN BRIEF

To understand and paint a picture of part of how the MMORPG came to be the new *mechanoidal* frontier, we need to trace back to when this type of collaborative play, between humans, and between non-human actants, first began, and how technology over time has served to shape this experience.

It's the 16<sup>th</sup> century, and *commedia dell'arte*, a form of improvisational theatre, is being popularized throughout Europe by roaming troupes. Roughly translated as a 'comedy of artists', *commedia dell'arte* is, perhaps, the most influential form of early role play where we can see the effects of its non-human actants, even today.

While there was a basic formula or framework, performances were largely unscripted. Participants were subsumed into one of a number of standard personas (Rudlin, J., 1994, p.34), "[...] in *commedia dell'arte*, [...], personality disappeared to be replaced by type: the personality of the actor is thus overtaken not by an author's scripted character, but by the persona of the mask to be played."

Performances were held in public markets and squares, often set up without prior warning, so audiences needed to be organically attracted by the spectacle. And the performers themselves, their faces, for the most part, were either partially or fully obscured by masks so they were forced to rely on exaggerated gestures and tonality (Rudlin, J., 1994).

Within this brief description of *commedia dell'arte*, we can see both the elements of some of the most fundamental and repeatedly translated aspects of the MMORPG play experience in their most essential form, as well as evidence of non-human actants ostensibly negotiating with human actants to translate the performance.

For example, the standard masked personas, such as the Zanni, Pantalone and Alecchino, could be likened to the standard class categories within MMORPGs, both of which have standard patterns of play, which are negotiated between the human and non-human. In the case of the *commedia dell'arte* it is the mask and the human inhabiting it, and in the case of MMORPGs, it is the avatar and the human player interacting with it.

(The terminology used of “class” in both contexts is interesting in that the hierarchy of personas within the *commedia dell'arte*, was a classist one, and while it is no longer perceived as a vertical hierarchy, the damage based classes in MMORPGs are typically thieves, rogues, archers, and mages, while the healing and tank based classes are often priests and knights, ostensibly also classist.)

The next major influence on MMORPG play came not long after in the form of wargaming. In 1824, Prussian lieutenant Von Reisswitz, born into a military family, decided he'd like to modify the German wargame of *Koenigspiel*, which was essentially a very large and complicated version of chess invented sixty years earlier.

He called his modification *Kriegspiel*, the German translation of “wargame”. The chess squares were abandoned and the pieces representing military units were allowed to move unconstrained about the board. When the pieces came into conflict, their resolution came



about either through the decision of an impartial umpire or through calculations derived from the experiences of real world combat. This eventually bifurcated into two distinct versions of kriegspiel, *free kriegspiel*, where combat resolution was made via the referee, and *rigid kriegspiel*, where combat was decided based on complicated calculations and elaborate rule sets.

By the early twentieth century, Kriegspiel was a standard tool used in strategic planning and officer training by almost every military power in the world. During the First World War and World War II Kriegspiel was extensively used in live combat scenarios. Kriegspiel was also enjoyed by hobbyists. However, in the early 1900s there was little to separate the version of Kriegspiel played by professional military officers, and that which was enjoyed by these hobbyists.

It wasn't until 1913, when author H.G. Wells, an avid Kriegspiel player himself, published a meticulously created rule book for hobbyists called *Little Wars*, partly in response to his frustration with the experience of it "[...] dull and unsatisfactory exercise, lacking in realism, in stir and the unexpected [...]" (p.21) , and partly because he was an ardent pacifist and saw *Little Wars* as an outlet for military aggression (that is, until he actually tested the rule set with military officers) (p.20),

"Great War is at present, I am convinced, not only the most expensive game in the universe, but it is a game out of all proportion. Not only are the masses of men and material and suffering and inconvenience too monstrously big for reason, but—the available heads we have for it, are too small. That, I think, is the most pacific

realization conceivable, and Little War brings you to it as nothing else but Great War can do.”

Little Wars would remain on the fringes of hobbyist wargaming for almost half a century, obscured by the two World Wars that soon followed its release, to the lament of H.G. Wells, “[...] miniature soldiers leave no widows and orphans, and that if more people were busy fighting little wars, they might not be involved in fighting big ones.” (Gygax, G., 2004)

It was then fortunate that a certain Gary Gygax, insurance underwriter and avid wargaming hobbyist came across the book in the late 1960s. Gygax, would later state in 2004 that H.G. Wells’ Little Wars would form a part in his creation of both Chainmail (1971), a medieval themed miniature wargame, and, Dungeons & Dragons (1974), arguably the most successful tabletop RPG in history, now eponymous with the genre itself.

“Little Wars influenced my development of both the Chainmail miniatures rules and the Dungeons & Dragons fantasy roleplaying game. For example, it established the concept of a burst radius for cannon rounds, an idea that was translated into both the Chainmail catapult missile diameters and the areas of effect for Fireballs in D&D.” (Gygax, G., 2004)

This demonstrates that it isn’t just human actants, but also non-human technological actants, in this case, Little Wars, the book and ruleset, which can equally effect the translation of an assemblage, such as tabletop role-playing games, for years or even decades after their mobilization.

This applies equally to Dungeons & Dragons itself, which, through its widespread popularity, has been translated successfully an indeterminate number of times, such that it has now become a punctualized genre in and of itself with many of its constituent mobilized actants inextricably locked in place, their original translation lost to history. For example, while it is known that the terms “player character” and “non-player character” came from Dungeons & Dragons, how these assemblages came about, eventually becoming part of the standard lexicon of role-playing games is unknown.

Inevitably, Dungeons & Dragons came to directly influence the creation of MUDs, or Multi-User Dungeons, the earliest forms of multi-player virtual worlds and, as previously discussed, the progenitors to MMORPGs themselves.

## WELCOME TO THE MECHANOIDAL FRONTIER

“You can solve a lot of problems with a DECsystem-10 or DECSYSTEM-20, The Personal Mainframe™ from Digital. [...] Everyone needs to use the computer? With The Personal Mainframe, up to 512 users can work interactively at their own terminals.” (ComputerWorld, 1981)

The *PDP-10*, later known as the *DECsystem-10*, was first created in 1966 by the Digital Equipment Corporation, otherwise known as DEC. It was one of the most popular mainframe computers in the world during the 1970s, driven by the success of the *TOPS-10* (Timesharing

Operating System-10) operating system, also made by DEC, and the first widely used system to utilize a form of shared memory (Bell, C.G., Kotok, A., Hastings, T.N., Hill, R., 1977).

Around the same time ARPAnet, otherwise known as the earliest version of the Internet, was being rolled out to research facilities and universities throughout the United States and parts of Europe, London and (oddly enough) Norway specifically. The primitive Network Control Protocol, otherwise known as the NCP, which had defined ARPAnet since almost its inception, only allowed for host-to-host communication within the network at the time though, limiting the ability of hosts to broadcast messages widely and to the different technologies utilized across the world. The transition from a small, closed and experimental network, to a truly open, global and dynamic network where that would have been possible, required a new governing protocol.

It took over five years to implement, but, by 1978, Robert Kahn and Vint Cerf of Bolt, Beranek and Newman (BBN), the research group that first developed ARPAnet, eventually succeeded in rolling out the Transfer Control Protocol/Internet Protocol, otherwise known as TCP/IP. It was this protocol that finally allowed the exchange of data between distant and different networks, the catalyst for what closely resembles the Internet we know today (Hauben, M., 1978).

Not too far away, at the Massachusetts Institute of Technology, students Tim Anderson, Marc Blank, Bruce Daniels and Dave Lebling, had just started summer break and were in the process of completing the last room of a popular ARPAnet game created by one of the original BBN team and *Dungeons & Dragons* enthusiast, Will Crowther, called *Colossal Cave Adventure* (Crowther, W., 1975), commonly shortened to simply “Adventure”.

Part of the problem with Adventure was that it was written in FORTRAN, at that point a nearly three decade old programming language, and could only accept two word commands. They had to enlist the help of a machine language debugger to reach the final point of the game, an excruciating exercise. There had to be a better way to input commands for games.

Bruce was part of the MIT team that had developed a sophisticated new programming language called the MIT Design Language (MDL), jokingly called “muddle” internally, and all four were looking for ways to fill their time (Anderson, T., Galley, St., 2004, p.1),

“Marc Blank was enjoying a respite from medical school; I had just finished my master’s degree; Bruce Daniels was getting bored with his Ph.D. topic; and Dave Lebling was heartily sick of Morse code. Dave wrote (in muddle) a command parser that was almost as smart as Adventure’s; Marc and I, who were both in the habit of hacking all night, took advantage of this to write a prototype four-room game. It has long since vanished. There was a band, a bandbox, a peanut room (the band was outside the door, playing “Hail to the Chief”), and a “chamber filled with deadlines.” Dave played and tested the game, saw that it was pretty awful, and left, to spend two weeks basking in the sun.”

By the time Dave Lebling had returned from sunning himself, much of the game, now called *Zork*, had been built by the rest of the team. There were characters, monsters, a house, and a dam, part of a forest, a maze, a glacier, and a few other partially completed environments. Importantly, they had created a well-defined ruleset governing how rooms, objects, creatures and actions interacted with each other, which allowed practically anyone to create a

subroutine, known as a parser, and drop custom creations into the world of *Zork*. This is a feature that continues to live on in many massive multiplayer games such as *Second Life* (Linden Labs, 2003), *Minecraft* (Mojang, 2011) and *The Sims Online* (Maxis, 2002).

At the time, the *PDP-10s* in MIT, which were powering *Zork*, had been bought in to serve the collaborations between a small group of expert users, such as Anderson, Blank, Daniels and Lebling. They had no security features to block their connection to the outside world. Because of this, the *Zork* universe was able to sustain itself through the efforts of a growing user community that had invaded MIT's network of *PDP-10s* (Barton, M., 2007).

Early translations of the *Zork* player assemblage actually required players to find signs of a *PDP-10* running *Zork*, i.e. the tracing of an actor-network in a very literal sense, and then required passage through a number of complicated technological obligatory passage points. But even so, the process of "logging in", through repeated translation by actants, both technological and human, from further and further away, became punctualized as *Zork* grew in popularity (Anderson, T., Galley, St., 2004, p.2),

"No one ever officially announced *Zork*: people would log in to DM, see that someone was running a program named *Zork*, and get interested. They would then "snoop" on the console of the person running *Zork*, and see that it was an Adventure-like game. From there, it only took a little more effort to find out how to start it up. For a long time, the magic incantation was "marc;zork"; people who had never heard of its, DM, or *pdp-10s* somehow heard that if they got to something called "host 70" on the ARPAnet, logged in, and typed the magic word, they could play a game."

This was a real world demonstration of black-boxing occurring before the creator's eyes. In the end, all that was required to translate the *Zork* player assemblage was to mobilize a known connection and input a phrase. Players no longer needed to know to log into MIT subsystems, nor know that they were accessing a PDP-10, nor know even the person running that instance of *Zork* (it was Marc Blank). These mobilized actants had all been locked into place, and punctualized. Inputs and outputs was all that was needed.

With the *PDP-10*, and MDL, a programming language that only ran on the *PDP-10s* within MIT at the time, in partnership with a group of four students and researchers haphazardly making their own version of *Colossal Cave Adventure*, *Zork* spread throughout the United States, carried along by the proliferation of the newly formed ARPAnet (now known as the Internet). Without this deep intertwining of both human and complex technological and non-human actants in mobilizing to support the *Zork* that MMORPG historians remember as the first MUD, it is likely that it would never have successfully translated – it would never have existed (Anderson, T., Galley, St., 2004).

This profound generalized symmetry of the non-human and human would also share many similarities in the way another major contributor to the contemporary MMORPG assemblage would develop: *Meridian 59* (The 3DO Company, 1996).

Almost exactly a full generation, or 25 years after the team of Anderson, Blank, Daniels and Lebling had started work on the bits of code that would eventually become *Zork*, two brothers, Chris and Andrew Kirmse, had just finished their sophomore and junior year at MIT and Virginia Polytechnic (more commonly referred to as Virginia Tech) (Kirmse, A., 2000).

Microsoft was about to release two industry defining operating systems, *Windows NT* and *Windows 95*, and the end of development cycle crunch demanded an uptick in the summer internship intake. Coincidentally, both Chris and Andrew applied to join, and both were accepted.

The brothers were both avid fans of MUDs, in particular, one called *Scepter* (Klietz, A., 1978), which was influenced by *Zork*, and came out just before Bartle and Trubshaw's *MUD1* (1978). As personal computing emerged from its hobbyist background, dominated by brands such as Commodore, Atari, and, the then tiny Apple, to becoming more work oriented, IBM, and the standard they had created with the *IBM PC*, rapidly gained majority market share. And so, in 1983, *Scepter* was ported to the *IBM PC XT*, and renamed *Scepter of Goth*. Chris and Andrew spent much of their high school years playing it on their own *IBM PC XT* rigged up to sixteen, by that time, outdated 300-baud modems.

However, in the summer of 1993, as Microsoft interns working on the project that would eventually become *Windows NT*, they both saw that the golden age of text-based games, of *Colossal Cave Adventure*, *Zork*, *Scepter* and *MUD1*, was well and truly ending. Company discount in hand, they used their savings to purchase *Windows NT* licenses and two Pentium 66 computers, each with 16 megabytes of memory and 500 megabyte hard disk drives – state of the art at the time.

While the games industry was rapidly industrializing, much of the success of the games industry at that time, was in the business of arcades, and home consoles. MUDs on the other hand, having emerged out of university and research facility mainframes, were still being made by teams of one to four programmers using technologies primarily created for research.



A standard method through which MUDs were successfully translated had yet to be repeatedly completed and punctualized. Each procession of problematization, interessement, enrollment and mobilization, was still unique to each MUD assemblage, subject to the trials and tribulations of interceding actants both human and non-human (Kirmse, A., 2000, p.1),

“We were both young [...] and knew basically nothing about the game industry, or even the fact that there were huge companies somewhere churning out games. [...] The first thing Chris and I did was design our scripting language, which we called Blakod. It had C-like syntax and operators, but data structures were built using lists. The language would be byte-compiled and then interpreted, and there would be automatic garbage collection and a class structure with single inheritance. Chris began work on the game server and Blakod interpreter, while I wrote the Blakod byte compiler, and later started the game client. The game server ran under Windows NT, but the game client had to run on the dominant operating system at the time: Windows 3.1. Writing for Windows was a slow, painful, and ultimately pointless exercise, as we eventually gave up [...]”

Like the makers of *Zork* before them, the first translation of their online world, didn't get very far. The Blakod language was working and so was the interpreter and compiler. They displayed a primitive two dimensional representation of a few rooms player's avatars could move between, and a few virtual monsters and items to interact with.

It wasn't until 1995 and the rapid convergence of disparate, but groundbreaking technological actants, did the idea of a three dimensional, widely networked MUD, in other words, the first MMORPG, seem possible.

ARPAnet had been superseded by the commercial Internet only five years earlier and the number of users able to access it was growing at an exponential rate. Microsoft's Windows 95 had just been released with a new method of drawing graphics on monitors and printers called GDI or Graphics Device Interface (this was the precursor to today's DirectX graphics engine also created by Microsoft that powers many three dimensional video games). Personal computing hardware was becoming exponentially more powerful with the companies AMD and Intel releasing increasingly fast microprocessors in quick succession throughout the 1990s (in 1995, the latest version of the Intel Pentium was almost three times faster than the ones bought by Chris and Andrew only two years earlier). And three dimensional gaming was being popularized by both *Wolfenstein 3D* and *Doom II* (id Software, 1992, 1994).

Similar to the last breakthrough, the brothers were avid fans of both of these games, and spent much of 1994 and 1995 attempting to come up with a similar graphics engine to the one found in *Wolfenstein 3D* and *Doom II* for *Meridian 59*. Along the way they enlisted the help of Andrew's roommate, budding computer scientist Keith Randall, and a coaxial cable connecting their machine to his Macintosh.

By the end of 1995, they had added a simple quest to retrieve a gem from a cave, character initialization, and simple customizations to facial features. Chris set up a small server with a local Internet Service Provider in San Jose, California, and the game was released to the world in its rough alpha state, able to support thirty five users at a time.

Over the next few months, they added a number of programmers to their team, while furiously developing monthly updates. By April of 1996, they entered their beta phase of

development with a more powerful server allowing *Meridian 59* to suddenly supported hundreds of people at a time.

The publisher 3DO took notice, and it was eventually picked up and widely published by them on September 27, 1996. It was Chris and Andrew's idea to charge a monthly subscription fee, now a common method of monetization for contemporary MMORPGs.

Other, non-human and technological actants that were first introduced by *Meridian 59* and continue to effect the MMORPGs of today, include the chat box, which 3DO had implemented to facilitate conversation and community building, but was thought of as unrealistic at the time (Achterbosch et al., 2008, p. 9); and the 'mini-map', a small visual representation of an avatar's immediate vicinity to allow players, who at that time had never seen a three dimensional representation of a MUD, to orient themselves (Gach, E., 2016; Parkin, S., 2014).

The importance of *Meridian 59* cannot be understated. Beyond the efforts of the brothers Chris and Andrew Kirmse, there was the assemblage of so many pivotal technological actants, from ARPAnet, to *Zork*, *Windows 95*, to *Doom II*, all mobilized in the translation of *Meridian 59* and all its constituent technological actants. These continue to effect contemporary MMORPG assemblages, and the translation of the MMORPG player more than two decades after their release (Klimse, A., 2000, p.3),

“Meridian was ahead of its time in several areas. For many people using the Internet for the first time, Meridian was how people actually “saw” people on the other end of their chat messages. The game's character gestures, such as waving, added a personal

feel to an impersonal network. Surveys showed that women were a far larger fraction of the player base than is usual for PC games. Meridian brought many of the phenomena well-known to MUD players, such as real-life friendships and even marriages, from Unix to the PC.

Meridian's sense of community and its global communication system, wherein anyone on a server can communicate directly with anyone else, are still ahead of today's RPGs [...] Meridian's user interface, while simple, turns up in game after game.

In-game email and newsgroups, a guild voting system, rentable guild halls, and a player combat arena made their graphical debut in Meridian.”

