

'KILLING THE NOOB'

A thesis on Meritocracy and what it has to do with Massive Multiplayer Online Role Playing Games

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Abstract

Massively Multiplayer Online Role Playing Games (MMORPGs) have now been around for over three decades, however, only in the last decade have they exploded in popularity. They now occupy a prominent position within the public sphere, cropping up in art, music, media, literature, and, in this case, academia. There are now at least as many MMORPG accounts as there are people living in Australia, and hundreds of millions of personal hours spent online within the virtual worlds of these MMORPGs per week. The creation of this thesis has been motivated by the fact that the fate of these worlds has come to *mean a great deal to a large number of people*. So then, what problems may this thesis be illuminating? This thesis argues that the cause for a recent sudden lack of growth in MMORPG subscriptions is a systemic ideological belief that mirrors the real world, though more intensely – meritocracy. This thesis explores the historical development of the semantics of meritocracy, as well as the origin of how and why MMORPGs have come to take their current form, in order to provide the reader adequate context for the theoretical exposition of the problems evident within the foundations of an MMORPG society. Finally a case study of Singapore, one of the last remaining meritocratic societies in the developed world, is used to illustrate the relevance of the development of meritocratic societies within virtual worlds, to the potential for such developments in the real world. This thesis argues that, while meritocracy is an unsustainable long term social structure, it currently provides to impetus for sustained competitive play within MMORPGs, and that further examination is required. Finally it argues that the relevance to the real world could see sociological experimentation within MMORPGs as a driving force for innovation in the future.

Keywords

MMORPGs, meritocracy, Singapore, social structure, virtual inequality, Fury.

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Table of Contents

Introduction	4
1. Existing Literature	8
1.1. Meritocracy – 8	
1.2. MMORPGs – 13	
1.2.1. Sociology – 14	
1.2.2. Governance & Ownership – 16	
1.2.3. Economics – 18	
1.2.4. Pedagogy – 18	
2. The MMORPG (mem-mor-peg): a primer	19
2.1. Before MUD (BM) – 20	
2.2. How do you <i>play</i> it? – 21	
2.3. The origin of Meritocratic mechanics – 26	
2.4. Legitimizing the social order – 28	
3. The Impossible MMORPG	30
3.1. Providing equal opportunity or driving inequality? – 31	
3.2. Hierarchy in an MMORPG – 33	
3.3. Meritocratic distribution of inequality – 34	
3.4. Inequality approaching ∞ , introducing the Noob – 36	
3.5. Damage meters and egos – 39	
3.6. The death of MMORPGs, developer life support – 42	
3.7. Hath no FURY – 44	
4. Case Study of Singapore	50
4.1. The dilemma of a small country – 51	
4.2. The making of Lee Kuan Yew's machine – 52	
4.3. Singapore today, for richer and poorer – 54	
4.4. Comparisons between the virtual and real – 60	
Conclusion	65
Glossary	68
Bibliography	78

"I am Valkorn, Defender of the Alliance. I have braved the Fargo Deep Mine, and defeated the Blood Fish at Jarod's Landing."

"Hm... Looks like that guy just killed you."

"What? Why? Why?!"

- Randy Marsh and his boss, Nelson
(South Park (Episode 147) – "Make Love, not Warcraft", 2006)

Introduction

Edward Castronova once stated that one does not study the labour market because work was holy and ethical; one did it because the conditions of work meant a great deal to a large number of ordinary people¹. Up to half a billion man hours are spent^{2 3 10} fishing, gathering, farming, exploring, fighting and socializing (among many activities users can enjoy, virtually) in hyper-vivid, digitally rendered realities each week around the world. Their economies are larger than two thirds of the world's nations without a single physical form of currency exchanged within them^{1 53}. It is clear that Massively Multiplayer Online Role Playing Games (or MMORPGs) have become more than just a passing fad teenage white males engage in^{7 9}. They have come to mean a *great deal to a large number of ordinary people*.

Hailed as an avenue of identity exploration⁶; a new third place to be enjoyed without venturing out of the comforts of your home^{13 14}; and the evolution of virtual socialization, it has also, just as furiously, been derided as puerile and dangerously addictive^{17 18}; a method of real world social isolation^{18 19 20 21}; and responsible for the propagation of a massive black

market of virtual sweat shops undermining the intellectual property of MMORPG developers^{4 5}.