Commercial success in the genre and the term ‘massively multiplayer online role playing game’ or MMORPG did not come until Richard Garriot's *Ultima Online* (Origin Systems, 1997) which attracted over 100,000 subscribers at its peak, and Verant Interactive and Sony Online Entertainment's *Everquest* (1999), which surpassed *Ultima Online* not long after its release, borrowing heavily from *Meridian 59* (Klimse, A., 2000, p.3).

Both of these MMORPGs were a popular past time for members of a certain fast rising studio that had just released two games to widespread acclaim: *Warcraft: Orcs & Humans* (1994) and *Diablo* (1996). That studio was Blizzard Entertainment.

## HOW AZEROTH WAS WON.

“Azeroth is but one small world in a vast universe, a realm filled with potent magics and mighty beings. Since the dawn of time, these forces have influenced Azeroth and the surrounding cosmos, setting the stars in motion and shaping the destiny of countless worlds and mortal civilizations...” (Metzen, C., Burns, M., Brooks, R., 2016 p.13)

Blizzard Entertainment was high successful. Between 1994 and 1998 the studio had released *Warcraft: Orcs & Humans* (1994), *Warcraft II: Tides of Darkness* (1995), *Diablo* (1996), and *Starcraft* (1998), all of them were widely considered commercial and critical successes. They would eventually become the three core franchises that Blizzard would continue to develop to the present day.

Following the completion of *Starcraft*, the studio divided its development staff into two teams. One worked on the successor to *Warcraft II*, and the other focused its efforts on a new type of game for Blizzard, a two dimensional point and click adventure spun off the Warcraft franchise called *Warcraft Adventures: Lord of the Clans*.

Despite the richly developed universe, and a strong story following one of the franchise’s central characters, Thrall, the studio felt that the game would seem outdated by the time it would have been released. Blizzard ended up cancelling the development of that title.

The fifth generation of home consoles had been around for nearly three years by that time, and the popularity of the Nintendo 64 and PlayStation meant that three dimensional gaming was in vogue.

Warcraft Adventures, however, wasn't too dissimilar to adventure games of the past, and so, with little to do, and as avid fans of the then newly released *Everquest* (1999) from Verant Interactive and Sony Online Entertainment, the team's lead, and one of the studio's pivotal co-founders (Kollar, P., 2016), Allen Adham, championed a new idea: Blizzard was going to make its own MMORPG (Zenke, M., 2008).

Keeping within the same franchise it was christened *World of Warcraft* early. *Everquest* was a strong influence upon it, and many of its early mechanics were merely tweaked translations of *Everquest's* features (Williams, M., 2018, p.4),

“The team was engaging with *Everquest* as fans, but also as game designers, wondering where the experience could be tweaked and improved. *Everquest's* death system forced players to trek back to their corpses, many times without weapons, to pick up their armor and items; meanwhile *World of Warcraft* implemented a different system where you were an invincible ghost and could pay a penalty to simply be resurrected at any graveyard. *Everquest* enemies would follow you until you reached a zone barrier, while *WoW* [(World of Warcraft)] mobs were tethered to their starting location and would snap back if they got too far away.”

It was not just *Everquest*, but other technological actants throughout the process of developing, or in other words, translating, *World of Warcraft* that also effected, and sometimes substituted the designer's intent for its mechanics and design.

For example, it was the original intention of the team to allow the play experience within *World of Warcraft* to be freeform, like *Everquest* and *Colossal Cave Adventure* before it. As a way to help new players acclimate and orient themselves to each new virtual environment, training quests were implemented in each distinct region. However, the popularity of these quests was such that it was eventually decided to make them a central vehicle for propelling the narrative of the world.

"[...] pretty early on, once we were doing team play tests, what we learned was the moment that you ran out of quests in your quest log, the game just felt broken and people didn't know what to do [...] It was definitely this big moment where the team was like, 'Uh oh, I guess we have to do ten times as many quests as we thought we were going to do.' But I think it's one of those great moments that happen in game development, where once you find the nuggets that are really fun, you double down on it." (Pardo, R., 2018)

This meant that quests had not only fundamentally effected the early design of *World of Warcraft*, but also fundamentally effected the development process itself. The team was expanded to incorporate a corps of quest designers.

In fact, much of *World of Warcraft's* development was driven by similar kinds of mobilizations and substitutions, which were seen as happy accidents for the most part, but

through tracing of descriptions, can be seen for what they truly are: unheralded technological actants effecting the translation of the game world, play experience and player assemblage. The interpellation between developer and technology during the development process demonstrates both generalized symmetry and translative success in action,

"There was just a lot of doubt until we actually made a building in Westfall that was super- stylized and we used all hand-painted textures. Even the terrain was more hand-painted textures. [...] When we first saw the human farm building in Westfall, that was the first time where I was like, 'Wow, I think we got something here.' " (Lo, J., 2018)

Five years of this organic development and *World of Warcraft* was released over the holiday season between 2004 and 2005, quickly becoming the most widely played MMORPG in history.

But that, in and of itself, came with its own challenges. *World of Warcraft* translated to become such a monumentally massive technological actant or assemblage it not only embedded itself into global popular cultures, transcending eastern and western dichotomies, but, it also effected the construct of the studio itself.

Perhaps unsurprisingly, as with any large, newly translated assemblage, the process of continual translation itself, was not always harmonious. Mobilized actants were not yet set in place and punctualized, interceding actants were unexpected, and the interpellation between the human and technological was, at times, discordant. Translative failure was a constant threat.



This can be seen in one instance around late 2005, when Blizzard planned the launch of a whole new region or zone, and its largest release of content to date, the development team severely underestimated the role of technological actants in successfully translating this new experience of MMORPG play,

“Current World of Warcraft technical director Patrick Dawson joined in December of 2005, right before the release of Patch 1.9 and the Gates of Ahn'Qiraj. At the time, Dawson was on the server team, tasked with making sure the servers stayed stable. And when the Gates opened, things started to fracture. Everyone on each server was there to watch the Gates open, but the game wasn't built to have every player in one zone.

"I think the WoW development team maybe wasn't as well-oiled of a machine back then, because it actually came as a surprise to the engineering staff that we decided to funnel the entire population of World of Warcraft into a single area. Everybody was waiting for that moment all in the same area," recalls Dawson. "We're sitting here teleporting out level 30 characters - 'You've have no business being here and you're just killing your server!' - and we're doing this by hand just trying to make it."

(Williams, M., 2018, p.12)

In late 2006, it was the technological actant of battlegrounds – zones within the virtual world where player versus player combat was sanctioned – which alerted the development team to, and was instrumental in addressing a growing inequality that has often led to the translation error and collapse in many other MMORPGs: population consolidation.

Azeroth does not exist in one single massive and homogenous instance. Technological constraints dictate that there is a maximum number of players that can be logged in to one instance of Azeroth at a time. To address this, the development team recreated Azeroth over a number of different servers, like parallel universes, each able to support a few thousand avatars and players. Over time each of these different servers named after pivotal characters, or places within the Warcraft universe, became unique play experiences of their own. Some allowed for widespread player versus player combat, leading to a brutal Darwinian translation of the MMORPG play experience; some did not, focusing instead on grouped questing, and defeating powerful non-player characters within Azeroth; while others focused on neither defeating each other, nor defeating non-player characters, but instead providing a safe space for players to fully inhabit their avatar's persona, in essence engaging in role play similar to the *Commedia del'Arte* of four centuries earlier.

Perhaps, predictably, this led to its own problems. Over time players clustered their avatars on a small number of servers, the popularity of a particular instance of Azeroth would often only lead to more players seeking entry into that server. This snowballing and consolidation of players and avatars into a few servers and instances had a particularly lopsided effect on one part of the World of Warcraft experience.

Zones which were sanctioned for player versus player combat, called Battlegrounds, often pitted the avatars of one instance of Azeroth against another. What this meant was that the heavily populated instances, would, almost always have a numbers advantage, "If you were on a low-population server, or one where one side vastly outweighed the other, you were no longer without any recourse." (Williams, M., 2018, pp.13)

This would lead to the development of cross-server Battlegrounds, and, eventually cross-server instances of dungeons and grouped quests, eliminating the problems with translating grouped activities, that inevitably came with a low population instance of Azeroth. This is a technological actant that would go on to become a staple feature in contemporary MMORPGs that followed *World of Warcraft*.

2007 brought with it a new expansion to *World of Warcraft*, which not only meant new content, but a raft of features were also released. One of those features was flying mounts – creatures’ players were able to ride that allowed them to traverse the world much faster than they already could with land-based mounts.

While the development team thought it groundbreaking – players were now able to not only travel faster, but could now survey an entire region from a birds eye perspective – that also brought challenges, or interceding actants that effected a complete change in the way that environments were designed,

"At first we were all like, 'Oh man, that's cool" [...] but then as we started prototype zones, concepting it, and actually thinking about each individual area, it started to dawn on us. We actually had to think about zone transitions in a different way compared to Vanilla, where there were a lot of areas you couldn't access. So we didn't have to think about blending between two particular zones, because either they can't get there or they'll never see it. [...] That really changed the way we kind of approached our zones even just design-wise. Traditionally, we would create a concept of how a particular zone looks. And then right next to that zone, we'll just do another

concept; this time we had to actually put a lot more thought into how we transition."

(Lo, J., 2018, p.15)

*World of Warcraft* is still the most widely played MMORPG 15 years after its release.

Tracing its early life through the lens of Actor Network Theory, we uncover the reason for its resilience: the willingness of its developers, the human actants part of the process of translation, to respect the influences and effects of technological and non-human actants.

They allowed the assemblage of *World of Warcraft* to fully undergo the processes of problematization, illustrated by the difficulties in executing the technological feats mentioned above; interessement, such as with the serendipitous alignment between *Everquest*'s release and the failure of *Warcraft Adventures: Lord of the Clans*; enrollment, for example, in the hand-painting of the landscape within the Azerothian region of Westfall; and mobilization, such as when it was decided that quests would become a central vehicle for driving the narrative of *World of Warcraft*, as opposed to simply using them as a tool for the instruction of game mechanics.

It is almost certain that the present day assemblage of *World of Warcraft* bears little resemblance to the original vision of its first producer and original obligatory passage point, Allen Adham (who would leave only ten months before its release), but that is also what is responsible for its longevity and sustained popularity. Other makers of MMORPGs have sought to impose their vision on what their MMORPG assemblages should be, for example, the narrative driven studio Bioware's *Star Wars: The Old Republic* (2011), and EA Games, richly funded *All Points Bulletin* (Realtime Worlds, 2010), effectively becoming interceding

actants to the successful translation of their own MMORPG assemblages, and effecting their own failure.

Tracing the technological and non-human actants, past, present and substituted, of *World of Warcraft*, demonstrates their pivotal role in its continued successful translation.

## FROM WHERE WE'VE COME

The goal of this chapter was to trace and describe the non-human actants that have effected the translation of MMORPGs as we know them today.

Firstly in the 16<sup>th</sup> century there was commedia del'arte, where the technological actants, masked personas, such as the Zanni, Pantalone and Alecchino negotiated with the human actant to form the character's assemblage. This is much like the avatar and player relationship we see today in MMORPGs.

Secondly, the advent of Kriegspiel in the 18<sup>th</sup> century, which evolved into H.G. Well's Little Wars (1913), and a meticulous rule book that effected the actions not only of the human actants engaging in wargames, but also one particular hobbyist, Gary Gygax, who would base his creation of an influential tabletop RPG known as *Dungeons & Dragons* (1974).

And finally, connecting that to ARPANet, PDP-10 mainframe computers, *Colossal Cave Adventure* (Crowther, W., 1975), the MDL programming language and the free time four enterprising computer science students, Tim Anderson, Marc Blank, Bruce Daniels and Dave

Lebling, had on their hands during summer break. All of this would culminate in the creation of the first MUD and progenitor to MMORPGs, *Zork*.

Through the tracing of these, from the masks in Commedia del'Arte, to the patterns of unit movement in Kriegspiel, to the *PDP-10s* that powered *Zork*, it is clear that these seemingly disparate, and often overlooked non-human and technological actants have had a profound impact on the way the MMORPG assemblage has evolved to become the vast virtual worlds we know today.

The pre-eminence that has been placed upon human actants in the development and translation of MMORPGs have obscured the equal importance and criticality of the role non-human actants have to play in the translation of these very experiences.

Which brings us to the next chapter which will delve into how non-human actants have played a critical part in the translation of the MMORPG player assemblage itself. It will be tracing the accounts of the subjects within this study, and how each of their unique translations of MMORPG play have been effected by an interpolation between human and technological actants, many of which have never been addressed before, neither by developers nor within academia, due to the misplaced pre-eminence placed upon the human actant.

**CHAPTER FIVE: PLAYERS ARE SNOWFLAKES**

“[...] I looked forward to finishing work and heading home and trying to figure out what we were going to do next or where we were going to make money next, and yeah, that was, I would say that was that *Final Fantasy XIV* was a big part of my life at that time and working through the new content with all the guys, and new craft recipes.

I lived in China for a little while and my Internet was a problem, and if I was raiding, or if I was doing dungeons or something, I would occasionally lag, and I'd quit party or D/C [*disconnect*], and leave a couple guys hanging, so I kind of got into crafting because it was a little bit more solo, a bit less lag dependent, and then when I got a little deeper into it, I really enjoyed the puzzle aspect of the crafting system in *XIV* and how you're kind of juggling a lot of moving parts in trying to see how you can get the highest quality item and beyond that there's the puzzle of how to make money the best and what to put on the market board and different things, market board's like that, and I really just enjoyed that and it allowed me to continue to participate in the game even while my Internet wasn't always so great.” (Interview with Emhati, 2017)

Now that this thesis has traced the instrumental effect that non-human actants have had on the creation of the MMORPG assemblage itself, the further question arises, how do non-human actants effect the creation of MMORPG player assemblages and the play experience itself.

The brief recounting by one of the participants of this study previously illustrates how the effects of non-human actants don't just play a fundamental role in the translation of MMORPG franchises and the genre, but also a similarly critical role in the successful translation of the MMORPG player assemblage and play experience. In fact, the interpellation between non-human and human calls upon such a multitude of different and varied actants and actor-networks, that each translation of these assemblages is a unique construct and a demonstration of heterogenous engineering in action.

The aim of this chapter is to trace the accounts of the participants within this study and unpack each of their player assemblages to show how radically diverse they are, and the equally important non-human actants that were mobilized in support of these translations of the player assemblage.

The first part of this chapter will provide a brief account of heterogenous engineering and why it is an important concept within Actor Network Theory to understand in considering how to address the translation of MMORPG player assemblages as well as trace the current understanding and categorization of the MMORPG player, typologies and its origins.

The subsequent sections within this chapter will focus on the accounts of the participants within this study, taking care to trace the descriptions of their MMORPG play experiences and unpack the translations of their player assemblage. The aim is to demonstrate both the Actor Network Theory concept of heterogenous engineering in action, as well as the need for a shift in the way both academics and developers understand the MMORPG player assemblage.



## PLAYERS AS HETEROGENOUS ENGINEERS

While it's been briefly referred to throughout this thesis up to this point, before going further, the question that must be first asked is what *is* heterogeneous engineering?

“The impossible task of opening the black box is made feasible (if not easy) by moving in time and space until one finds the controversial topic on which scientists and engineers are busy at work. This is the first decision we have to make: our entry into science and technology will be through the back door of science in the making, not through the more grandiose entrance of ready made science” (Latour 1987, p.4).

While Actor Network Theory was a framework borne of Science and Technology Studies (STS), hence the focus on scientists, and the environments they work within, heterogeneous engineering draws on a fundamental aspect of Actor Network Theory itself – that there are no essentialist, in Latour's word's, “ready made” explanations of actor network assemblages, there are effects and only effects. All the actants, human, non-human, sociological, technological or otherwise, that are mobilized in the translation of an assemblage, effect each other, and are, in turn effected by actants within the sphere of that assemblage, as well as outside of it.

What this means is that Actor Network Theory must describe the world in ontologically flat terms. There is no separation of the social and technological; nor the physical and the virtual; in fact, it eschews separation altogether, the very act of declaring seemingly disparate actants connects them.

This leads to the central premise of heterogeneous engineering: an actant in the process of shaping or translating an assemblage or construct, is constantly, integrating with and negotiating, defining and redefining, the effects of social, technological, virtual, physical and all other possibilities or entelechies that have materialized and become networked with it.

The term itself is derived from Michel Callon's study of how electric cars were developed in the 1970s (Callon, M., 1986). What Callon found during the tracing of this moment was that the engineers involved were not only negotiating the interceding technological and scientific challenges that came with the development of new technologies, but were also negotiating the social implications of the assemblage itself. They were not only contributing to the translations of constructs in science and technology, but also the makeup of the "French social structure [that] would radically change" (Callon, M., 1986, p.84), simultaneously.

This can be seen in Turkle's early work on MUDs which will be discussed in greater detail later in this chapter. Delving into unfamiliar territory, Turkle relied on constructing vivid descriptions of the MUD player assemblage which revealed players who were negotiating, assembling and mobilizing actants not only from social and technological spheres, but also the familial, vocational, psychological and emotional in forming these assemblages (Turkle, S., 1994, p.163).

These translations are all "the function of the interaction of heterogenous elements as these are shaped and assimilated into a network" (Law, J., 1987, p.113). They are, as all assemblages when properly unpacked and understood are, works of heterogeneous engineering.

However, this would be short lived. The intensive unpacking that inherently occurred within early investigations of an assemblage would quickly fall by the wayside, as it wasn't long after Turkle's own interrogations of MUDs that the player assemblage would become much more densely punctualized and, subsequently, categorized. This will be described later within this chapter, but before reaching that point, we start tracing at the very beginning of the thread towards MMORPG categorization, where we find the very frustrated Game Master, John Sgammato.

#### THE CURRENT UNDERSTANDING

“One summer I tried an experiment. I wanted to run a campaign that would satisfy all of my players. Some of them had been dissatisfied recently, while others loved every adventure. I realized that they had different needs and expectations, and that I wasn't satisfying all of them.

Put in those words, it sounds like a formidable task. Yet every week we GMs [*Game Masters*] assume that we can cook up our best work and everyone will eat it. The same GM who wouldn't dream of ordering a large pizza with anchovies will create a beautiful elven forest without knowing how the party feels about unicorns. It's a question of compatibility. But how do we know if we're compatible with our players?

Well, I did it. They played six weeks and met ghosts and headhunters and a lost subterranean temple full of scorpions and spiders and even hordes of loathsome frog

people. Everyone enjoyed it. Except me; I burned out [...] Sure, I learned what I had set out to, but now I wish I hadn't. You see, my players all liked roleplaying, but they all liked it differently. They had widely differing goals in playing. I found out that I couldn't satisfy all of them and still keep my style of GMing. So I told them what my ideal campaign would include. Those who liked my style formed a group with me; the rest formed a group with a different GM, more suited to their style of play.

Say one player likes political intrigue, and another wants to kill monsters and take their treasure, while a third wants to unravel the underlying foundations of magic. You, as GM, may have to sacrifice your artistic leanings for number-juggling of encounters to satisfy everyone. Sooner or later, something will break. A player may leave, or the GM may burn out.” (Sgammato, J., 1990)

Despite having existed since 1974, little thought had gone into deciphering the player assemblages within role playing games, nor, by extension MUDs, save for a short article published in a 1990 edition of a community newsletter for a small subset of the role playing game ecosystem called Generic Universal RolePlaying System or GURPS (Jackson S., 1986). It was written by a frustrated Game Master, John Sgammato, who identified three interacting factors of play that identified player typology: randomness versus trust, creativity versus formulaic, and steady-state or episodic versus expanding universe, or persistent world.

Interestingly, Sgammato, perhaps unbeknownst to him, used non-human actants as a critical part of differentiating between player assemblages within his GURPS universe.

In the case of randomness versus trust, an innumerable number of seemingly randomized actants contribute to the effect. Some examples might include, how the die is used to determine the interactions with non-player characters; and how the interpellation between the random results of the die, the player assemblage and the constructed rules of the game itself are translated. How these actants are mobilized by the player (or human actant) determines whether they are reinforcing, i.e. the player finds it more enjoyable to be subject to chance, wherein heterogenous engineering has a greater effect on the player assemblage; or, whether they are interceding, i.e. the player finds it preferable to have more tightly translated actants, such as the rulesets and story, where the actants are more well defined, repeatedly translated and their constituent actants, mobilized and calcified or reified. Sgammato referred to the two ends of this player typology spectrum as the “dice-roller” and “interactor”, respectively.

When looking at creative players versus formulaic ones, there is a similar spectrum, although, it concerns the interpellation of the rules and imaginary environment, the encounters with non-player character, and situation, and the players themselves. Again, one end of the spectrum favors randomized actants, where there is no thought to repeatedly translate and punctualize; and at the opposite end of the spectrum, repeatedly translated assemblages are favored, in fact, punctualization is sought for efficiency. Sgammato referred to the two ends of this typology spectrum, “creative players” and “puzzle solvers”, respectively.

And finally, Sgammato looked to the translation of the imagined environment, past and present events, and their interpellation with a character’s statistics and property to determine whether a player assemblage was more episodic in nature, for example, a player who preferred bounded narratives, or more persistent in nature, such as a player who prefers an imagined world where they were able to continuously gain power.

This would be the only article written by Sgammato concerning GURPS, and he would not go on to elaborate on his spectrums of player typology.

GURPS was, of course, a precursor to MUDs and MMORPGs, however, the virtual player assemblage would not be explored with seriousness until 1994, despite MUDs having existed for almost 20 years by that point.

Sherry Turkle, in the *Second Self* (1984), published around the same time that the embryonic moments that would crystallize into Actor Network Theory were being formed, provided, perhaps inadvertently, an account of computers that, in large part reflected the ideals of generalized symmetry, and saw them as an important non-human actant that formed an intrinsic part of the construct or assemblage of a person's identity. It forced the questioning of the meanings and nature of concepts we'd previously considered as solely within the realm of humanity, such as what is alive; what is intelligent; and, what is free will? (Turkle, S., 1994, p.164).

In 1994, Turkle began asking the same questions of MUDs,

“There are over 300 multi-user games based on at least 13 different kinds of software on the international computer network known as the Internet. Here I use the term “MUD” to refer to all the various kinds. All provide worlds for social interaction in a virtual space, worlds in which you can present yourself as a “character,” in which you can be anonymous, in which you can play a role as close or as far away from your “real self” as you choose. Where they differ is in how constrained that world is. It can

be built around a medieval fantasy landscape in which there are dragons to slay and gold coins and magical amulets to collect, or it can be a relatively open space in which you can play at whatever captures your imagination, both by playing a role and by participating in building a world. [...] In the MUDs, the projections of self are engaged in a resolutely postmodern context. There are parallel narratives in the different rooms of the MUD; one can move forward or backward in time. The cultures of Tolkien, Gibson, and Madonna coexist and interact. Authorship is not only displaced from a solitary voice, it is exploded. The MUDs are authored by their players, thousands of people in all, often hundreds of people at a time, all logged on from different places. And the self is not only decentered but multiplied without limit. There is an unparalleled opportunity to play with one's identity and "try out" new ones." (Turkle, S., 1994, p.159)

As MUDs were so new to the academic sphere at that time, Turkle was required to unpack the assemblage herself, and translate it's an assemblage that held meaning for her, mobilizing the actants she was familiar with coming from the perspective of a social scientist to act as substitutes.

While not a work of Actor Network Theory, per se, in attempting to understand the player assemblages of the study's subjects, Turkle's descriptions of their interactions with MUDs were highly vivid, such that, despite the focus on the human actants in their translations of MUD play, it was clear that non-human actants (such as the actor-network of the MUD itself) also held an equally important role in sustaining these assemblages and experiences.

“Robert is a college freshman who in the months before beginning college had to cope with his father’s having lost his job and disgraced his family because of alcoholism. The job loss led to his parents’ relocation to another part of the country, far away from all of Robert’s friends. For a period of several months, Robert, now at college, MUDded over 80 hours a week. Around the time of a fire in his dormitory which destroyed all his possessions, Robert was playing over 120 hours a week, sleeping four hours a night, and only taking brief breaks to get food, which he would eat while playing.

At the end of the school year, however, Robert’s MUD experience was essentially over. He had gotten his own apartment; he had a job as a salesman; he had formed a rock band with a few friends. Looking back on the experience he thought that MUDding had served its purpose; it kept him from what he called his “suicidal thoughts,” in essence by keeping him too busy to have them; it kept him from drinking (“I have something more fun and safe to do”); it enabled him to function with responsibility and competency as a highly placed administrator; it afforded an emotional environment where he could be in complete control of how much he revealed about his life, about his parents, even about something as simple for other people as where he was from.” (Turkle, S., 1994, p.163)

In the case of Robert, the translation of his player assemblage was an effect of his family’s relocation. His player assemblage was an active form of therapy. It left an indelible effect on the construct of his life. From an Actor Network Theory perspective, at the time that Robert was in college, MUDs acted almost as an obligatory passage point to him functioning, and



the continued successful translation of his existence. He was so densely connected that they served to counteract the interceding actants of suicidal ideations and alcohol.

Turkle's transcribed illustrations of Robert and the other subject's experiences within this study, in many ways closely mirrored the explorations of non-human actants surrounding the failure of an automated subway system in *Aramis or the Love of Technology*, which Latour had published only a year earlier (Latour, B., 1993). It demonstrated the early outlines of an understanding of player assemblages as being a result of heterogenous engineering – that of unique constructs that are constantly negotiating their existence with both technological and social actants.

## VIRTUAL CLASSISM

As the academic community further interrogated MUDs, the spheres of development and academia became more densely intertwined (the study of MUDs and eventually MMORPGs became a more serious exercise, as opposed to a fringe novelty). Inevitably, the construct of the *understanding of the player assemblage* (important to note that this does not mean the player assemblage itself, rather the construct of the academic or theoretical understanding of *what a player assemblage is*) quickly became, more or less, punctualized from repeated translation.

The first, and perhaps most prominent example of this can be found in Richard Bartles' *Hearts, clubs, diamonds, spades: Players who suit MUDs* (Bartle, R., 1996). It was borne out of a drawn out debate in November 1989 to May 1990 between Bartle and fifteen to thirty

experienced participants in a MUD that he was an administrator for, *MUD2* (Bartle, R., 1985). Within it Bartle proposed four dominant non-exclusive player typologies: killers, achievers, socializers, and explorers,

“The four things that people typically enjoyed personally about MUDs were:

i) Achievement within the game context.

Players give themselves game-related goals, and vigorously set out to achieve them.

This usually means accumulating and disposing of large quantities of high-value treasure, or

cutting a swathe through hordes of mobiles (i.e. monsters built in to the virtual world).

ii) Exploration of the game.

Players try to find out as much as they can about the virtual world. Although initially this means mapping its topology (ie. exploring the MUD's breadth), later it advances to experimentation with its physics (ie. exploring the MUD's depth).

iii) Socialising with others.

Players use the game's communicative facilities, and apply the role-playing that these engender, as a context in which to converse (and otherwise interact) with their fellow players.

iv) Imposition upon others.

Players use the tools provided by the game to cause distress to (or, in rare circumstances, to help) other players. Where permitted, this usually involves

acquiring some weapon and applying it enthusiastically to the persona of another player in the game world.

So, labelling the four player types abstracted, we get: achievers, explorers, socialisers and killers.” (Bartle, R., 1996, p.4-5)

Bartle outlined two component pairs, each pair measured on a continuum, that determined which of the four types a player was, whether player preferred interacting with other players, or whether a player enjoyed interacting with the world; and whether a player preferred acting on the world or other players, or allowing the world and other players to dictate.

As can be seen, Bartle placed great emphasis on human actants, elevating them to the exclusion of non-human actants in the translation of the play experience. In fact, the way that it was described, the four factors that determined a player type, indicated that the model was a transactional one. Too much emphasis on player to player interaction, and the MUD would become little more than a glorified chat room; too much emphasis on the world, and it becomes a virtual landscape with little more to do than exploration. At the same time, allowing the world to dictate the actions of a player too often, or, in Bartle’s words “interacting”, and the play experience becomes a glorified movie; alternatively, giving player’s too much choice, and the MUD becomes too shallow, the actions of the player, monotonous.

But Bartle’s contention that the key to a MUD (or, similarly, an MMORPG) being successfully translated relied on catering to the desires of human actants belies the fact that within his very descriptions of his typology of player assemblages, non-human, technological

actants play just as an important role. In fact, if we take Bartle's framework to its logical conclusion, a MUD or MMORPG is the result of the interpellation between the player assemblage and the virtual world. The virtual world effects the player as much as the player effects it. The resultant assemblage is a living, constantly evolving, mobilizing and substituting, heterogeneously engineered construct that is both a network and an actant. The complexity of all of the combined connections made, negotiated, substituted, strengthened and interceded, necessarily leads to the translation of MUDs players and virtual worlds that are as unique in composition as the physical, social and technological realities that we live within. Turkle's earlier reflected as much. So, to break down the player assemblage into a typology of four categories: killers, achievers, socializers and explorers, as Bartle had done, can then be seen as grossly reductive.

Another prolific MMORPG theorist, as noted in the Literature Review, Nick Yee, was also critical of Bartle's model citing that the four player types were purely theoretical and possessed no instrument for which players could be assessed. This meant that it could not be determined whether the components that comprised the explorer, achiever, socializer and killer player types closely correlated, or not, and that "[...] any attempted assessment of players based on this model might be creating player types rather than measuring them." (Yee, N., 2006, p.2)

From an Actor Network perspective, what Yee had pointed out was that Bartle had prematurely assumed the fifteen or so individuals who had taken part in the initial discussion, or translation of his model of player typologies, as "[...] highly experienced players, of rank wizard or witch [...]" (Bartle, R., 1996, p.3), could effect "ready made science". In effect, what Bartle was describing was the individual bodies, who interacted with other individual

bodies in the creation of a thought construct that existed within their network of interactions. There were “[...] several hundred bulletin-board postings, some of considerable length [...]” (Bartle, R., 1996, p.3) but, as Bartle had punctualized this process of translation from the outset, and the reader is only ever given visibility through the obligatory passage point of Bartle’s brief descriptions, the actor-network assemblage of the player typology existed within the network behind that lens, and only within that network. Hence, the difficulty in continuing to translate this assemblage when outside of it. Bartle discounted the process of heterogeneous engineering, where these individual bodies were seen to be linked together through heterogeneous instruments, texts and technologies (such as bulletin-board posts and MUDs); and where, together, the human and non-human were constantly negotiating, redefining and interpellating the structure of the player assemblage. Consequently, Bartle failed to realize that his model of player typology was, in fact, also a network of human, and non-human actants.

To illustrate what Bartle’s oversight meant, take, for example, Latour’s realization that Louis Pasteur was not simply a born researcher from which the discoveries of vaccination and pasteurization magically flowed (Latour, B., 1988),

“[...] work by Bruno Latour shows that Pasteur was nothing more than a network of heterogeneous elements (Latour 1988). This Pasteur-network was made of a lot of bits and pieces: laboratories, domesticated strains of bacteria, notebooks, statistics, and even--as Gerald Geison has treacherously suggested -- vaccines chemically treated by his colleague Joseph-Henri Toussaint. And one could add many more: the farm at Pouilly le Fort where sheep lived and died in infected fields; the journalists who witnessed Pasteur’s spectacular experiment on the farm; the French electors Pasteur

sought to convince; and so on, and so on. The argument is that Pasteur was not a single entity, not just a body and a soul. Or rather it is that he was much more than a body who interacted with other bodies. That, instead, he was a combination of a great number of different elements which produced Pasteur-the-great-researcher.” (Callon, M., Law, J., 1997, p.167-168)

Despite this, Bartle’s model of player typology still strongly influences the development of future role playing game and MMORPG designers to this day (Kumar, J., et. al., 2018)

Nick Yee, in finding fault in Bartle’s model of player typology, would eventually translate it into a more complex component based model of his own.

Using a factor analysis approach on the results of a 39 item questionnaire answered by 3200 respondents, Yee described three main components: Achievement, Social and Immersion. These were further divided into ten subcomponents: Advancement, Mechanics and Competition under the main component of Achievement; Socializing, Relationship and Teamwork under the main component of Social; and Discovery, Role-playing, Customization and Escapism under the main component of Immersion (Yee, N., 2006, p.6).

In large part, Yee’s work refuted the assumptions of Bartle. The components and subcomponents did not determine player type nor were they mutually exclusive – being achievement oriented did not preclude one from also being socially oriented, as was the case in Bartle’s model of player typology,

“The subcomponents generated by the factor analysis are NOT player types. It is NOT the case that we have come up with 10 boxes that we can put players in, but rather, we have revealed 10 subcomponents that co-exist and together reveal the motivations of a player. Bartle assumed that your underlying motivations “suppressed” each other. In other words, the more of an Achiever you were, the less of a Socializer, Explorer and Killer you could be, but just because you like ice-cream doesn’t mean you will hate pasta. The assumption of polarized motivations is also not supported by the correlations of the current data set.” (Yee, N., 2006, p.8)

This was the largest study of MMORPG players ever conducted. Yet, Yee’s factor analysis that led to the creation of his ten subcomponents, could only account of 60% of the overall variance. This meant, inversely, that 40% of the responses couldn’t be accounted for, demonstrating a high level of variability and a statistically significant number of players who didn’t neatly align with nor exhibit the behavior identified by his component model. It indicates the heterogeneity of each of the participant’s player assemblages

This is, perhaps, unsurprising as the original tool with which these responses were generated, Yee’s questionnaire, was comprised of bounded questions derived from “ready made” science, in essence, observations made by previous theorists,

“First, a list of possible motivations for playing an MMORPG was generated from existing literature (such as Bartle’s Types) or open-ended responses from earlier surveys [...]

These motivations were then converted into survey questions, such as:

How important is it you to level up as fast as possible?

- Not Important At All
- Slightly Important
- Moderately Important
- Very Important
- Tremendously Important”

(Yee, N., 2006, p.3)

While the questions posed could be answered in an open fashion, as seen in the choices posed to respondents they immediately effect punctualization by forcing a response that fits into one of five possibilities, and removing the power and nuance of heterogeneity beyond the limited factor of perceived importance.

Furthermore, save for questions exploring player’s emotional perspectives on the virtual non-human actants within the MMORPG environment, non-human actants were, largely, ignored. This is especially so when considering those external but connected to these virtual worlds,

“How interested are you in the precise numbers and percentages underlying the game mechanics? (i.e, chance of dodging an attack, the math comparing dual-wield to two-handed weapons, etc.)

[...]

How much do you enjoy working with others in a group?

[...]

How important is it to you to be well-known in the game?



[...]

How much do you enjoy exploring the world just for the sake of exploring it?”

(Yee, N., 2006, p.39-43)

Yee acknowledged that the component model he was proposing could only partially illustrate the motivations of MMORPG players, and, by extension the player assemblage itself – that they were complex, diverse and multi-dimensional, in other words, heterogeneous. So, in order to provide the detail that the component model was found to be lacking, Yee relied on the descriptions of respondents he had collated over the five years prior to this study. An approach that, coincidentally, was similar to the process of tracing within Actor Network Theory practice,

“ [...] if we don’t understand why players are in these online worlds to begin with, then we can never truly appreciate the more complex phenomena that emerge from these environments.

Oftentimes, we project our motivations onto others and we fail to appreciate what “fun” is to someone else. The following narratives show how relative fun can be and the sheer diversity of ways of deriving satisfaction from the same construct. “Fun” means something different to different people.