Research has been conducted in vastly different fields of study; from the psychological effects of an MMORPG on its user^{9 16} to simulated epidemics⁸; from the ramifications of currency flooding virtual economies derived from unsavoury sources¹ to the legal experimentation of legislation in a virtual environment⁷.

However, in the midst of this upwelling of interest in the genre of MMORPG's very few people have asked a question that millions of ex-inhabitants around the world have subconsciously answered. In a world where it is the emergent social interactions, rather than the graphics, sound or even mechanics, that keep users immersed⁷³, *why are people leaving?*

Like the increasingly omnipresent social networks of Facebook and MySpace, inhabitants can commit *virtual suicide* for a variety of reasons, for example, an unfortunate spat with friends, which are as rapidly gained, as they are lost¹⁵. However, unlike social networks, this thesis will argue that MMORPG's have a finite life span¹⁰, a built-in soft used-by-date caused by the implementation of developer created mechanics. These mechanics promote a society within these worlds that is purely (as practically possible) based on the concept of merit, providing inhabitants a psychological rationale to create an environment of proactive, extreme virtual social stratification^{11 12} (as does any aspiration towards a theoretical social structure does²²).

Recent data on MMORPG population growth has indicated that, while there has been considerable growth in the uptake of MMORPGs overall, which can be attributed to the massive growth in the number of titles within the genre, if individual franchises are investigated, they show commonality in growth patterns indicative of a meritocracy - a massive spurt in subscribers at its inception followed by consistent decline¹⁵⁵.

The concept of “*Ability plus Effort determines your resultant station in life*²⁵” has been a generally accepted mantra for western society’s masses since the American Revolution, where it is still jubilantly declared as both a fundamental tenet of the American way of life¹¹ and is also referred to as the blueprint for Britain’s future³⁰. It has worked well in the limited multiplayer mechanics of, essentially, single player oriented games, in such forms as highest score tables and ranking/scoring systems³¹.

However, this thesis will argue that the creation of mechanics to enforce such a viciously arbitrary social structure in a vastly different multiplayer environment, such as that of an MMORPG, results in long term systemic instability, growing social unrest and “avatar suicides”. This deserve thorough discussion - Is it warranted? For few people, would choose to participate in a world where they would be forced to eke out a life in poverty, ostracized on the fringe of society.

This thesis aims to explore the issue of the existence of meritocracies in online worlds, with MMORPG’s being of main concern. It aims to provide the reader context, by reviewing current important literature surrounding the study of MMORPGs and meritocracy. Through a narrative of the evolution and permutations of meritocracy and multi person play, arriving at the current iteration of MMORPGs, and an historical exposition of the semantics of the term *meritocracy* – where its contemporaneous definition has come to lie, this thesis aims to give the reader a comprehensive and constructed understanding of how meritocracy and MMORPG’s have converged. Finally, a case study on one of the last remaining meritocratic societies, Singapore, will illustrate MMORPGs relevance to real world social structures, and provide impetus for further study into the development of meritocracy in both real and virtual contexts.

Through the above outlined exposition this thesis will argue that meritocracy is an integral part of both the real and virtual; that it is both essential to the function of MMORPG societies and the cause of their demise; and that the development of meritocracies in virtual worlds mirrors the potential consequences of their growing prevalence in the real world, and that this deserves both greater attention to meritocracies and the testing of them within virtual worlds.

To begin with, there are several things to note. Firstly, that this is a theoretical examination of the issue, which is the initial step towards engaging with the subject empirically. Secondly, it is important to note that active population data pertaining to MMORPGs has yet to be gathered and that absolute subscriber numbers are only an illustration of a franchise's active population. Thirdly, due to constraints, the exploration of meritocracy and MMORPGs within a ludic framework lies beyond the scope of this thesis; and, lastly, while the evolution of the semantics of the term meritocracy is explored within this thesis, the definition that will be utilized, is in reference to the ideology in its original form; that meritocracy is based on the success and reward derived from "merit", as was first postulated by Plato in his work on plutocracies.

Chapter

1

Existing Literature

While there has been an upwelling of interest on such subjects as players perception of identity embodied within online worlds and the relationships fostered there, Game Culture is still a nascent field of research and, as such, little has been published that concerns the structure of society within MMORPG's³³.

In order to explore the nature of online social structure this thesis will incorporate two divergent fields of more established research. This will include the theory of meritocracy, especially the subject of psychological legitimization of deserved inequality, and the structural characteristics of MMORPG's (post-Ultima Online, released in 1997) that encourage these meritocratic power structures.

1.1 Meritocracy

The term *meritocracy*, itself, was not invented until the middle of the 20th Century, when a disgruntled British ex-Labour politician penned a widely misinterpreted satire.

Unable to sway the British Labour party to depart from their election manifesto, *Let us face the future: A declaration of Labour policy for the consideration of the Nation*, which was partially responsible for their 1947 landslide election victory²⁴, Michael Young quit politics and went on to publish *The Rise of the Meritocracy* in 1958²³. It was a fictitious (so as to not elicit scorn from his political connections) historical discourse from the

future on the systematic adoption of a meritocratic social structure in Britain up to the year 2033.

In it, the *real* Michael Young (as opposed to the fictitious character of Michael Young described within the book, who, naively, approved the changes) was able to elaborate on his fears of the breakdown of family and community ties, the deterioration of the working class and equal social activism, and the creation of a new exalted elite class, without means to reproach them. *Most importantly*, he saw education and the *possible* ramifications of implanting a system of intelligence grading as the root of creating a meritocracy.

The fact that it had the appearance and convolution of a thesis (complete with fictitious citations), led to it not only being turned down by several publishing houses, but, it also provided a framework for British governmental policy for the next 50 years after its publication, much to the dismay of Michael Young²⁵.

Despite its influence, the complexity within *The Rise of Meritocracy* often led to its misreading by many. This propagated a widespread disagreement as to the meanings of its themes, most visibly among the political elite²⁵, and remained a “quaint” field of research in academia, which could be attributed to the popularity of egalitarianism during the 1950s and 60s³⁶. Egalitarian, Brian Jackson, during this period, optimistically stated, “*Our society is one of opportunity and possibly plenty. We reduce its potentiality by an educational sieve designed for a society of scarcity*”³⁷.

It was not until 1973 that meritocracy was lifted back into the academic consciousness when the late Richard Herrnstein, a psychologist from Harvard, published a controversial book *IQ in the meritocracy*⁴¹. The idea was seeded by eugenics sociologist, Bruce K. Eckland in 1967, when he wrote in the *Atlantic Monthly*, “...it would appear that the observed

variability in performance has become increasingly dependent upon individual differences in the mental capacities that unavoidably handicap the slow learners and, just as unavoidably, favour the really fast ones...⁴³", and it followed Christopher Jencks's influential publication, *Inequality* (1972)⁴⁰, which discussed the perceived simultaneous failure to equalise educational outcomes between the rich and poor in both the US and Britain after lavish government outlays during the preceding two decades on providing schools for those of more modest incomes and diversifying classroom curricula.

Herrnstein saw a need to better determine the needs of the individual and satisfy them using the controversial construct of g-Factor, or General Intelligence Factor, testing. The g-factor was first theorised in 1923 by psychologist Charles Spearman, as a way to accurately determine an individual's mental capacity⁴⁶. However, it gained greater notoriety through UC Berkeley (later Harvard) psychologist Arthur Jensen⁴⁴, when he recommended it as a way for teachers to tailor pedagogical processes to suit each individual student. Eysenck (1996) and Brand (1996), who famously had his book, *the g Factor: General Intelligence and Its implications*, depublished due to conflicting "deep ethical beliefs" with the publisher, are also notable proponents of g-factor testing.

In his book, Herrnstein focused on the individuality of ability. He speculated that the influence of genetics on our intellect was a greater determinate for an individual's income, employment, crime and overall socioeconomic status, than was previously thought. The book discussed the problems of the intellectually challenged interpreting the growing complexity of the information society; of accessing the growing brain economy and shrinking brawn economy; and the moral ambiguity between democracy and capitalist/consumerist influences^{41 42}.

These views would later carry onto his even more explosively controversial book *The Bell Curve: Intelligence and Class Structure in American Life* (first published in 1994 with political scientist Charles Murray, already notable for his disdain of welfare states), which implied inherent differences in mental capacities between African Americans and Caucasian Americans. Within the publication, it stated, “*America equalises the circumstances of people’s lives, the remaining differences in intelligence are increasingly determined by differences in genes.*”⁴²

Despite not being the first to advance the idea (Jensen had already clearly stated born differences between races in mental capacity in his work, *Genetic and Behaviour Effects of Non-random Mating*⁴⁵), he was martyred for his lack of empathy towards the environmental factors that contributed to one’s intellectual disadvantage, largely dismissing the ethical and moral dilemmas associated with straying into the realm of eugenics. In some publications his work was regarded as “scientific racism”^{38 39}.