The narratives are framed by the 3 main components, thereby illustrating how the different subcomponents can combine, but more importantly, shedding light on where more work still needs to be done.” (Yee, N., 2006, p.14)

For the most part, Yee only published excerpts of longer transcripts, thereby punctualizing responses to match component categories, which he acknowledges “[...] might create the illusion that players are more single-dimensional than they really are.” But, qualifies that “This was done to make it easier to understand the spectrum of motivations” (Yee, N., 2006, p.14), hinting at how broad and complex MMORPG player assemblages are when taken in their entirety. But even these brief accounts provided by Yee reveal the most interesting glimpse throughout his study into why someone might play an MMORPG, and, inversely, why someone might leave one, the research question of this thesis,

“It gives me the illusion of progress, I know that. I hate the level of frustrated progress in the [real world] so I play the game and [level] up instead. It is \*crack\* for the achievement center of the brain, like cocaine affects [sic] the pleasure center. [WoW, M, 34]” (Yee, N., 2006, p.14)

“Part of the reason I play online games is to experience a sense of achievement. When I put a good deal of time and effort into an in-game task, I am rewarded in a way that's meaningful and measurable: I gain a new item, I finish a difficult quest and get experience points or money, I gain a higher level of proficiency in a skill or ability, or I gain notoriety in the virtual game community. The real world isn't like that. In the real world, there are few quantitative rewards for the effort one puts out merely 'to live'. In the real world, you have to run errands, shop at the grocery store, clean your house, do your taxes, keep all your papers organized, do the laundry, etc. etc.. There is no sense of 'achievement' or forward progression in these things -- they are merely daily must do's. There is no sparkly new item or new skill waiting for me after I do my 6th load of laundry in a week.

[...]

As children, we are taught to 'achieve' by being given milestones with specific goals. 'If you eat your green beans, you can have ice cream.' 'If you get an A in biology, you can get your driver's license.' 'If you work hard at school, you will get into a good college.' 'If you get a 90 on a test, that is an A-' [sic]. We are graded in school, critiqued by coaches, evaluated by theatre and musical directors, sized up by our peers and family: we are always being judged both quantitatively and qualitatively as we make our way slowly and methodically to 'adulthood'. There are direct relationships between 'doing' and 'accomplishing' that I think disappear to an extent after we enter the 'real world'. Achieving becomes much harder, especially if you're not sure what goals you want to set for yourself to begin with. There is no structure anymore - the world is more freeform, and less supportive. There are no rewards hanging out there waiting for you to pluck them. You have to go out and create them, then strive to achieve them, and it takes a lot of effort, and a lot of time. While I personally own and run a successful small business, and have enjoyed reaching milestones and goals I've set for myself, they come fewer and farther between than i [sic] NEED, and so, playing online games allows me to find a positive outlet for that need to achieve on a regular basis. [WoW, F, 37]" (Yee, N., 2006, p.15-16)

"All I did was 'poking' other people (helping them to insert there [sic] implants). So in other words I just helped some fellow players and my only reward for doing so was there [sic] thanks. But I found that experience to be very rewarding and did that again on several occasions. I would call that socializing just for the fun of it [...] [WoW, M, 28]" (Yee, N., 2006, p.22)

The above excerpts are just three examples of participant recounting their play experience within *World of Warcraft*, but it is clear from just these few that non-human actants played an integral part in the translation of these participant's player assemblages.

In the first example, while it is punctualized, the phrase "[...] frustrated progress [...]" (Yee, N., 2006, p.14) hints at a much larger and complex actor-network mobilized in support of that particular assemblage. The second example elaborates on a similar sentiment further.

In the participant's descriptions, when she states, "When I put a good deal of time and effort into an in-game task, I am rewarded in a way that's meaningful and measurable: I gain a new item, I finish a difficult quest and get experience points or money, I gain a higher level of proficiency in a skill or ability, or I gain notoriety in the virtual game community." (Yee, N., 2006, p.15) she is, in fact, listing the many non-human (and human) networks, and actants mobilized in supporting the continued successful translation of her play experience. As she describes the moments and experiences in her past that have led her to enroll these actants, we discover entelechies (i.e. potentialities, something that will be explored in greater detail later in this text) years, perhaps even decades, in the making that illuminate the sprawling nature of the actor-network that is her player assemblage,

"As children, we are taught to 'achieve' by being given milestones with specific goals. 'If you eat your green beans, you can have ice cream.' 'If you get an A in biology, you can get your driver's license.' 'If you work hard at school, you will get into a good college.' 'If you get a 90 on a test, that is an A-.'" (Yee, N., 2006, p.15)

In other words, the desire or motivation to achieve, as an obligatory passage point through which problematization occurred, was not an essentialist part of her being. It was rooted in childhood. Without the “green beans”, without the “A in biology”, without school, and without all the other non-human and human actants mobilizing in order to support and effect that particular translation or desire, it is likely that at this point she would never have sought to mobilize *World of Warcraft* and thereby effect the translation of her MMORPG player assemblage.

The final example, although brief, illustrates how unique each conception of “socializing” can be, and, hence, by extension, how unique the translation of each player assemblage can be. In this instance, simply “poking”, or inserting virtual implants into other avatars, despite involving little communication, constituted an act of socializing for the participant.

What this and previous accounts demonstrate, in combination with the inconclusive outcomes of the works of Richard Bartle and Nick Yee among others, is that both developers and theorists of MMORPGs rushed into creating taxonomies and categorizing player assemblages. This was in an attempt to punctualize players into more easily understood black boxes or nodes that could be readily deployed for further study or to enhance commercial outcomes. However, this was never able to happen as, despite efforts, the “science” behind this has never been “settled”.

The attempt by the MMORPG theorists to rush through a translation of a not fully understood conception the MMORPG player, led to the creation of an equally fragile model of player typologies. It attained wide use because it *seemed to make sense*, but it was, in essence, a

*mirage*. Errors became readily apparent through repeated translation, as Yee would attest (2006).

What this next section of the chapter aims to do, through a selection of the accounts of this study's participants, and like a "blind, myopic, workaholic, trail-sniffing, and collective traveler" (Latour, B., 2005, p.9), as Latour once referred to Actor Network theorists, is take the time to trace certain networks and actants that serve to support a player assemblage. This is to demonstrate the necessity of tracing for still new constructs and assemblages such as MMORPGs and MMORPG players, but that has been rarely done since the very earliest interrogations. It is done in the hope that what will be revealed will allow the assemblage to "speak" or interpellate with the reader, to allow for the translation of the moment whereby a particular player assemblage is able to come into being, while consciously observing the principals of Actor Network Theory.

## TRACING SNOWFLAKES

In the first section of this chapter we were introduced to one of the participants of this study, Emhati and an excerpt from his account describing his MMORPG player assemblage. Here it is again, this time, a full account demonstrating the heterogeneity of MMORPG player assemblages.

It can be roughly divided into three sections. Firstly, an account of the translation of his own player assemblage. Secondly, an account of the non-human (and human) actants that both support and intercede with successful translation of player assemblages. And finally, when fully traced, the account of the non-human obligatory passage point that Emhati comes to

find was essential to the translation of his player assemblage but only revealed to him after translation failure had occurred, when, like a computer that has malfunctioned and is in need of repair, the constituent actor-networks that had once supported it are unpacked and laid bare.

“So yeah, I lived in China for a little while and my Internet was a problem, and if I was raiding, or if I was doing dungeons or something, I would occasionally lag, and I'd quit party or D/C [disconnect], and leave a couple guys hanging, so I kind of got into crafting because it was a little bit more solo, a bit less lag dependent, and then when I got a little deeper into it, I really enjoyed the puzzle aspect of the crafting system in XIV and how you're kind of juggling a lot of moving parts in trying to see how you can get the highest quality item and beyond that there's the puzzle of how to make money the best and what to put on the market board and different things, market board's like that, and I really just enjoyed that and it allowed me to continue to participate in the game even while my Internet wasn't always so great.” (Interview with Emhati, 2017)

In just this first section, while a number of virtual non-human actants are seen to be supporting Emhati's player assemblage, such as the components that go into crafting a virtual good, virtual currency, and the virtual marketboard where the goods are sold, really, the obligatory passage point that allows for all of these to be enrolled and mobilized is the massive assemblage of the Internet infrastructure in China. Its effect is such that it actually shapes the way Emhati's player assemblage is translated. Translation error occurs when “[...] raiding, or [...] doing dungeons [...]” (Interview with Emhati, 2017). When these are unpacked, unsurprisingly, what is revealed is both a delicate and complex network of actants

being translated hundreds, perhaps, thousands of times, over the course of a raid, or dungeon. Just the simple act of pressing the key of “W”, means that the switch under it needs to actuate and create a charge, which is then interpreted by the logic board in the keyboard, which then feeds what can be described as a “request” back, through a cable to his computer. That is then interpreted by interpellations of numerous non-human actants, both physical and virtual, including the code of the client application for the MMORPG, and the central processing unit, both of which, are complex, densely bundled technological actants with thousands of actants and networks supporting their delicate assemblages. The central processing unit fires that command out to the Internet via the networking interface. That request needs to make its way through a dense maze of not only thousands of kilometers of copper and fiber optic cabling, through numerous exchanges, routers, and Internet service providers, but also through numerous regulatory frameworks policing data, and organizational policies that both interact with and govern these non-human networks. For example, in this case, one very dense connection that would have to be negotiated is with the actor network contained within the regulatory framework governing Internet usage in China, which, much like the central processing unit within Emhati’s computer, is also a densely bundled, and complex assemblage, supported by thousands if not tens of thousands of human and non-human actants problematizing, persuading, enrolling, mobilizing, and interceding with one another. This is all before being received by a computer server within the datacenter housing the code governing the particular expression of the MMORPG virtual world Emhati, the avatar, is a part of. Once interpreted by the internal architecture and code within the server, a return response undergoes all of the above again, but in reverse, before being translated on the computer screen as the avatar of Emhati running forwards. When successfully translated, the complex negotiations between these interconnected actants described previously is expected



to all happen in a matter of milliseconds, hundreds of thousands, or even millions, of times an hour across the globe.

Considering the widely dispersed and massively complex actor-network mobilized to translate an avatar's actions within the virtual world, it isn't surprising then that the tight tolerances, calcified through repeated translations too numerous to count, inevitably effect translation error.

Whether it's a copper cable somewhere within the assemblage breaking, or a server computer becoming overloaded, or even, perhaps, a censor employed by the Chinese government having a particularly bad day at work, a translation error in any of the thousands of actants mobilized to support this assemblage could lead to a perceptible delay between the interface receiving a command it being reflected on the corresponding screen to "[...] leave a couple of guys hanging." This is punctualized as "lag" effected by the Internet infrastructure in China, supporting and shaping Emhati's player assemblage. Without it, it is likely that his avatar would never have become what it was now. In essence, Emhati had his play style completely changed by what had become an obligatory passage point for the construct of his MMORPG play: lag. Instead of raiding dungeons, he effectively, became a crafter, and a virtual small business operator.

"My work was pretty easy, and not a lot of preparation as long as I was kind of focused during class there was little that could have affected me in that respect, [...] but you know while I was at work in China with Final Fantasy XIV and just reading some different things on Reddit or shooting some private messages between guild

mates and it's just kind of a between classes thing. No I don't think it ever affected me while I was working in teaching while in China [...]

When Final Fantasy XIV came out I got a beta invite and I really enjoyed it, but I would say that it kind of... things got a little stale right after about 2.2, patch 2.2, and so I stopped playing for a little while. I was working a lot in China and I was doing other things, so I kind of moved away from it for a bit, but when Heavensward was on its way, I came back. A lot of friends returned as well, and we, and I really got into it at that point. When my wife and I left China I sold my computer and part of the reason I haven't been playing since is that I've been really busy with responsibilities as an adult in trying to find a full time job, trying to find a place for my wife and I to live and get settled, and taking care of my son, and I really haven't had a lot of time for games in general, much less MMOs, and, yeah, I've logged on a couple times and chatted with the guys, did a bit of crafting, but I wouldn't say that I really returned, and I am really debating with myself whether or not I should continue to try or not, because, I mean, there's a certain aspect of after you leave an MMO for so long there's a lot of catching up to do, and that can be, sometimes, a challenge, and fun, but sometimes it can be very daunting and for me right now the social aspect isn't pulling me back enough. I've got a lot of co-workers and some friends here now outside of games, and so I'm fulfilled in that aspect, but I do enjoy the game itself, and so that's always kind of drawn me back some, and... So it's... There's a debate there, internally, and has been for a little while, whether I should continue to put in effort into trying to return to the MMO, to Final Fantasy XIV

[...] the early patches, a lot of people would say, and I would agree, that it was a little backwards. The very first patch they released had a lot of very very high end, high level typical content, and it was great. It was challenging, it was all brand new because they'd just revamped the entire game. And then when 2.1 and 2.2 came out, they released the lower end raids for bigger groups and more casual players, and so people who were already running and beating the cutting edge content, high end raids, were bored because they could just roll through it with minimal effort, and it didn't really present a challenge, and it wasn't really engaging to these skilled players that had already been beating the designed raids for them, for high end content, and I, personally, didn't quite jump into it, but there was a lot of culture, and there's a lot of atmosphere around people kind of just rolling through the new easier raids, and I was one of those people. I didn't quite do the high end raids, but I was rolling through the lower end raids, and that culture, that disengaged atmosphere that there wasn't a lot that was presenting a challenge, or engaging at that time, and, to be fair, the game was fairly new, so there just wasn't enough time for it to come out, and the developers were doing a good job, and towards the end, really, as I said earlier, I came back just before the expansion, and at the time there was a ton more and good content then, and it was, for me I just needed to give the developers some time to put in some more challenging content and it was a lot of engaging and interesting for me. [...] it was definitely an atmosphere of checked out, and a culture of checked out, especially if you were doing anything outside of your own personal free company, and you were checking forums or you were checking Reddit, or the official forums. There was a lot of checked out, waiting for updates, for new content, attitude from a lot of players. [...] a lot of people leaving. Many, I would say, would've come back, kind of like I did, when there was more content to be had, but, you know, some exodus, and

looking for something different. I know that a couple of my free company mates tried out some different games that released at that time, for them. None of them quite hit the spot, but, yeah, I would say a lot of people were looking for something more.

[...] MMOs are a huge time sink and as much as I do enjoy them, I need to spend my time doing other things, and I still use games as a bit of an escape, and a bit of relaxation for me, but it's a lot more short pace games these days, like, I've been playing a bit of Clash Royale where the battles on there last 3 minutes tops...and get into about 3 battles which last about 10 minutes tops, so you can get it all in, and if you got 30 minutes you got 3 rounds to go and you get a bit of relaxation and a bit of escapism right there, and you don't... It's not much of a time sink.” (Interview with Emhati, 2017)

This second section of Emhati’s account gives a very clear description of what interceding actants look like, that both human and non-human actants can effect others and intercede in ways unforeseen, bringing into sharp relief the limits of the developer’s influence on a constantly evolving assemblage that is constantly enrolling, mobilizing, translating and substituting its constituent actor-networks.

While it is unsurprising that the rigors of family life, taking care of a young child and the pressure to find a fulfilling job would intercede upon the translation of the play of an MMORPG, perhaps, more surprising, is that an MMORPG itself could intercede upon the play experience of its constituent players. In response to the wide gap in difficulty between the most challenging encounters and the rest of the MMORPG, developers introduced new content. While logically sensible, this placed pre-eminence on the sentiment of human

players and demonstrated the hubris of developers. As with many works of heterogeneous engineering, the effects could not have been predicted. The new content allowed for the player assemblage to translate much more quickly through rapid consumption. Repeated translation led to calcification and brittleness, whereby mobilized actants were locked into place and the tolerances for substitution lessened. Inadvertently, the introduction of new content by developers had interceded upon the sustainability of the MMORPG.

“Most recently, an action to leave, I sold my computer to a friend because it was difficult to try and logistically bring a whole large desktop on an airplane back to America, and so that whole move there, and then I've been using my money for other things, so I haven't put money towards a computer, and it just hasn't been financially smart yet, I mean, I need an apartment, just had a kid, and got a lot of expenses for different things, and a computer was one of them, so not having a computer has kind of forced my hand a little bit, but at the same time even if I had a computer I don't think I would have been playing recently. Just kind of moving along with my new family and trying to look for a full time job. It's difficult and it's taking a lot of my time, and so, yeah, I haven't had a lot of time for it. At the same time I haven't had the desire for it, I've just been wanting to do these other things, and MMOs take a back seat to that.

I think maybe I gave a couple of people a couple of items, but not much, because at the time in my head, I thought that I was going to come to America and put together a computer within a month or two months and return. The time that I left I imagined

that I would be returning, so I didn't really do a lot. I think I paid off some debts to a couple of people I owed some money to or whatever.

[...] At one point I just kind of realized that I wasn't going back at the rate that I had originally envisioned, and I was just OK with that. My wife and I were late into her pregnancy, and I was trying to support here, and so it was just... One day I was just like, 'Well, I'm probably not going to go back any time soon, so I probably won't play any time soon either.'" (Interview with Emhati, 2017)

The final, and, perhaps, most interesting section within Emhati's account recalls an important technological actant found to be responsible for effecting the motivation to translate the MMORPG player assemblage, but this was only able to be determined after it had disintegrated. Like sifting through remains, its disintegration allowed for reflection and unpacking that wouldn't have been able to occur, while in the midst of its translation. Emhati's final statement in his recount, "[...] 'Well, I'm probably not going to go back any time soon, so I probably won't play any time soon either.'" (Interview with Emhati, 2017) demonstrates his recognition that he would not be returning to play the MMORPG "any time soon". It is also the recognition that the disintegration of his player assemblage was complete, or, seen inversely, that the successful translation of his exit was complete.

While the traditional preeminence placed on the human actant would deem Emhati's wife and child most important to trace as, potentially, interceding actants, there are two statements made within his account that reveal a technological actant that both defined his player assemblage as an obligatory passage point, and effected the motivation to translate,

“Most recently, an action to leave, I sold my computer to a friend because it was difficult to try and logistically bring a whole large desktop on an airplane back to America [...] I thought that I was going to come to America and put together a computer within a month or two months and return.” (Interview with Emhati, 2017)

Emhati’s personal desktop computer was essential to his translation of the player assemblage. It effected the motivation for it to be translated. By virtue of its very existence it effected the moments of problematization, for example, connecting to the Internet infrastructure of China and being effected by it; interessement, through Reddit forums and recipes for crafting virtual gadgets; enrolment, through intermediary technological interfaces and being readily visible and accessibly; and, mobilization of all this to allow the translation of the player assemblage to occur. Without this particular technological actant, this process could never have occurred. This is clearly demonstrated when, after leaving China, despite no longer being subject to “laggy” Internet infrastructure, he found he had no motivation to continue the translation of the player assemblage.

The second example, while significantly shorter, is no less interesting nor unique,

“Well, I’ve always been kind of a math guy. So once I’ve started getting down to the nitty gritty then I’m having to... At that point I also started to theorycraft at that point [*sic*], figuring out how DPS worked, and that was very entertaining to me. And it was also... I think a part of it was that it was during high school, and I was very bored of high school. And so I had the time to sink in into this, and it was more mentally stimulating than a lot of classes. I would theorycraft during, in between lessons in math. So I guess that was also part of the reason why. I mean, just because this was

more stimulating. [...] It didn't really make a big impact on how I played the game, because the stats were, basically, as we knew, just kind of like a personal achievement. Me, I would actually apply some skills that I know towards a certain goal that I wanted to achieve. Because up until then math had just been an abstract thing that you used to solve problems that were given to you on a piece of paper. You knew you are supposed to do it to solve, rather than having to figure out what you need to do to solve a problem.” (Interview with Raven, 2017)

For Raven, mobilizing mathematics was such an important component actant of his player assemblage, it could be considered the obligatory passage point through which his MMORPG play occurred. Much of this experience occurred outside of the virtual environment, involving unpacking the algorithms that defined how the actions within were translated, or “theorycrafting”. In fact, it could be surmised from his account that actually playing within the MMORPG environment was less important than, and object to, this more stimulating task.

In essence, Raven is akin to a virtual physicist. For Raven, the MMORPG’s virtual environment was a research site to test assumptions, and it is the algorithms that define the rules of this virtual environment that also define his player assemblage. While his actions don’t align with what would be considered normative by the models of MMORPG play created by theorists and developers such as Yee and Bartle, Raven’s translation of the MMORPG player assemblage can still, conceivably, be considered as effecting what can be seen as a play experience, demonstrating the heterogeneity of these complex constructs.



This third, and final example, demonstrates how the non-human actants within an MMORPG, more specifically, the avatars within them, can act upon the player, demonstrating that the play experience is never an entirely human construct,

“Makes me feel a little crazy when I do it, but I have two characters that I main, Shaede and Killion. In my head they're like twins, they're siblings and I make up excuses why I'm playing one more than the other because I feel bad about not playing them. Which feels crazy. But I guess, the game feels different when I play each of them. It feels a little a little darker, a little sharper, a little sadder when I play Shaede. That's how I feel really how she feels or how she experienced this world. When I play Killion, it's kind of brighter. I see a lot of little details in the game. He runs around and talks to everybody. Shaede does that too but I notice when I play with him because I'm taking my time. It's hard to explain. That sounds completely crazy. [...] It's kind of like I'm channeling different parts of my personality. I could be silly and upbeat on Shaede but most of the time when I'm experiencing story, it's kind of like ‘Oh this is sad.’ It's kind of like more serious to me as supposed to Killion is like ‘Crap, this is happening. I got to fix it.’ Shaede is kind of my ‘I see this. I'll do something about it. This sucks.’ Killion is my ‘I can do something to help these people. I want to do this.’ I guess like different aspects of my personality that allows me to lean more that way.” (Interview with Shae, 2017)

It had been assumed in previous models of player typology that the nature of the MMORPG play experience was one that was entirely determined by the proclivities of the human actant; that if an avatar preyed on others it was because the player controlling the avatar was, innately, a killer; and, that if an avatar decided to socialize with others, instead, that the

player was also, innately, a socializer. Not only does this place pre-eminence on the human, but it consequently, also ignores the effect avatars contribute in translating a player assemblage. The choice to employ the term *vassal* previously was a conscious one. While an avatar might normally be seen as subservient to the player, it has as much of an effect on the player, as a vassal body may have to a lord. This is demonstrated in Shae's account above.

Shae explicitly describes how her two avatars effect her; that she felt bad about not playing them, and that the very nature of her play is dependent upon the particular avatar she cohabits the MMORPG experience with. Where one might assume that the human player is the obligatory passage point through which the translation of an MMORPG avatar must pass, as demonstrated previously, this often isn't the case. In this specific instance, the role of obligatory passage point is actually occupied by the avatars themselves.

Both avatars, Shaede and Killion, effect her play experience in different ways, and, in turn, effect different emotional responses as well. As she describes, Shaede engenders a more depressed emotional response, while Killion evokes a more practical, even manic, response. They even effect the way the virtual world is seen by the human player. As Shae recounts, Shaede the avatar occupies a world of darkness and sharp contrasts, while Killian occupies a distinctly brighter one. It is almost as if each of Shae's avatars were translating an entirely different MMORPG player assemblage each time she cohabits the play experience with one of them. And while she rationalizes this by saying, "It's kind of like I'm channeling different parts of my personality [...]" (Interview with Shae, 2017), it could be argued that, without the avatars themselves, she would not have been able to "channel" those different parts of her personality. This explains both the very necessity of non-human actants in the translation of

player assemblages, as well as the resultant complex and unique nature of each of these assemblages due to the multitude of actants and networks involved.

These examples above, as well as the longer excerpts provided by Yee (2006) demonstrate the heterogeneity of player assemblages; that a multitude of both non-human and human actants can effect their translations and that to try to boil that down to a series of typologies is highly reductive.

The commercial implications of these findings mean that developers can no longer simply address the long held assumption of placing pre-eminence on the human player, but that the sustainability of MMORPG populations relies on addressing the interceding actants that arise from a multitude of networks both human and non-human. For example, Internet infrastructure and hardware in the case of Emhati's experience; the algorithmic meta game being conducted by Raven; or the needs of avatars themselves, in the case of Shae.

When investigating deeper into the heterogeneity of these actor-networks, it is important to understand that the networks of effects described in the accounts previously did not come from nowhere. They are the crystallization of entelechies, potentialities, which started forming, months, years or even decades, ago. The next chapter will explore these, and the moments that demonstrate how the translation of an MMORPG player assemblage can be a process years in the making.

**CHAPTER SIX: YEARS IN THE MAKING**

“I played *Final Fantasy VII* when I was a kid in 1997, so when I was 7-8 years old. My dad bought us a *PlayStation*, and we ended up getting that game after seeing it in *Game Informer*, if that was even around back then. It was whatever the game magazine was at the time. And my dad bought us that game, and we, me and my brother, just started playing and then we just followed up by finding out about other *Final Fantasy* titles.” (Interview with Dafina, 2017)

The original intent of this thesis was to investigate players leaving MMORPGs, in Actor Network Theory terms, the disintegration of the MMORPG player assemblage and concurrent translation of a post-MMORPG existence. However, what became abundantly clear throughout this process of interviewing and tracing participant’s accounts of their player assemblages and their play experiences, and unpacking these blackboxed experiences, is that MMORPG play, the MMORPG player and the use of the term MMORPG itself is somewhat of a misnomer, because, in fact, none of these assemblages are monolithic constructs. When unpacked it was found that many of the participants had started the process of translating their player assemblage many years prior, some before MMORPG was even a term coined by Richard Garriot in 1997 (Asbjørn Jøn, 2010, p.97), and the entelechies or potentialities that form the primordial soup from which these assemblages evolve and arise, sometimes stretched back in time even further.

In the account above, Dafina recalls her father purchasing a *Playstation* for her, and the obligatory passage point of the *Game Informer* magazine, which prompted her into first

translating her player assemblage within *Final Fantasy VII* (Square Enix, 1997). She goes on to say that this is what led her into exploring later iterations of the Final Fantasy franchise, which led her to translate the MMORPG player assemblage we find today in the research site, *Final Fantasy XIV: A Realm Reborn* (Square Enix, 2013)

Dafina's account not only demonstrates the heterogenous engineering required of her first player assemblage, effected by not only her father, but also the *Playstation*, and, most importantly, a popular gaming magazine; but, it further demonstrates that these moments of translation are part of the entelechy, or potentialities, through which the later translation of her player assemblage within the research site MMORPG are effected. Despite occurring decades in the past, there is a direct line that can be traced between the then and now.

Without these, it is likely that the eventual translation may never have happened. In that sense, it could be said that the MMORPG player assemblage is one that has been *years in the making*.

This chapter will explore this concept and unpack the entelechies involved in the translation of participant's player assemblages; how they arise from the disintegration of previous assemblages, from weird and wonderful places, often having little to do with the eventual translation they effect; and the effect of entelechies upon the translation of assemblages, and how their very nature, as ephemeral moments of potentiality can impact translation events that are, chronologically, distant from them.

It will start by tracing the meaning of entelechy itself from its Aristotlean beginnings and how it came to be co-opted as a term to define the pre-assemblage state of a network in Actor Network Theory.

It will then explore how the term *entelechy* has been deployed by previous adherents to Actor Network Theory with the often repeated phrase from Latour, “as soon as an actor engages with an actor-network it too is caught up in the web of relations, and becomes part of the ‘entelechy’” (2005, p.27) before diving into its use in MMORPG studies itself, and it’s affinity with explorations of the identity and the self (Boone, G.W., 2008; Gorman, K., 2012).

Finally, through the accounts of this study’s participants, this chapter will illustrate how the MMORPG player assemblage is an assemblage that starts its journey towards translation, or it’s “full realization”, months, sometimes years before the first moment of problematization ever occurs as the seeds of a network or, as Latour would have it, web of relations.

But, first, what do we mean when we refer to an *entelechy*?

## THE ENTELECHY OF ENTELECHY

To be clear, the term *entelechy* is one that is relatively rarely used both within Actor Network Theory and throughout wider academia. A quick search online found that the most highly cited examples of the term being discussed were a 1967 article by George A. Blair in the *International Philosophical Quarterly*, and a book by Charlotte Witt published in 2003, *Ways of Being: Potentiality and Actuality in Aristotle's Metaphysics*, which, combined, had been cited 201 times as of 2019. Both Blair and Witt are both highly respected scholars of Aristotelian metaphysics, however, as can be seen, neither popularized the term.

That is perhaps not surprising due to the fact that, although Aristotle invented the term of *entelecheia* and *entelechy* by extension, he was not the one to define them. Since its invention there has been a centuries-long intellectual battle about what it actually means. St. Thomas Aquinas declared it as the only possible way for motion to be defined, while Descartes stated matter-of-factly in his *Principles of Philosophy* that "motion [...] is nothing other than the action by which some body is transferred from one place to another" (trans. Mahoney, M.S., 1977, part II, para. 24) or, in other words, "motion is motion" and it is irreducible. Daniel Graham wrote an impassioned treatise on the etymology of *entelecheia* (1989, p.73-80) through which he describes the permutations of the term through the works of Rudolf Hirzel, Kurt von Fritz and, finally and most approvingly, Herman Diels, whereby he settles upon the meaning of "being complete"; and, in return, Blair excoriated his approach (Blair, G.A., 1993, p.91-97) through a letter of reply, four years later.

While the toing and froing of academia over the meaning of Aristotle's *entelecheia* is undoubtedly an interesting traversal of etymological history, it is not the place of this thesis to dive deeply into it. Rather, what is of interest is what happened when Bruno Latour picked the term up in his 1984 book, *Les microbes: guerre et paix suivi de irreductions* or, translated into English in 1988 by John Law and Alan Sheridan, *The Pasteurization of France*, the last section of which is dedicated to *entelecheia* and his principle of *irreductions*.

Latour takes a somewhat Cartesian approach to the word, that "[...] nothing is, by itself, either reducible or irreducible to anything else." (*The Pasteurization of France*, p.158).

To know why he took this radical approach, it is important to understand how he arrived there in the first place, which, happily, he recounts in his uniquely Latourian, eccentric way, his moment of epiphany to preface his treatise on irreductions,

‘I taught at Gray in the French provinces for a year. At the end of the winter of 1972, on the road from Dijon to Gray, I was forced to stop, brought to my senses after an overdose of reductionism. [...] To put everything into nothing, to deduce everything from almost nothing, to put into hierarchies, to command and to obey, to be profound or superior, to collect objects and force them into a tiny space, whether they be subjects, signifiers, classes, Gods, axioms-to have for companions, like those of my caste, only the Dragon of Nothingness and the Dragon of Totality. Tired and weary, suddenly I felt that everything was still left out. Christian, philosopher, intellectual, bourgeois, male, provincial, and French, I decided to make space and allow the things which I spoke about the room that they needed to “stand at arm’s length.” I knew nothing, then, of what I am writing now but simply repeated to myself: “Nothing can be reduced to anything else, nothing can be deduced from anything else, everything may be allied to everything else.”’ (*The Pasteurization of France*, p.162-163)

Latour added to this an almost Joycean account of the philosophical approaches, religions, occupations and, essentially, reductionists he was repulsed by and who had driven him to ponder a new philosophy through which to view life “[...] unreduced and set free”. From the “[...] Hegelian [who] wishes to squeeze from events something already inherent in them” to the “[...] Kantian [who] reduces things to grains of dust and then reassembles them with synthetic a-priori judgments that are as fecund as a mule”; from how a “[...] French engineer attributes potency to calculations, though these come from the practice of an old-boy



network” to how ‘A philosopher sharpens the “epistemological break” to guillotine those who have not yet “found the sure path of a science.”’ (*The Pasteurization of France*, p.162-163)

In Latour’s irreducible perspective, the human *and* non-human can no longer be dismissed as trivial nor an error. Every human and non-human object has the potential to be an effect or “force” upon others and so every human and non-human object is then equal, but none is inherently reducible to another. Philosophy, physics, biology and psychology are as subject to these effects as surgeons, generals, nannies, writers, chefs, biologists, engineers and romantics.

“We argue constantly with one another about the relative importance of these materials, their significance and their order of precedence, but we forget that they are the same size and that nothing is more complex, multiple, real, palpable, or interesting than anything else.” (*The Pasteurization of France*, p.156)

So, while we can *explain* the forces and effects; the alliances that need to be created; and the translations that need to occur for, say, the sap within a tree to become a rubber eraser, we *cannot explain away* these forces, effects, alliances and translations by *reducing* the assemblage to “rubber eraser is a result of tree sap”, nor can we elevate the human to say that the “rubber eraser is a result of the rubber maker”. In a way, this is the *inverse of punctualization* that was discussed earlier within this thesis. The universe is a tangle of negotiations of effects, and humans are but a part of that mass.

Latour illustrated the futility of separating the “human” and “society” from the “natural” through the description of Robinson Crusoe meeting the man he would come to call Friday, as according to Tournier (1967, 1972).

“This shift from a reductionist to an irreductionist philosophy closely resembles what happened to Robinson Crusoe when he finally met Friday. I am talking here not about Defoe's story but about the original version of the myth offered to us by Tournier (1967/1972). His story starts off like Defoe's, but halfway through the novel Friday carelessly blows up the powder magazine and Robinson finds himself as naked as he was on his first day on the island. For a moment he thinks of rebuilding his stockade, his rules, and his disciplinary measures. Then he decides to follow Friday and discovers that the latter lives on an entirely different island. Does Friday live like a lazy savage? No, for savagery and laziness exist only by contrast with the order imposed on the island by Crusoe. Crusoe thinks he knows the origin of order: the Bible, timekeeping, discipline, land registers, and account books. But Friday is less certain about what is strong and what is ordered. Crusoe thinks he can distinguish between force and reason. As the only being on his island, he weeps from loneliness, while Friday finds himself among rivals, allies, traitors, friends, confidants, a whole mass of brothers and chums, of whom only one carries the name of man. Crusoe senses only one type of force, whereas Friday has many more up his sleeve.” (*The Pasteurization of France*, p.154)

Crusoe's preconceived notions of the way the world was ordered came crashing down through meeting Friday who did not share the reductionist view that the island was to be

conquered. Instead Friday, in the irreducible way he negotiated with the island and forest was free to experience it as it truly was.

Like Friday, Latour insisted that there be “[...] no a-priori ideas about what makes a force, for it comes in all shapes and sizes.” (*The Pasteurization of France*, p.154) – that the world cannot be understood through the lens of raw first principles but requires that we trace and describe the forces and effects that can be observed.

Within these few pages, Latour seeded the creation of a radically empirical and ontologically flat view of the universe; of actants and networks and alliances; of translations and the irreducible. Eventually, what would come to be formalized as generalized symmetry, and heterogenous networks. *Irreductions* within *The Pasteurization of France* (1988) was an important part of the entelechy that led to the translation of Actor Network Theory.

## THE REDUCTION AND IRREDUCTION OF ENTELECHY

The passage above illustrated that the thread of potentialities, entelechies, can be traced back years. Actor Network Theory itself, as an assemblage, has been building alliances, being subject to the trials of academia, being shaped and molded by others for over four decades now. Each moment of translation “creates time” for the next, and so in that way Actor Network Theory is not a settled theory, it is only made durable through the forming of alliances and the weathering of trials. Based on its own observations, it will never be settled, but then, neither will anything else until they are lost to time.

“1.2.5 Forces that ally themselves in the course of a trial are said to be durable. Each entelechy generates times for others by allying with or betraying them. “Time” arises at the end of this game, a game in which most lose what they have staked.” (*The Pasteurization of France*, p.164-165)

This chapter will be exploring how translations and moments in the past for this study’s participants “created time” or led to the entelechy that eventually translated into the MMORPG player assemblage. But before we do so and make equivalent, or *reduce*, the journey of these player assemblages to the “first principles” of Actor Network Theory, it is important to explore how the concept of the entelechy itself has been used. As this thesis has no intention of traversing the entirety of its use in academia, we’ll be looking at how entelechy has been translated specifically in games and MMORPG studies, and where it has ended up.

The concept of the entelechy didn’t make it into the lexicon surrounding games studies and peripherally connected investigations until the late 2000s and, even then, it was sparsely deployed. Through textual analysis, there were three works that refer to it in supporting their descriptions of, mostly, the concepts of identity and self in MMORPGs and video games in general.