It was this controversy over methods of establishing meritocracy that led to the study of the ethical and moral effects of meritocracy stagnating for almost two decades, as academics fought over the legitimacy of Herrnstein’s work³⁹. This culminated in 1994-1995 with the publication of Linda Gottfredson’s article, *Mainstream Science on Intelligence*, in which fifty-two academic signatories declared their support for his work⁴⁷, and *The Bell Curve Debate*, edited by Jacoby and Glauberman, contained eighty-one papers responding to Herrnstein’s work³⁹, including papers written by Stephen J. Gould and Howard Gardner. At the end this heated debate, while there still was not a definitive interpretation as to how a meritocracy should occur³⁵; there ended up being two well-defined groups, which reflected the swinging political upheaval that occurred between the late 60s and early 90s.

Egalitarians such as Jackson³⁷, Jencks⁴⁰, and, later, Gould³⁹ and McNamee & Miller Jr.¹¹, argued that a true meritocracy necessitated equality of opportunity; that, for individuals to truly actualise their potential for merit, all would need to start from a level playing field. They advocated more stringent progressive taxation and educational legislation to allow for (or force) more socioeconomic diversity in schools^{11 37}. However, anti-egalitarians such as Schar⁵¹ argued this only provided a permanent level playing field, rather than providing motivational impetus to excel i.e. equality of outcome or egalitarianism masked as a meritocracy⁵².

The other school of thought followed more closely with Eckland, and Herrnstein's original vision, that, with other discriminatory barriers receding, increasingly the success of an individual was determined by their "G-factor", or general intelligence factor. Their proponents included Wooldridge³⁶, Kamolnick⁴⁶, and the aforementioned Gottfredson, Jensen, Eysenck, and Brand⁴⁷. They argued the "one size fits all" comprehensive system of education and income redistribution through progressive taxation had been a colossal failure^{36 46}, and, believed the use of intelligence testing was needed to provide the appropriate support for those with less and more "mental ability"^{41 42 43 44 45 46} (Jensen argued the use of the word "Intelligence" was problematic as its derivation from Latin was inherently loaded, applying to most sentient species on earth, not just homo-sapiens).

Still, there were others, who refrained from taking sides and/or argued that a real world sustained meritocracy was a practical impossibility. They included the progenitor of meritocracy, Michael Young²³, who, despite fearing *the rise of meritocracy*, in 1994, helped Tony Blair draft his *Let us face the future: anniversary policies*⁴⁸ and economists Heemin Kim and Glenn Parker. Their paper, *When meritocracies fail* formalized, in theory, open and sustainable corporate organizational structures, whereby coexisting companies implementing a meritocratic hierarchical power structure allowed for employees unable to satisfy their social capital

requirements to transfer to and from other, nearby, companies, which better suited their needs⁴⁹. Another influential publication edited by Kenneth Arrow et al., *Meritocracy and Economic Inequality*, discussed the current socioeconomic inequality, and, more importantly, how it was widely perceived in present day America as a result of a population deeply inculcated with the simple premise behind meritocracy⁵⁰.

1.2 MMORPGs

In order to provide the context in which the structure of a meritocracy will be applied and discussed in this thesis, we must also have an understanding of how the social worlds of MMORPG's (alternatively termed in this thesis as virtual worlds and synthetic worlds) as a highly specialized derivative of online communities, work, and how these mechanics could possibly allow for, or even encourage, the dynamic of accepted and rationalised discrimination.

While they are clearly acknowledged as a significant part of gaming culture, it is important to note that MMORPG's, as they came to be known, did not simply come about as the brainchild of an exceptional game designer. In the fall of 1978, Roy Trubshaw, a Computer Science undergraduate of Essex University, and avid role-playing game fan (which were little more than digital versions of dungeons and dragons with different flavours, at the time), decided to experiment with assembly code to see if an environment could be created in which more than a single user could inhabit the space. However, it was not until 1980, when Trubshaw handed the project to Richard Bartle, now considered the "father" of MMORPG design, did it become the *first virtual world* with simple environments that allowed multiple users to interact with and modify it through text based commands⁵⁵.

Beginning as a university experiment to create a multi-player port of the Zork adaptation, DUNGEN (which lead to them being labelled as “multi-user dungeons” or MUDs), and despite being often derided as child’s play, the rise in popularity and cultural influence of MMORPGs has “...become too fraught with heady implications to be ignored any longer⁵³”. Academic investigation of the virtual reality of MMORPGs has branched out and crossed into almost as many disciplines as there are disciplines for our own earthly reality. While this thesis will not outline all of these, it will discuss the findings of some of the more prominent academics and disciplines.

1.2.1 Sociology and Psychology

Two of the most active fields are the social sciences and psychology. Gary Alan Fine (1993) and Sherry Turkle (1995) were two of the first academics to investigate the experiences of play within MMORPGs or, as they were known at the time, MUDs and role-playing games (RPGs). In his publication *Shared Fantasy*⁷³, Fine examined the major inspiration for many current and past MMORPGs, fantasy role-playing games. As a participant-observer ethnographer he saw them as incredibly social experiences, contrary to the commonly held view of them at the time, of being isolating experiences. As an influential sociologist and psychologist interested in peoples relationships to the technologies they used, Turkle investigated the therapeutic use of assuming different identities within MUDs in her book *Life on the Screen: Identity in the Age of the Internet*⁶. R.V. Kelly explored his anxiety over his perceived addiction to Massive Multiplayer Online Role-Playing Games in his 2004 publication of the same name². In it, he interviewed hundreds of players from a number of games, examining how a virtual environments that, at that moment, could hold their undivided attention. Breaching the often misunderstood pejorative of *addiction*, Kelly saw how a world that “...you can derive the same sense of satisfaction for doing things well that you find in the real world, but you don’t suffer any

pain or anguish when you fail..." He touched on such concepts as identity exploration (as was discussed by Turkle⁶), the fulfilment of being a successful entrepreneur in a thriving informal economy (referring to Castronova's work¹) and immersion in a unique society and culture that a participant can help shape. He argued that, while player's compulsion to immerse themselves in another reality could be classified as an "addiction", the actual nature of their addiction was much more complex than what any clinical definition of the term could convey. In *Play Between Worlds*⁵⁹, as a participant with over two years of play within the world of Norrath, Everquest, T. L. Taylor was the first to write extensively on the society and culture within and surrounding MMORPGs. Importantly, she explored the blurring dichotomy between what was considered "real" and "virtual" and what was considered a "game" and "non-game".

Turkle's, Taylor's, Fine's and Kelly's investigations were necessary for the advancement of serious MMORPG research, but supplementing their findings, and the findings of much of the literature on MMORPGs to date, has been the raw empirical data collected by the PARC (Palo Alto Research Center) duo of Nicolas Ducheneaut and Nick Yee. Using a combination of data mining, social network analysis and online questionnaires, they are responsible for initiating the two largest longitudinal studies in MMORPG literature. Using the results of his two year, 500,000 avatar study, Ducheneaut has published numerous papers on the social dynamics and design of MMORPG's with the *World of Warcraft*, *Star Wars: Galaxies* and, more recently, *Second Life*⁶⁵. More often than not, these papers were written in collaboration with fellow PARC researcher, Nick Yee. Yee's "personal side project", the Deadalus Project, continues to be one of the most widely cited studies on MMORPG's, with over 40,000 participants answering questions on the motivations and perceptions of those who play games such as *World of Warcraft* and *Star Wars: Galaxies*⁶⁶.

1.2.2 Governance & Ownership

With the rise in popularity of MMORPGs, the issue of governance and *who owns the artefacts* within these worlds has becoming increasingly contentious. The fallout from these inevitable, and, to an outsider, astonishingly heated confrontations has ranged from fractured relationships, to fully fledged lawsuits, and even as far as murder (in a very real sense)^{53 60}. While Richard Bartle has continued to investigate the evolving design of virtual worlds, more recently, his work has concentrated on the relationships between developers and the game's users over the rights of property ownership⁵⁵. He argues that all the artefacts within these virtual worlds are essentially "ones and zeroes", and, in referring to the very fundamental state of these artefacts (the code that constructs them), hence, they are *carte blanche* owned and controlled by their developer who, he also argues, are the only group that have an understanding of the (virtual) world's interconnectedness that qualifies them to do so⁴. Influential editor for *Wired* magazine, Julian Dibbell, drawing on Lawrence Lessig's work, saw a need for developers to insulate the player's avatars as much as possible from external legal influences through the use and enforcement of an End User License Agreement (EULA). He saw the EULA as a social contract between the developers and players, where what constitutes a possession and what does not, is negotiated. However, due to the ontological ambiguities present within the realm of virtual worlds, they are consistently difficult for laws to assess⁵.