The first to take it up was Charles Soukup in 2007’s *Mastering the Game: Gender and the Entelechial Motivational System of Video Games*. Soukup did not use the framework of Actor Network theory, instead he deployed entelechy to explain the “[...] discursive logic of many video game systems [where] the perfect “end-point” is a “complete” aggressive domination of all others” (p.171), elaborating further that the participants of video games “[...] feel

compelled to see it to its "logical completion" regardless of the moral consequences" (p.171). Soukop uses "entelechy" in such a way that reflects Herman Diels interpretation of a movement towards the ideal, couching this motion within the fulfillment of the Burkean ideal of "terminal compulsion",

"[...] there is a kind of "terministic compulsion" to carry out the implications of one's terminology, quite as, if an astronomer discovered by his observations and computations that a certain wandering body was likely to hit the earth and destroy us, he [she] would nonetheless feel compelled to argue for the correctness of his computations, despite the ominousness of the outcome." (Burke, K., 1966, p.19)

However, this is somewhat antithetical to the core of Actor-Network Theory, which rejects the reduction of a whole series of forces and effects, mobilized actants and networks of relations, to some amorphous essential "compulsion". It allowed Soukop to deploy this "node" of meaning in the further argument that "from a feminist perspective, the entelechial endpoint of complete domination of all others has significant ethical implications" (p.171), but in effect, what Soukop did was employ the concept of the entelechy as a means to an end; to explain away through a punctualization, i.e. that this "entelechial system" he refers to creates the intrinsic motivation towards mastery and dominance. Of course, in Actor Network Theory, nothing can be created from nothing, nor can anything be reduced to anything else.

A 2008 thesis by George William Boone describing identity in *World of Warcraft* (Blizzard Entertainment, 2008) takes a similarly Dielsean approach to the use of entelechy, that the game "offers for players to "perfect" an aspect of themselves through the pursuit of in-game

power” (p.87). Boone also deploys the same Burkean philosophical framework as Soukop (2007), also seeking to actively punctualize the observable actions of an avatar,

“Burke (1973) describes three tactics for establishing *consubstantiality* between a rhetor and his or her audience. [...] Thirdly, and finally, one may constitute themselves through linguistic inaccuracy. It is this third form of identification that is useful for us here, as it represents making oneself *consubstantial* with both machines and social hierarchies. For example, I make myself *consubstantial* with an avatar when I refer to my actions, via the avatar, as something “I” do.” (Boone, G.W., 2008, p.88)

Finally, in 2012, Kyla Gorman briefly refers to it when quoting the work of Sandra LaFave (2016), who defined entelechy as a structure of potentiality, and a movement along a continuum towards the fulfilment of that. While LaFave’s explanation of entelechial structures hinges upon her understanding of Aristotlean work, it, coincidentally, reflects much of the Latourian interpretation of it, as well, that “[...] Each entelechy generates times for others by allying with or betraying them. "Time" arises at the end of this game [...]” and that this movement towards the end goal is a negotiation between both human and non-human objects,

“A knife is a better knife, and more of a knife (it has more knife being) the better it realizes its potential to cut. Its entelechy is its knifely structure. The structure organizes its matter and at the same time limits and determines the possibilities for that matter. (Matter organized in a knifely way can cut, but it can't walk or carry on photosynthesis. Those limitations are imposed by the entelechy.) The optimal knife,

the best knife, the knife with the most knifeness, is the one put together optimally to achieve the natural purpose of a knife. We help this along (by cleaning, sharpening, etc.) or hinder it (by leaving it out in the rain)” (LaFave, S., 2016)

Gorman deploys this in discussing the “soul” of objects within a game’s virtual world. While he does place pre-eminence on the human, if only offhandedly, by stating that “Any given object in a game world was put there by a designer or developer [...]” (p.6) he also acknowledges the important role that non-human actants have to play within the construct or assemblage of the play experience, for example, he notes that “An enemy AI might be placed in a level with the goal of making an area difficult but not impossible to traverse” (p.6). Curiously though, he takes the concept of an object’s “soul” and reduces it, or punctualizes it through the concept that there can be an “ideal form”,

“Some games encourage the player to explore one of a number of ideal forms, but most games have in their design an implicit “skilled” way to play, and encourage the player to strive for that particular ideal.” (p.7)

The concept of the entelechy, the tangle of negotiations, relations and actants, through which lies the potential for all of these to organize in such a way that an assemblage, construct or “moment” can translate, is a concept which cannot be reduced. Taking LaFave’s example of the knife, it’s knifely structure, and all of its “knifeness”, just because it can cut, and one thread within its entelechial structure might be leading towards cutting, does not mean there is some essentialist ideal for it to cut, some ideal form, which can appear out of nowhere – there needs to be allied actants who can mobilize to “help this along” as are there opposing actants that can intercede or “hinder it”. If, as Latour would, we see *no* “ideal form” for the

knife, only the effects that define its form, then the entelechial structure is irreduced and has the potential to organize and translate into a multitude of forms. Like Crusoe finally giving up on imposing his colonial will on the island and following Friday, the knife is set free.

After traversing the works of the few who had taken upon the troublesomely difficult to define idea of the entelechy, we reach a point further away from Actor Network Theory than we started. While Soukop (2007) and Boone (2008) both took the Dielsean approach to interpreting the entelechy, and Gorman (2012) was influenced by the interpretation of Aristotleanhylomorphism by Sandra LaFave (2016), whether referring to “terminal compulsions”, “perfecting aspects”, or striving for an “ideal form”, all three end up in the same spot (punctualization or node, if you will): the entelechy reduced to an essentialist ideal.

Thus, it seems appropriate that, before we dive into the entelechies and entelechial structures that have effected the translations of participant’s MMORPG player assemblages within this study, we reorient ourselves with some of the principles of irreducibility that will be evident through tracing (before, effectively, discarding them as reductions). For this we go back to Latour and the dense stream of thoughts laid down on paper within *The Pasteurization of France* (1988):

“1.1.1 Nothing is, by itself, either reducible or irreducible to anything else.

- I will call this the "principle of irreducibility", but it is a prince that does not govern since that would be a self-contradiction (2.6.1).” (Latour, B., 1988, p.158)



Firstly, to exist is to differ. Object A cannot be Object B, for if Object A could be said to be reducible to Object B, then, effectively, they would not be separate entities. They would be one and the same.

“1.1.8 No actant is so weak that it cannot enlist another. Then the two join together and become one for a third actant, which they can therefore move more easily. An eddy is formed, and it grows by becoming many others.

- Is an actant essence or relation? We cannot tell without a trial (1.1.5.2). To stop themselves being swept away, essences may relate themselves to many allies, and relations to many essences.

[...]

1.2.2 Entelechies agree about nothing and can agree on everything, for nothing is, in and of itself, either commensurable or incommensurable. Whatever the agreement, there is always something upon which disagreement may feed. Whatever the distance, there is always something upon which an understanding may be built. To put it another way, everything is negotiable.

- "Negotiation" is not a bad word so long as it is understood that everything is negotiable, not just the shape of the table or the names of the delegates.

Decisions also have to be made on what the negotiation is all about, when it can be said to have started or finished, what language will be spoken, and how whether we have been understood or not will be determined. Was it a battle, a ceremony, a discussion, or a game? This is also a matter of dispute, a dispute that continues until all the entelechies are defined and have themselves defined the others.” (Latour, B., 1988, p. 158-159, 163-164)

Secondly, nothing is beyond relation, everything can be negotiated, there is no space between objects that they cannot possibly bridge. There is no object that does not possess the force to relate to, and enlist another, nor is there enough animus between objects that enemies cannot become allied. Figuratively, there are no lines in the sand that cannot be crossed, rather there are many lines that can be crossed so long as there is a sufficiently strong alliance to cross them.

Furthermore, if we take the inverse of the first principle, to form an alliance is to form a single entity, *is to reduce*. For A to ally with B they must negotiate relations to some degree – they must translate, hence, simplify or *reduce* their counterpart. They must do this because they themselves are *irreducible*. So, the reducible and irreducible are not so much contradictions, but rather a self-reinforcing chain of relations. For relations to occur, objects must be *both* irreducible and reducible.

“1.2.4.1 Though places are distant, irreducible, and unsummable, they are nevertheless constantly brought together, united, added up, aligned, and subjected to ways and means. If it were not for these ways and means, no place would lead to any other.

[...]

1.2.12 Nothing is, by itself, either knowable or unknowable, sayable or unsayable, near or far. Everything is translated [...]” (Latour, B., 1988, p.164,181)

Thirdly, nothing can persist on an island. All things must be brought to bear, or translated. Without the web of constantly negotiated relations, nothing could happen, and nothing would exist. Everything is a tangle and mess of relations, every moment is an event cascading from

the last. The ontology of the entelechy is, like lines of dominoes falling upon each other, innumerable tendrils made up of the many moments that define the current moment of reality.

Finally, we trace back to the first principle of Latour's treatise, the "1.1.1" in his "theory".

"1.2.8 Every entelechy makes a whole world for itself. It locates itself and all the others; it decides which forces it is composed of; it generates its own time; it designates those who will be its principle of reality. It translates all the other forces on its own behalf, and it seeks to make them accept the version of itself that it would like them to translate.

[...]

1.4.5 Entelechies wishing to be stronger can be said to create lines of force. They keep others in line. They make them more predictable.

[...]

1.5.1 A force cannot be given those forces that it arrays and convinces. By definition it can only borrow their support (1 .3.4). Nevertheless, it will claim what does not belong to it and will add their forces to its own in a new form: in this way potency is born.

- When an entelechy contains other entelechies which it does not contain, we say that it contains them "potentially." The origin of potency lies in this confusion: it is no longer possible to distinguish an actor from the allies which make it strong. From this point on we begin to say that an axiom implies its demonstration "in potentia"; we begin to say of a prince that he is powerful, that the being-in-itself contains the being for itself, though only "potentially." With potency injustice also begins, because apart from a happy few-princes, principles, origins, bankers, and

directors - other entelechies, that is, all the remainder, become details, consequences, applications, followers, servants, agents-in short, the rank and file. Monads are born free (1.2.8), and everywhere they remain.

[...]

2.1.7 There are no theories. There are texts to which, like lazy potentates, we respectfully attribute things that they have not done, inferred, foreseen, or caused. Theories are never found alone, just as in open country there are no clover leaf intersections without freeways to connect and redirect.” (Latour, B., 1988, p.166, 171, 176-178)

This is where we begin butting up against the works of Gorman (2012), Boone (2008) and Soukop (2007), and this is where, once we’ve acknowledged the first three principles, we then, immediately, discard them.

Latour’s first principle, to which the others are beholden, is a true “prince”, wherein the power to govern lies “in potentia”. It has the power to seed discourse, but does not govern it. This contrasts with classical metaphysics, for example, Descartes’ “Cogito ergo sum”, “I think, therefore I am”, where everything can theoretically be drawn from first principles.

As we trace and uncover the tendrils of the entelechies that have brought to bear the player assemblages of the participant’s within this study, it is important to keep in mind this thesis does not seek to reproduce, or represent “reality”. From the perspective of Actor Network Theory, that would be conflating reality with the words you are reading right now, which would be a gross reduction.

Winners and losers will be made through the discourse that is currently unfolding between yourself, and this text, and about to unfold between yourself, this text, and others. We can never capture the entirety of what we study, i.e. “injustices” are about to begin, where “[...] a happy few-princes, principles, origins, bankers, and directors [...]” are uncovered, and the remainder fall in line to become “[...] details, consequences, applications, followers, servants, agents-in short, the rank and file [...]” (Latour, B., 1988, p.174). Nevertheless, what this thesis seeks to do, like Latour’s *Irreductions* before it, is crystallize into something new in the universe, a semantic actant that can seed new relations, negotiate new alliances, and prompt the translation of new assemblages.

This thesis’ metaphysical position and veracity will be demonstrated over time by the tangle of relations that form around it like the friendships, enemies, tools and hindrances that Friday contends with on his island in the earlier described Robinson Crusoe. Rather than espousing a theory, which seeks to govern the world, like Crusoe’s attempts to conquer Friday’s island, but only creates a poverty of discourse by conflating words with reality.

## THE ENTELECHY OF THE PLAYER ASSEMBLAGE

At the start of this chapter we introduced one of the participants within this study and a small excerpt of the entelechial thread that led to the translation of her MMORPG player assemblage. Tracing the thread further, Dafina’s extended recount not only illustrates the equal and important roles both human and non-human actants have played throughout the translation of her player assemblage, but also that these translations and effects that created

the entelechy for which her player assemblage was able to eventually exist, started decades prior,

“*Final Fantasy* is very nostalgic for me. I played a lot of the titles going up, and I had a few friend a couple of years ago when *A Realm Reborn* came out, they just were telling me that it was fun and I would enjoy it, and I didn't have to commit a bunch of time to it, I could play however much I wanted to or however, whatever I could. So, I just started playing mainly because of my friends. [...] The only thing I was committing was the subscription.

[...]

I played *Final Fantasy VII* when I was a kid in 1997, so when I was 7-8 years old. My dad bought us a *PlayStation*, and we ended up getting that game after seeing it in *Game Informer*, if that was even around back then. It was whatever the game magazine was at the time. And my dad bought us that game, and we, me and my brother, just started playing and then we just followed up by finding out about other *Final Fantasy* titles. And that was pretty much it.” (Interview with Dafina, 2017)

For Dafina, that first moment was receiving a *PlayStation* in 1997. That created the time to allow for the intense interest in the *Game Informer* article on *Final Fantasy*, which in turn created the time to allow for the translation of the *Final Fantasy VII* player assemblage. From there nearly every iterative translation of *Final Fantasy* play would create the potential for the next,

“It was a game series that I enjoyed playing [...] Every time a new *Final Fantasy* came out I would always be interested in playing it.

[...]

I've played every single one minus *X-2* and the *XIII* series. I played a little bit of *XIII*, I didn't like it, and I didn't play any of the sequels to it.” (Interview with Dafina, 2017)

This was reinforced through the action figures, and plushies, which were allied with the assemblage,

I have a couple of *Final Fantasy* action figures. I have some plushies. That's about it. Everything else that I had I no longer have any more, but I did save some of the figures. I still have them in boxes, and then I have a Vincent plushy and I have Moogles somewhere [...] gaming for me has always been more of a social thing. I've always had friends that play games, so we were just... Like, we would just play whatever games together. Like... So that's how I got into *Final Fantasy XIV* was the friends that I was playing *League* with all started getting into *Final Fantasy*, so I just, I did the free trial for them and then I found it interesting, and then I just played it for a bit and then I took a really long break. And then I started playing again when *Heavensward* came out, and even then I played for a summer and then I took another break. And I started playing again.” (Interview with Dafina, 2017)

Although Dafina stated that “[...] gaming for me has always been more of a social thing”, this is, perhaps, more of an indication of how entrenched the practice of placing pre-eminence in the human actant is, as tracing back through her experiences, it is evident that social gaming would never have occurred without the potential first emerging from those first moments involving not only her father, but also the non-human allies, the *PlayStation*, the *Game Informer* magazine and *Final Fantasy VII*. All of these assemblages of play, allied

action figure and plushy paraphernalia, strengthened the dense entelechy that created the heightened potential for Dafina to translate her MMORPG player assemblage within *Final Fantasy XIV* years, or even decades, before the game itself was ever mooted within the Square Enix team.

Undoubtedly the entelechial mass from which the MMORPG player assemblage was translated over many years is infinitely more complex and broad than this, but for the purposes of the scope of this thesis and tracing this will suffice.

However, Dafina's entelechy is not dissimilar from a number of other participants within this study,

“[...] when *Final Fantasy XI* came out, because it was in the *Final Fantasy* series [...] I wanted to play it [...] been playing Square Enix titles and Squaresoft titles for a long time. [...] just being a fan of the series, you know, I see it posted up, I knew, when *XIV*, the original 1.0 came out, I was in college and didn't have the opportunity to get on to it, then it ended up being a massive flop anyway, and when the reboot came around I was out of college at that point and had more time to invest so... I moved to *XIV*.” (Interview with Rahsei, 2017)

“[...] my first video game on *Playstation 1* was *Final Fantasy 8*, and I've been a fan of all *Final Fantasy* series, I've played the previous ones from 8 and then I've been following it, and then when I came to America, the game released 2 months after, or a month after, actually, so I figured, pick it up. Bought a new laptop, pick up the game.” (Interview with Dryst, 2017)



“[...] at first I played some of the original more mainstream [*Final Fantasy*] games where they were just, the classic JRPG's. And I was talking to a friend of mine who also played some of the games, and he brought up *XIV* back before *A Realm Reborn* launch, how it was kind of shitty, and then they were trying to relaunch it, and that was how I first heard about it. Then later on I heard it was coming to the *PS4* so I was like, "Maybe I'll pick it up." And I did.” (Interview with Raven, 2017)

Like Dafina, Raven, Rahsei and Dryst had previously been involved in translations of play that were densely intertwined with *Final Fantasy*. These created the potential for, and eventually effected the translation of the MMORPG player assemblage within *Final Fantasy XIV*, the research site, for each of them.

However, while there were a number of participants who were effected by previous iterations of *Final Fantasy*, which played an integral part in leading them onto this one, this definitely, did not apply to the majority of them. The entelechies which created the potential for others to translate their own player assemblages were not always so straightforward,

“[...] I was basically I was just getting into playing online gaming and I was playing an early version of *Counter Strike* with friends in LAN [Local Area Network] centers and what not. So it kind of started from there, and then I would see my friends playing *WoW* [*World of Warcraft*] because it was about the time [...] I got a subscription then and I tried do an MMO then, but at first it was hard to get into because of the amount of time you had to spend levelling up, so I wasn't able to get to the point that my

friends were. So, I got in and then just stopped playing. I got back into playing again at the end of *Burning Crusade*.

[...]

I wasn't expecting to find more people to play with. A lot of my "online" experience was still LAN, so while it was technically online, it was still a bunch of people in the same room, so it wasn't really strangers because I would know people that were playing the LAN. This is one of those experiences that I got where I was starting to interact with new people that I never met before and I would start building relationships through *World of Warcraft*.

[...]