Raph Koster, lead designer for SOE (Sony Online Entertainment) and co-creator of the iconic *LegendMUD*, on the other hand, saw the players as equally contributing to the formation of the environments within these worlds, and, as such, should be afforded rights of entitlement, which reflect this involvement. In his paper, *Declaring the Rights of Players*, Koster drafted nineteen articles on the rights of player's avatars and their property, in similar rhetoric to the US *Declaration of Independence*.

However, he too, during the course of drafting these articles, found it difficult not only to grasp the ambiguities present within and around MMORPGs, but also balancing the needs and wants of two opposing groups, players and administrators (which were also referred to as the developers)⁶².

The field of legal research, possibly subscribing to the nineties and Castronova's early views on the world of an MMORPG as being a "wild west frontier", has seized upon this emerging hotbed of social activity as the cutting edge in legal experimentation^{1 63}. In this tug-of-war between players and developers over the level and type of governance afforded to each group over their involvement with their concerned virtual worlds, legal scholars have begun asking serious questions about regulating the boundaries each group has on speech, property and creativity.

Two of the most prominent scholars and catalysts for the growth in this form of MMORPG research have been Jack Balkin and Beth Simone Noveck, who, through their work have dealt with the rights and freedoms of players versus that of the developers, the ability for MMORPGs to facilitate social movements, and who initiated the annual *State of Play* conference series (bar 2008), which dealt with the intersection of virtual worlds and law, and fellow New York Law School Professor, James Grimmelman^{63 64} whose work dealt with power structures within virtual worlds.

Caroline Bradley and Michael Froomkin, from the Miami School of Law, are another pair of prominent legal scholars within the field of MMORPG research. They argued that the realistic social landscape, coupled with the ability to tightly control and monitor the parameters in which the society operated, created the perfect society/tool to test the implementation of experimental legislation⁷.

1.2.3 Economics

Despite being, arguably, the most commonly cited academics in MMORPG literature and, recently, also one of the most commonly cited academics in economics literature, Edward Castronova is one of the very few economists who has investigated the economies of *synthetic worlds* (as he terms them), and, possibly, the only economist to do so in great detail. In his seminal work, *Virtual Worlds: a First Hand Account of Market and Society on the Cyberian Frontier*, as a player of Everquest, Castronova looked at the structure of the somewhat chaotic economy of Norrath and how it was deeply entwined with the culture within and surrounding the game^{1 53}. While Castronova now classifies his work as contained within the field of telecommunications, he still remains deeply rooted within his economics background, which is reflected in his later works on virtual worlds, *Exodus to the Virtual World* and *Synthetic Worlds: the Business and Culture of Online Games*^{53 56}.

1.2.4 Pedagogy

Finally, as one of the emerging academics and pioneers in the discipline of pedagogical sciences, Constance A. Steinkuehler has written numerous papers on the player's experience within and around (such as fandom spaces) virtual worlds, particularly *Runescape*, *World of Warcraft* and *Lineage II*^{58 61}. In her work, she argued that the complex interface, navigating and interacting with a novel virtual environment, combined with a shared experience of emergent social behaviour could be modified to create an environment conducive to more scholastic modes of learning.

Chapter 2

The MMORPG (mem-mör-peg) : a primer

My eyes are red-raw and burning, whether it is from my body protesting the lack of sleep and/or blinking, or the bitterly cold and musty environment I am in, I could not care to discern. I grimace as I force myself to stare, unblinkingly at the right foot of what can only be described as an absolutely gigantic and hairy monstrosity. A more definitive description I could not muster, twenty-four other equally short-tempered and bleary-eyed adventurers depended on me to stand unflinchingly against the wall and stare at the beast's foot.

Over the din of steel clashing, roaring infernos and the beast's bellowing, a distinctive voice screams,

"Two stacks! Do it now!"

That was my cue. The entire team is counting on me. Come here beasty...

Every night, millions of players enter this world and, undoubtedly, many of them enact these very actions^{10 155}. For many MMORPG inhabitants, compared to their earthly existence, it can be *"...in many ways richer, more sensible, more beautiful, more satisfying, more interesting, and more intensely real..."*²

In this chapter we discuss the history of how MMORPG's came to need new participants to undergo cultural acclimatization in order to allow immersion.

These factors both contribute to a player paradigm, which leads to the promulgation of a false meritocracy, with the groundwork already laid out by the developers of MMORPGs.

2.1 Before MUD (BM)

According to the father of MMORPG's, Richard Bartle⁵⁵, the first "age" of MMORPG's started in 1978, when fellow student at the University of Essex, Roy Trubshaw created *MUD* or Multi-User Dungeon (hence the genre's name). *MUD*, however, was not as revolutionary as Richard Bartle would have readers of his work, which is still, undeniably, pivotal to the development of MMORPG's, believe. In fact, the name Multi-User Dungeon could be considered an unofficial adaptation or "expansion" of the single user adventure game that inspired it, *DUNGEN*, that added multi-player functionality through the exploitation of the shared write enabled memory within the DEC-10 mainframe at the University⁵⁵.

However, even before *Zork* and *DUNGEN* adapted the rules and settings of *Dungeons and Dragons* (D&D) for computer use, the roots of social role-playing style games can be traced back to a combination of one of the Prussian army's methods of training officers, *Kriegsspiel* (wargames)^{95 97} and the 16th century art of improvisational theatre known as *Commedia dell'arte*⁹⁶. As war-games became close to real life approximations of armed combat, similar to current day military war games, during the 1960s, improvisational theatre groups also began moving from mock trials and model legislatures to historical re-enactments of battles, most notably with the founding of the Society for Creative Anachronism at Berkeley in May of 1966⁹⁶. The first recorded instance of large-scale role-playing is attributed to David Wesely who, as part of the Midwest Military Simulation Association, served as a referee for a Napoleonic era war game set in a fictional German town called *Braunstein* in 1967⁹⁷.

These groups created were responsible for creating the proto-RPG (as Porter⁹⁵ labelled them): structured recreation of medieval history and culture, with

mildly fantastic elements. The players within these “creative history” games (as was termed by the Society for Creative Anachronism) took on the role of a character and improvised.

Porter⁹⁵ classified this early era of role-playing as *Generation 0*. It was characterised by *free form, rule-less role playing* and included any form of role-playing for entertainment including the childhood games of cops and robbers and cowboys and Indians. However, it was also characterized by a lack of widespread agreed-to rules to arbitrate disputes that would invariably arise in situations that were, essentially, imagined.

It was not until 1974 that formalized rules were created for the settings of social role playing games with the publishing of the first edition of *Dungeons & Dragons* (D&D) by Gary Gygax. However, even *D&D* owed its rule-set and existence to an earlier miniature wargame by the name of *Chainmail*, also created by Gygax and inspired by Kriegsspiel⁹⁷.

Porter classified this first iteration (of which there were many after) as *Generation 1*. It was characterized by the concept of fixed characters and roles in a medieval setting supplemented by fantasy elements, with specific attributes and the use of poly-sided die adding the aspect of chance to determine the outcome of difficult or random tasks⁹⁵.

It was from this pen and paper rule-defined role-playing game that Zork (DUNGEN was a Fortran port of the game), the single player virtual adaptation of D&D, was a direct offspring of, and, in Roy Trubshaw’s and, later, Richard Bartle’s attempts to create a DUNGEN that had more in common with its progenitor, the MUD, and, hence, the MMORPG was born.

2.2 How do you play it?

It has been over 30 years since the first MMORPG was developed, relatable to its current virtual form. Bartle states that we are now in our fifth

generation of MMORPGs⁵⁵, the first generation able to return a profit to its investors¹.

By far the most popular franchise has been World of Warcraft¹¹ and its extraordinary popularity is indicative of MMORPGs similarities to other forms of social media and their giants (Facebook, MySpace etc.). This is confirmed by the Niko Partners study, which indicated, a portion of the MMORPG player base had moved to more casual social-network based games¹⁰⁶. Social media can command tremendous attention from its participants¹⁰⁷, as can MMORPGs with some playing upwards of 110 hours per week³.