I had first heard of it [*Final Fantasy XIV*] in passing when they had announced the trailer years ago. This was the 1.0 trailer and then the release of it, I had heard the news that it was received very poorly and had a terrible launch at what not. I stayed away from it [...] I didn't actually get into it until much later. [...] it was actually through my work that I got to start playing it.” (Cheezu, 2017)

For Cheezu, that first moment of his entelechy that led to the eventual formation of his MMORPG player assemblage was playing *Counter Strike* with his friends in that particular LAN center. The translation of this moment created time for Cheezu to be connected and acquainted with, or subject to interestment by, *World of Warcraft*. The mobilization of other avatars, players, the network, and the game world itself created a dense assemblage. Dense enough that Cheezu's entwinement with the MMORPG genre could effect the translation of a job in MMORPG development as a QA tester. This, in turn, led to the translation of his MMORPG player assemblage with the site being studied,

“Basically my current work has me involved with certain aspects of Square Enix and some of that does involve *Final Fantasy XIV* so when I had started up my job the things they set me up with was a Square Enix account and then they got me a copy of *A Realm Reborn* to get myself familiarized with the game. In that sense they had told me to give it a try, get yourself familiar, see what you like about it, because if I'm going to be doing some writing and some translation involving *Final Fantasy XIV* then I should definitely try to at least experience it and I was still playing *World of Warcraft* at that time, so still focused on that, I was still doing end game raiding then, but I gave it a shot. I started a character up and I started playing and it was nice to give it a try casually at first and then it kind of slowly grew on me.” (Cheezu, 2017)

While there are, undoubtedly, countless allies, actants and networks the above accounts have forgone, what can be seen for Cheezu, as opposed to Dafina, Raven, Rahsei and Dryst, is that one of the key moments, the obligatory passage point, which seeded the entelechy that allowed for this to happen was not the franchise of *Final Fantasy*, but rather the MMORPG genre that it was a part of. While it may meander, a line can be traced from his MMORPG player assemblage back through the genre to the LAN cafe where he and his friends played *Counter Strike*. Without the cafe, the computers, *Counter Strike*, the physical network that connected both locally and to the wider Internet, and without his friends, and others playing *World of Warcraft*, without all of these allied actants, all complex in their own right, coming together and effecting the translation of this moment for Cheezu, time would never have been created for the intermediary translations and assemblages, and the potential for his MMORPG player assemblage to translate would never have occurred.

Cheezu's entelechial path demonstrates several of the fundamental concepts of Actor Network Theory. Firstly, it demonstrates generalized symmetry in action, that is the equal importance of both human and non-human actants in contributing to the effects that lead to successful translation. Secondly, that his account and this text only offer a glimpse into the near infinite and complex permutations of the entelechial structure or construct that housed the potential of the player assemblage to translate, and a relatively poor representation at that, demonstrating its irreducibility. Finally, part and parcel of that irreducibility is the acknowledgment that the entelechy that allowed for Cheezu's player assemblage to translate, was a moment that stretched back years and years.

Similarly, the focus of this final chapter, the concept of the entelechy, brings us back to the beginnings of Actor Network Theory. In essence, what this thesis has done is traced backwards, from the later works of Callon and Law, and the concept of the assemblage, to the extended literary epiphany that started it all, Latour's *Irreductions* (1988), done through the lens of the MMORPG player assemblage. And while a work of Actor Network Theory, such as this one, should have no intention of generating grand theories nor sweeping all-encompassing first principles, through tracing through MMORPG player assemblages and the "theory" itself, and its descriptions, there are a few important observations that can be made. Observations, which could change the way MMORPG players, play, and the assemblages of them, might be viewed, in answering the question of *how can we reconceptualize MMORPG play?*

And so now, at the end of this thread or "game", we reach a point where the once constructed moments before it have all long disintegrated, and even the most steadfast of allies must "[...] lose what they have staked" (Latour, B., 1988, p.165). A destination that all "[...] blind,

myopic, workaholic, trail-sniffing, and collective traveler [...]” ANTs must eventually reach (Latour, B., 2005, p.9), the limited human actants we are, we arrive at the final section of this thesis: the conclusion.

**CONCLUSION: THE MMORPG PLAYER IS A MECHANOID**

“Quai des Grands-Augustins: all the major players in the Aramis affair are seated around a large oval table. The project heads from Matra, the RATP, the Region, the research institutes, and the government ministries have all been convoked by the clients of the study. Only the elected officials are missing.

‘In detective stories there is always a moment when all the suspects and their buddies gather in a big circle, quaking, to hear Inspector Columbo or Hercule Poirot name the perpetrator [...]’” (Latour, B., 1996, p.289)

We have traversed the assemblages of MMORPG play and players like detectives uncovering snippets of information from suspects, and using the framework of Actor Network Theory as our compass and key to piece them together.

Necessarily, as this compass and key have played such a pivotal role in this unpacking of play and players, we’ve also traversed Actor Network Theory itself; from the punctualized concept of the “object”, back to the moment of epiphany, when Latour himself “[...] At the end of the winter of 1972, on the road from Dijon to Gray, [...] was forced to stop [...]” (1987, p.164) and contemplate what would become the primordial aspects of Actor Network Theory, laying down the entelechy for “objects” to eventually be described.

It’s been a journey along simultaneous and multi-dimensional threads, and while a work of pure Actor Network Theory would leave it at that, happy in the knowledge that the landscape of MMORPG play has been wrought, mapped and explored; for the purposes of satisfying at least this author, there are a few moments to be recounted, like the grizzled officials post

mortem of the failed Aramis guided transport project that Latour once so lovingly spoke to above (Latour, B., p.289-301).

This final concluding chapter will outline the map of MMORPG play and players described previously including the brief overview of the current commercial viability of MMORPGs, the state of MMORPG studies and the assumptions or punctualizations this thesis has aimed to unpack.

It will then recount the previous four chapters in brief, summarising what was found, and a description of the new understanding. Having recounted the paths already traversed, this chapter will lay out one final path to be explored, where all of the previous traversals converge, to answer the titular question of this thesis: *how have we misunderstood MMORPG play?*

For too long pre-eminence has been placed upon the human actant when describing MMORPG play and the MMORPG player. To single out an actant to explain a wider assemblage is to see it wither and die, as the wider assemblage is subject to the trials of reality and all its effects; of opposing and intervening actants; substitutions of mobilized supports; and the punctualizations and calcifications of negotiated, then codified relations. This thesis argues opposingly: MMORPG play and the MMORPG player in particular, are not human, they are inseparably part of a larger tech-social construct. Yes they are not simply ‘cyborgian’ either, a term popularized by Haraway (1991) and used before. *They are mechanoidal.* Here is why.

## A BRIEF RECAP

First, we need to reaffirm what was previously described on how this pre-eminence on the human actant had come to be.

As was established at the beginning of this thesis, the genre of the MMORPG was, at one point, the darling of the video game industry. It had been a nearly 30 year journey to go from the first rudimentary MUD, 1978's *Zork*, (Anderson, T., Galley, St., 2004), to Blizzard's *World of Warcraft* launched in 2004. So commercially and critically successful was *World of Warcraft* that it generated billions in revenue, and continues to be the touchstone through which the mainstream viewed MMORPGs. Unsurprisingly it also led to a number of other high studios and publishers aping Blizzard's blue-print with high powered franchises nestled deeply within popular culture. Perhaps, not unreasonably, they made the logical assumption that creating the same technological artefact for fictional universes the wider population had grown to love and took ownership of, would lead to a similar cash cow on their hands.

But, as with all logical assumptions, in other words, punctualizations, little thought is given to how the actor-network being aped was first translated. Nobody had bothered to trace *World of Warcraft* back to its entelechial origins, where they would have discovered that the process of translation was a five year journey and its obligatory passage point, an MMORPG from an earlier era called *Everquest* (Sony Online Entertainment, 1999), rather than the players that formed the World of Warcraft community, and that were highly visible throughout popular culture (Koch, C., 2014).



This miscalculation would lead to a consistent series of catastrophic commercial failures first with the *Matrix Online* (Monolith Productions, 2005), then *Lord of the Rings Online* (Turbine, 2007), followed by *Warhammer Online: Age of Reckoning* (Mythic Entertainment, 2008), and *Age of Conan: Hyborian Adventures* (Funcom, 2008), before the greatest commercial failure in the history of game development: Bioware's \$250 million dollar *Star Wars: The Old Republic* (2011).

At around the same time, like all new fields of inquiry, MMORPG research rapidly expanded in a number of diverse tangents. Many of the most prominent of those researchers viewed MMORPGs as a new avenue for socializing and exploration, a new and expansive “third place” (Bainbridge, 2012; Boellstorff, 2008; Castronova, 2001; Nardi, 2010; Pearce, 2009; Taylor, 2006); a virtual, but very tangibly real economy (Dibbell, 2006; Castronova, 2005, 2007); or, a system akin to a Skinner Box with the potential to be highly addictive (Caplan, Williams, & Yee, 2009; Griffiths, King, & Demetrovics, 2014; Hide, 2006; Lee, Yu, & Lin, 2007; Lin & Tsai, 1999; Ng & Wiemer-Hastings, 2005; Wan & Chiou, 2006).

Throughout all this, the focus within the assemblage of MMORPG play continued to be the human actant – how they interacted with each other, and how they interacted with the virtual world: the non-human actants were at best, punctualized, at worst, not even acknowledged. And yet, these assumptions by both the makers of MMORPG worlds and those who study them has led to the commercial collapse of the genre and no clear path to the sustainability of its population.

Actor Network Theory was chosen as the methodology of choice for this thesis, firstly, because of its ontologically flat nature, its equal treatment of both human and non-human

actants, when unpacking assemblages. This is eminently suited to the study of MMORPGs, which are, if nothing else, constructs of both the technological or non-human, and human. Secondly, MMORPG studies is a relatively nascent area of inquiry. Because of this, as described earlier in this thesis, it's still relatively fluid. In its most elemental form Actor Network Theory is almost entirely unfiltered description, allowing the interpellation between text and reader to construct meaning, rather than having it shaped by the practitioner,

“[...] in situations where innovations proliferate, where group boundaries are uncertain, when the range of entities to be taken into account fluctuates, the sociology of the social is no longer able to trace actors' new associations. At this point, the last thing to do would be to limit in advance the shape, size, heterogeneity, and combination of associations. To the convenient shorthand of the social, one has to substitute the painful and costly longhand of its associations.” (Latour, B., 2005, p.11)

And so, the focus on human actants thus far has led to an erroneous understanding of MMORPG play and MMORPG players. Through a novel application of Actor Network Theory, and tracing the descriptions provided by MMORPG player participants, this thesis counteracts these assumptions to form a new understanding of MMORPG play and the players themselves.

This is what was found.

## FRIENDS NOT REQUIRED

Friends are seen as a ubiquitous requirement for the success of an MMORPG. This has been seen both commercially and academically.

MMORPG developers have, almost universally, created recruitment programs that rely on their existing player base's network of external friends, for example, both *World of Warcraft* and *Final Fantasy XIV*, the research site for this thesis, have Recruit-A-Friend programs. Incentives such as virtual currency, faster levelling or the prospect of obtaining a rare item are often dangled in front of players to incentivise them to influence their friends to join. The long running space MMORPG, EVE Online, has even made their Recruit-A-Friend program an intrinsic lever within the virtual economy, using it like a monetary faucet to adjust money supply and influence inflation.

Within academics friendship and the primacy of the human actant was put at the forefront early.

First, Turkle (1994) saw MUDs as a vehicle to expand social reach, and placed technological actants, as described earlier, "[...] directly in the service of the development of a greater capacity for friendship, the development of confidence for a greater capacity for intimacy." (p.163).

Then, in 1998, Bartle argued that MUDs clearly formed a society – that through the uniquely limited chat interface a shared network of meaning was developed, and through the safety of

that medium, which substituted for physical presence, players could, uninhibited, develop deep feelings of attachment towards virtual friends.

More recently, Jakobsson and Taylor (2003) referred to the *notion of sociality* as being central to the success of an MMORPG player base, citing the comments of one Brad McQuaid, one of the designers for *Everquest*,

“[...] people are compelled to group and even to form large guilds and alliances. All of this builds community, and it all keeps players coming back for more and more.”

(Aihoshi, R., 2002)

Not every theorist subscribed to the importance of friendship to the translation of the MMORPG player, however. Yee, Ducheneaut, Nickell and Moore concluded in 2006 that, despite there being what may ostensibly be considered upon first glance, social interaction within the MMORPG of *World of Warcraft*, upon deeper investigation, it was determined that player interactions were less *social* and more about accessing an audience to both perform feats in front of, to glean information from, or to idly chitchat with,

“Based on WoW’s success, this suggests alternative design strategies for online games (and online spaces more generally) where encouraging and supporting direct interactions might be less important than designing for the “spectator experience” and a sense of social presence.” (Yee, N., et. al., 2006, p.415)

This followed similar, though more hopeful, conclusions by Ducheneaut and Moore in 2004. Their investigation of social interaction within the MMORPG of *Star Wars Galaxies* revealed

a similarly low level of interactivity between players, that was dominated by short, transactional and instrumental moments. At the time they put it down to structural issues that future designers could control. But, as the later 2006 study demonstrated, this was more a misplaced emphasis on the human actant, and there is a need to study the technological actants that effected and informed these interactions in more detail in a similar vein to T.L. Taylor's approach to studying how damage meters (used to track how much damage players have dealt to enemies) effected play in *The Assemblage of Play* (2009).

Although the approach differed, through tracing the descriptions of participants within this study, it was similarly found that friendships weren't necessarily critical, nor the obligatory passage point, that the translation of an MMORPG player needed to pass through.

Despite friendship occurring in at least eight of the fifteen descriptions provided by participants, many of these connections were found to be short-lived, unstable and often substituted,

“I got into it right after all my art buddies did it, because that's just something we're doing. But then they fell out and they went back to whatever they were doing, [...] so I got into the game, because it was just something that I thought I could get good at. ”  
(Interview with Helion, 2016)

In Helion's recount it can be clearly seen that the translation of her player assemblage, while it briefly involved “art buddies”, they were quickly substituted for the mechanics of the MMORPG itself.

For others, their player assemblages were found to be more densely connected to fantastical, technological actants, rather than the human. For Cole this was, partly, his avatar, and other avatars within the MMORPG,

“All of the characters feel like they have a personality. Like, if you look at a character, they can do a ton of different emotes, they have different poses, races look totally different from each other.” (Interview with Cole, 2016)

And for many of the remaining participants within the study, friends were actually an interceding actant, introducing failure into the translation of their own player assemblages. The fragility of an MMORPG player assemblage where the obligatory passage point is friendship is perhaps most bluntly illustrated by the descriptions of one participant, Admike,

“Once most of my friends have left the game, I too will leave the game.” (Interview with Admike, 2016)

This is only a brief recount of what has already been discussed, but the point being made is that the repeatedly reinforced network of perspectives that has been reflected in the works and actions of both academic and commercial actants – the assumption that human-centered friendships are core to, or the obligatory passage point to the successful translation of both MMORPG play and MMORPG player assemblages, is flawed. They are, in fact, too unsuitable, too brittle, and too easy to intercede and substitute to sustain the MMORPG play and player assemblage of another (for example, Admike’s above) leading to inevitable translation failure.

These perspectives also fail to take into account the innumerable non-human, technological actants that have an equal part within this process of translation, from massive fibre optic networks, to the computer being used, to the chatbox that always seems to be in the bottom left corner, to obscure international agreements allowing the trade of digital information around the world. The disintegration of any one of these actants, not to mention the many actants described by the participants of this study, effects the translation of MMORPG play and the player assemblage and demonstrates the observation that friends should not be a privileged actant within the MMORPG player assemblage.

## THE MECHANOID FRONTIER

So, the question became, if the human should not be privileged in the translation of the MMORPG player assemblage, what should be?

The previous description might assume that the technological should hold precedence. It is these descriptions where generalized symmetry must be consciously employed, enforcing the flat ontology where neither the human nor non-human are given primacy but are, in fact seen as equal and inseparable in the translation. It is also the reason for the purposeful and carefully considered use of the term Mechanoid – where the human is encased within a network of technological actants and relations, and where both are intrinsic to it's existence. This will be explored in greater detail later within this chapter.

However, the purpose of involving the concept of the Mechanoid brings us to the next observation or description to emerge from tracing the entelechial origins of the MMORPG.

Within contemporary MMORPG studies and commercial MMORPG development, preeminence has been placed on the human actant in an almost self re-inforcing feedback loop. Take, for example, the previously referenced work of Ducheneaut and Moore (2004). They did not simply describe the lack of sociability in *Star Wars Galaxies* (Daybreak Game Company, 2003) but also proposed mobilizing additional technological actants in an effort to effect interactions in such a way as to make them appear more *human*. Similarly, the makers of today's MMORPGs have used technological actants in an attempt to entice new player by almost short-cutting or punctualizing the actual translation of MMORPG play itself. They do this by bifurcating it into two stages: trivialising the play before an avatar attains maximum level where much of the activities are done without the assistance of other avatars through providing perks such as the ability to skip 30 levels (*World of Warcraft*, Blizzard Entertainment, 2004); and focusing on the *endgame* or *elder content* – content which is designed to be completed after an avatar attains maximum level, often difficult and highly complex to complete, almost always requiring that multiple avatars and players be involved.

As was described earlier, the translation of MMORPGs was itself not a short process. It involved generations of actants and sprawling networks of relations, from Commedia dell'arte to *Dungeons & Dragons* (Gygax, G., 1974); from *PDP-10s* and *Zork* (Anderson, T., et. al., 1977) to the breakthrough *Everquest* (Sony Entertainment Online, 1999). None of this could have been sidestepped. The countless negotiations, mobilization of allies and actants, and every iteration of that was and is integral to the translation of the current generation of MMORPGs, represented by the seminal *World of Warcraft* (Blizzard Entertainment, 2004). Without the advent of three dimensional gaming, popularized by the *Nintendo 64* and



*Playstation* consoles, and Blizzard's development teams devotion to *Everquest* it may have never happened,

“The team was engaging with *Everquest* as fans, but also as game designers, wondering where the experience could be tweaked and improved [...]” (Williams, M., 2018, p.4).

This is not unlike the translation of MMORPG play and the MMORPG player. The coincidences in early in the translation of MMORPG play can neither be predicted, nor modelled or skipped. These are the moments of repeated translation. The human and technological actants are given the time to negotiate the player assemblage, reinforced and hardened through resisting interceding actants and substituting weak allies by mobilizing stronger ones. Like Latour's Aramis (1992), attempts to hurry this process by our own, very human impatience, leads to undesirable consequences. In the case of Aramis, it was an emergence of an assemblage doomed to probable failure, and the label of being a construct “before it's time” (because that's really what has happened); not dissimilar to a brittle untested player assemblage prone to translation error.

And so, to return to the construct of the mechanoid briefly shaded earlier in this chapter, to intervene, as developers have done, and to trivialise the technological, while prioritising human interaction in the process of translating MMORPG play and the MMORPG player, is like wrenching the human out of the mechanoid. Separated, both machine and human are frail, brittle constructs susceptible to the effects of interceding actants. As in all mechanoids, the human and non-human are required for the entity's function.

This brings us to the next observation in our retracing of this text: those wrinkles caused by the coincidences referred to earlier are the very moments that make each player assemblage unique.

## HETEROGENEOUS ENGINEERING

There was a time when academia saw player assemblages in a similarly heterogeneous manner. When MMORPGs were but a twinkle in Richard Garriot's eye, and MUDs were reaching their zenith, Sherry Turkle (1994) viewed its players with a certain intense fascination. Her "newness", similar to the state of naivety consciously employed by Actor Network practitioners, allowed her to describe the very unique interpellation between the human and the technological in vivid detail. In one recount, she noted how indelibly a MUD could effect the growth of a person,

“At the end of the school year, however, Robert's MUD experience was essentially over. He had gotten his own apartment; he had a job as a salesman; he had formed a rock band with a few friends. Looking back on the experience he thought that MUDDing had served its purpose [...]” (Turkle, S., 1994, p.163)

This type of open-minded discovery into the translation of MMORPG player assemblages did not last long, however. Just two years later, and without much more being added to the academic discourse, Richard Bartle (1996), ex-administrator of *MUD2*, proposed a framework for categorising players with four player typologies. Emerging out of a long

running debate between the players of his own MUD, these four typologies were: killers, achievers, socializers and explorers.

Bartle explicitly stated that he had not tested these typologies, nor did he ever intend to (Bartle, R., 1996, p.25). And yet, Bartle asserted that catering to the desires of human actants using this framework as a guide, was the key, or obligatory passage point through which the translation of a MUD could succeed. Apart from being grossly reductive, Bartle failed to acknowledge the equally important role of the technological actant in defining the very typologies he described, in other words, he had missed the elements of heterogeneous engineering in action when describing his framework. Killers and socializers need other avatars, virtual weapons and chat boxes (to name a few) to successfully translate; explorers and achievers need a digital landscape, the ability to traverse it, and the virtual tools to investigate it to similarly translate these typologies. It was crude and flawed, but, in the absence of another framework, Bartle's player typologies has and continues to have a tremendous effect on contemporary MMORPG developers (Hamari, J., Tuunanen, J., 2014, p.37).

It would take 10 years for another academic to iterate on Bartle's model. Nick Yee was critical of Bartle's player typologies due to the fact that there was no instrument with which to measure a player or players against them, meaning that they could only ever be theoretical in nature and could, in fact, be simply creating player types, as opposed to measuring whether they held true (Yee, N., 2006, p.2). His attempt to answer this by surveying 3200 participants and attempting to attribute a complex combination of 13 components and sub-components, while largely refuting Bartle's assumptions, also failed to establish a universal framework of player classification of his own. Despite the vastness of the study, Yee's model could not

account for 40% of the responses, and through the tracing of descriptions of MMORPG play and viewing them through the lens of Actor Network Theory there is a good reason why.

The translation of an MMORPG player assemblage, along with the human actant, involves thousands, perhaps even millions, of equally important non-human and technological actants. How these interpellate with each other, negotiate alliances, and repel interceding effects, can be an infinitely complex question to answer. However, what can be understood is that, due to the complexity and immensity of every process to translate the MMORPG player, each successfully translated assemblage is thoroughly unique. This *is* heterogeneous engineering in action, and the uniqueness of each heterogeneously engineered translation of MMORPG play was seen in the descriptions of this study's participants, for example,

“[...] I really enjoyed the puzzle aspect of the crafting system in *XIV* and how you're kind of juggling a lot of moving parts in trying to see how you can get the highest quality item and beyond that there's the puzzle of how to make money the best and what to put on the market board and different things, market board's like that, and I really just enjoyed that and it allowed me to continue to participate in the game even while my Internet wasn't always so great.” (Interview with Emhati, 2017)

Here, understanding the concept of heterogeneous engineering and unpacking the moments of translation can trace the visible near term and allow us to see the network of relations surrounding the MMORPG player. But these translations do not simply emerge out of nowhere and the potentialities which give rise to these moments of translation aren't time bound. They can extend back years or even decades. The translation of MMORPG play is

just one moment on a continuum of events where each translation effects the next. This brings us to the last, most recent observation retracing the descriptions within this thesis, and it is one that, in 1972 (Latour, B., 1988 p.162), seeded the very translation of Actor Network Theory itself: entelechies.

## ENTELECHEIA AND IRREDUCTIONS

As previously discussed, the concept of the entelechy is not yet a settled one. It's been debated throughout academia since its creation by Aristotle and it's contemplation by St. Thomas Aquinas. However, this debate, while interesting, is not a path that can be adequately traced at the end of this thesis. Rather, it is Latour's use of it that is of interest here.

We are concerned with, of course, Latour's *Les microbes: guerre et paix suivi de irreductions* (1984), translated by Law and Sheridan in 1988 as *The Pasteurization of France*, and in particular, the last section, which is concerned with entelecheia and irreductions, the protozoic form of contemporary Actor Network Theory.

Latour uses the term of entelechy to describe the potentiality to effect or act upon other actants – an interpretation of Descartes use of entelechy as an irreducible force. To elaborate briefly, we previously laid out Latour's fundamental principles of irreducibility: firstly, that no two objects were the same (or they would not be separate); secondly, nothing is beyond relation, and everything can be negotiated; thirdly, nothing can come from an island, all things must be translated; and finally, and most paradoxically, once these principles are acknowledged, and are able to seed discourse, they are to be discarded.

In summary, every human and non-human, the social and technological, have the potential to effect or act upon others, and none are so powerless as to be able to be reduced to another. Latour viewed the world as entirely a result of the negotiated effects, within which humans and non-humans are connected in equally important ways. Each effect creates time for the next, and so, like tendrils within time, as long as it has not been lost to time, as all things are eventually, these effects can be traced back years, or even decades.

So, what does this have to do with the assemblage of the MMORPG player?

While tracing the descriptions of MMORPG play with the participants of this thesis, it was uncovered that the player assemblages being described, were a construct years, and sometimes decades, in the making. This was a surprising observation, and to this point within both the study of MMORPGs and their commercial development, as far as could be determined at the time of writing, this was not an observation that had ever previously made, and may never have been uncovered if not for the application of Actor Network Theory.

For many of the participants, previous entries within the franchise of the research site, Final Fantasy, effected the entelechy which allowed the MMORPG player to translate,

“[...] I've been a fan of all Final Fantasy series, I've played the previous ones from 8 [...]” (Interview with Dryst, 2017)

“[...] just being a fan of the series, you know, I see it posted up [...]” (Interview with Rahsei, 2017)

For some, it was non-human actants that were more obscure, surprising or distantly connected that created the potential for the MMORPG player assemblage to occur in participants,

“My dad bought us a PlayStation, and we ended up getting that game after seeing it in Game Informer [...] me and my brother, just started playing and then we just followed up by finding out about other Final Fantasy titles. And that was pretty much it.” (Interview with Dafina, 2017)

“[...] my current work has me involved with certain aspects of Square Enix and some of that does involve Final Fantasy XIV so when I had started up my job the things they set me up with was a Square Enix account and then they got me a copy of A Realm Reborn to get myself familiarized with the game [...]” (Interview with Cheezu, 2017).

Previous accounts of MMORPG play, and attempts to study it have typically focused on the moments occurring between starting and ending play itself, in part, a consequence of the influence that is wielded by Huizinga’s concept of the Magic Circle in games studies (Huizinga, J., 1938). This was also the original focus of this thesis. However, what has been found through the descriptions of its participants, and the tracing of those descriptions, is that MMORPG play starts forming well before a copy of the game is bought, and that these moments leading to the translation of it can stretch back years. If we couch it in the same conceptualization as Huizinga, it is as if play is not a two dimensional circle where there is a two dimensional plane of possibilities, but ultimately, there is an edge where it all “ends”,

rather it is a multidimensional vortex, or vortices that are effected from elsewhere in time, like tendrils they can be months long, years long, or even, in some cases, decades long.

This misunderstanding leads us to the final element of this thesis, and the very reason for it to exist (or be translated).

## HOW CAN WE RECONCEPTUALIZE MMORPG PLAY?

This thesis has already explored four of the ways that we, as makers and explorers of MMORPGs have misunderstood both the assemblage of play and the player. Firstly, that friendships, so often leveraged as an obligatory passage point, are actually quite unsuitable for that role, resulting in brittle assemblages, ready substitution and, ultimately, translation failure. Secondly, and elaborating on the previous descriptions, the importance of non-human technological actants to the successful translation of MMORPG play and the player assemblage has also been misunderstood and consistently underappreciated. Thirdly, the assumption that all instances of MMORPG play can be typecast into a limited number of tightly defined typologies, the two most commonly accepted models created by Bartle (1996) and Yee (2006), when, in fact, it was found that player assemblages were significantly heterogenous, translating into a myriad of weird and wonderful playstyles often with little to do with the prime motivating factors established by Bartle and Yee of virtual combat, exploration, socialization and achievement, for example, in the previously mentioned case of Raven, who's assemblage of MMORPG play was translated through the algorithms that governed the virtual world's physics. Fourth and finally, that MMORPG play and the translation of the MMORPG player assemblage starts when logging into the virtual, and ends



when logging out. The further the descriptions of this study's participants were traced, the more it could be seen that this was, in fact, a very limiting way to view MMORPG play. For many of the participants, their journey to translating their assemblage of MMORPG play began years, or even decades into the past.

Throughout this thesis there has been a common denominator to these misunderstandings. It cannot be said that this is some essentialist root cause, but there is the pervasive and disproportionate focus on the human actant, whether that has been the voice of the human player, a developer's own motivations, or the suggestions from theorists, that has effected these misunderstandings. On the whole both creators and scholars of MMORPGs are singularly focused on the human. As alluded to earlier in this thesis, to singularly focus on *any* actant, human or otherwise, is to wrench it from the folds of a complex, multidimensional, holistic assemblage. While much easier to conceive in the light of day, it is a frail and brittle representation of the much larger whole. Isolated and naked, it is much more susceptible to interceding actants and so withers and dies over time.

This is reflected in the commercial stagnation and decline of the MMORPG genre. As we've seen developers have attempted to arrest this decline by furiously creating end-game or elder content in response to the most vociferous and densely connected within their player bases and attempting to leverage the social networks of players through referral programs. For the academics that study these MMORPGs, few have responded to this decline.

So, if none of the actions of developers or academics have effected a reverse in the decline of MMORPGs, and there are continued misunderstandings due to the pre-eminence placed upon

the human actant as a player, what is a more suitable way to conceive the MMORPG player assemblage?

This is where we introduce the Mechanoid, a carefully conceived concept and understanding the MMORPG player assemblage as an irreducible and inseparable technological and human construct.

The term *cyborg*, while it may seem apt at first glance, is problematic in at least two ways.

Within academic discourse, it, of course, is occupied most prominently by the work of Donna Haraway, as briefly alluded to earlier in this thesis. Haraway similarly rejects essentialist explanations, and also observes the collision of the natural and mechanical. However, her cyborg theory mostly stops at writing, used as a technology to proffer increasingly artificial linguistic twists that serves to politically advance wider societal phallogocentrism,

“Writing is pre-eminently the technology of cyborgs, etched surfaces of the late twentieth century. Cyborg politics is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly, the central dogma of phallogocentrism.” (Haraway, D., 1991, p. 183)

Within the general population, the term *cyborg* also illicit connotations of augmented human ability and humanity. It is even defined as such within the dictionary,

“cyborg (NOUN) - A fictional or hypothetical person whose physical abilities are extended beyond normal human limitations by mechanical elements built into the body.” (*Oxford English Dictionary*, 2019)

The key contention here with the use of the term cyborg, is that, within this context, the technological actant is still only viewed as a tool or *object* to transmit human intention, whether that is in support of a human ability, such as viewing the bionic ear as an object to human hearing, or for transmitting human political communication, such as Haraway’s description of writing as a tool used by men to control socialist-feminist tendencies. Cyborgian existence is simply an “extension of man”. As such, these explanations underserve the intrinsic role that technological and non-human actants play in the translation of both socio-political messaging and artificial hearing.

Mechanoid theory is squarely aimed and remedying this. It does not seek to declare any position, neither in socio-political nor bio-political discourse. It maintains the ontological flatness of Actor Network Theory and it only seeks to describe and equally consider all actants, both human and technological, intertwined within techno-human assemblages such as the MMORPG player. It is, therefore, a theory that is irreducibly agnostic.

A mechanoid would not be mechanoid without the human connected to and within in, it would simply be an inert mass of cables, metal plates, actuators, logic boards and software instructions. But, at the same time, it would not be a mechanoid without those cables, plates, actuators, logic boards, and software instructions either. Both are intrinsic to the Mechanoid. None can be isolated and wrenched out without eliciting translative failure.

The same can be said when viewing the MMORPG player assemblage. While it can be, and has been correctly surmised previously that human actants play an important role in the translation of the player assemblage, it is clear throughout the participant descriptions within this thesis, that they are far from the only ones, and are often not even the most densely connected actants,

An MMORPG player assemblage cannot be successfully translated without the effects of the human actant, but neither can it be successfully translated without the equally important non-human and technological actants, such as the screen, the keyboard, the transistors on the motherboard, the legislation governing the data transferred between countries, or, as described previously by one participant, Emhati, a slow Internet connection. Emhati's player assemblage, and, for that matter, every MMORPG player assemblage, is an irreducibly heterogeneous techno-social construct. As unique as the translation of play is, it is also equally both human and technological. The MMORPG player assemblage is *thoroughly mechanoidal*.

To see the MMORPG player in such a way requires a reorientation in the way both academics *and* developers view MMORPGs, and what an MMORPG player is. It is then hoped that this thesis and the Mechanoid theory will provoke different, unconventional and innovative ways to unpack the status quo and question previously ignored actants. Instead of viewing a translation of MMORPG play that doesn't smoothly follow the expected path of progression laid out by developers as an aberration, seeing it for what it is: a beautiful instance of heterogeneous engineering in action, where, perhaps, the algorithms within the virtual environment are effecting the player as much as the player is effecting the virtual environment (in the case of the participant, Raven); instead of viewing the stagnation and

decline of the MMORPG as simply a function of not being able to provide what the human player wants, seeing technological actants as being an equal effector, for example, the referral mechanic allowing avatars to skip levels, as explored previously, could be responsible for effecting the translation of frail, brittle, and short lived player assemblages.

And though it is not within the scope of this thesis, the theory of the Mechanoid, is not simply restricted to MMORPG player assemblage. It would not take a particularly large logical leap to envision it being applied to almost any of the emerging techno-human assemblages that are captivating the public consciousness. In many ways, modern technology has become our obligatory passage points to the world, the representative actant of the modern human assemblage, with human and non-human actants mobilized in support of it.

For example, an account on the popular visual social media platform, Instagram. One may assume that it is the representation of an identity driven by the motivations of a human actant. However, *reducing* it to the identity of the human actant, that the persons identity and Instagram representations are one and the same, ignores the reality that the platform, it's filters, and other pictures, among many non-human, technological actants, are part of the process of translation that has effected this Instagram identity, as much as the human actant is. And while the human actant is densely connected to this assemblage, they are not one and the same. The Instagram representation is a thoroughly *mechanoidal* one.

This is a question perhaps for another intrepid trailsniffer to unpack and trace.

And so, as the human experience increasingly becomes defined by technological actants, not only through the MMORPG player assemblage, but also through emerging technological

actants such as self driving cars, connected clothing, identity defining smartphones and the offloading of *thought* to an increasingly powerful, amorphous “cloud”, while we can answer the question for one of these in *how we can reconceptualize MMORPG play*, another question for a future ANT journey arises first from this, *have we also misunderstood the player itself?*

**EPILOGUE**

*And so, I have made the journey and come back to tell a story of how I came to be an MMORPG player and will never be the same.*

*I save the thesis into the cloud and sync its bibliography with a server from somewhere in Europe. As I prepare to close the laptop, my fingers worn smooth from the incessant typing. The iPhone next to it starts to shriek, its screen reads,*

*“6:00PM - Stop?”*

*As if sarcastically suggesting I pack up and go home.*

*I look back up to my screen and I realise I don't see anything beyond it, what is there to see? At work I am defined by these six screens, two oversized headphones, an audio mixer, and the two laptops sitting upon two desks. When someone asks for me, they point to the brightly neon lit corner. Technology speaks for me.*

*Have I gone native? What is native? Perhaps native is existing within the mechanoidal world we live in, our persons stitched together from smartphones, social media profiles, our watches, our cars, our offices, our clothes. Technology makes us. Identity is spliced and stored amongst millions of bytes and bits of data that move and pulsate within an incomprehensibly expansive society of servers, computers and routers. It was never mine. I exist at the whims of temperamental, ever shrinking, central processing units, memory banks and fibre optic cables.*

*Is this going native? Or is this simply existence? That can only be speculated by those actants scrambling towards the periphery of our assemblage, yet still looking inward, trying to desperately remain detached. But, like you, the reader, they are as inexorably connected and forever effected as you and I.*

*For me, it is time to venture to back into the fold. While you have just begun your journey, I am melding back into the virtual dreams of past. That icon on the taskbar. It's golden "W" surrounded by a similarly golden ring, glows at me. The Azeroth I once knew over a decade and half ago, again, irresistibly calls, and my avatar and I heed. Like the Jaegers of Guillermo del Toro's *Pacific Rim* (2013), I settle into my seat, and get ready to drift with my avatar. Together we wade back into battle.*

*We are Edana, a mechanoid assemblage with the potential to shape the rest of both our existences, and we'll keep a seat warm in the Pig and Whistle for you.*





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