During Castronova's first study of Norrath (Everquest), he found, of the 3,916 respondents that participated in the Norrath Economic Survey fifty eight percent wished they could spend more time in Norrath than they did already; thirty nine percent would quit their current job or schooling if they could make enough money selling their wares and services in Norrath; and twenty two percent of respondents indicated that, if possible, they would spend their entire existence immersed in Norrath^{1 53}.

However, contrary to popular belief^{2 74}, MMORPG's are not inherently enthralling (some would call it "addicting"). One cannot simply enter an MMORPG in an immediate state of immersion; in fact, attaining the ability to reach that level of mental engagement can be a rather protracted experience^{53 57 59}. Very briefly, it involves, not only deciding which of the many virtual worlds you may want join, but, also, in some cases setting up subscription services to the company that publishes and maintains the virtual world. It involves installing the client software required to access this world, then updating, otherwise known as "patching", your client software to conform with the current "version" of the virtual world¹¹¹. After all of this, you still have to create your representative within that world, otherwise known as your "avatar", before familiarising yourself with the control interface, limited communication methods and the virtual

landscape. Castronova⁵³, Bainbridge⁵⁷, Taylor⁵⁹ and Kelly² have covered the physical process of accessing an MMORPG world previously, and in great detail.

What these theorists do not explicitly state, however, is that the transformative process that is necessary for naturalisation can involve many stages totalling hundreds of hours of consistent play⁷⁵. In each stage there is a chance that the player will become frustrated and/or despondent and withdraw from the virtual world, due to administrative, technical or, more importantly, socio-cultural barriers. This is especially true of players new to gaming, the meta-genre: MMOGs (Massively Multiplayer Online Games), or the genre itself, MMORPGs.

Beyond the customary technical requirements and administrative hurdles already outlined above, and assuming the player is already a competent user of the platform he or she is playing on⁵³, the first stage of naturalisation, which is required for any interactive virtual world, is for a player to overcome the mental obstacle of technical interface limitations in order to accept embodied immersion as a response to the actions of his or her created avatar¹⁵⁷.

The second stage of naturalisation is unique to MMORPGs, and is, perhaps, the most complex barrier to entry of any interactive virtual world. 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, nor are players suddenly released from the hierarchical pressures of a meritocratic society at the end of this stage of naturalisation. This has all been discussed in great detail, not only by the aforementioned Castronova⁵³, Bainbridge⁵⁷, Kelly² and Taylor⁵⁹, but also by Yee¹⁶, Ducheneaut¹⁵, Steinkuehler³³ and Turkle⁶.

What is not so commonly discussed, though, is, along with understanding the role an archetype plays within a group, players must also develop the ability to frame their social interactions defined by the chosen archetype.

While *framing* has long been a part of media studies literature, most notably reappropriated first by Iyengar (1991) and Entman (1993), then further developed by D'Angelo (2002) and Tankard (2001)⁸⁰, Goffman's (1974) original understanding of the concept still best describes the interactions of the participants within an MMORPG *reality* (as Goffman would emphatically define it). He draws upon and attempts to answer the much earlier work of William James (1869), *under what circumstances do we think things are real?* Or, as Goffman would have it, *what is it that's going on here?* ^{IV}.

Let us be clear, though, while MMORPGs may draw many physical similarities to the earthly reality, for example, an avatar walking off the edge of a cliff will inevitably fall downward, there are also significant differences; some avatars may be able to fly; others are able to shoot seething balls of fire from the palms of their hands; pain is irrelevant, and no one is subject to the binary nature of being either alive or struck dead; most notably, death is non-permanent^{2 53}. It can be said, then, that the Goffmanian *physical framework* in which an MMORPG may exist, compounded by the simple fact that a player's transition between physical frameworks (earthly and virtual) is mediated by relatively crude interface tools, is, perhaps, not the most compelling way for a player to enter a state of immersion.

While it can also be said that participation within an MMORPG requires some suspension in the players current understanding of what *is* or *can be real*, as Goffman states in the first sentences of his essay on frame analysis⁸¹,

“There is a venerable tradition in philosophy that argues that what the reader assumes to be real is but a shadow, and that by attending to what the writer says about perception, thought, the brain, language, culture, a new methodology, or novel social forces, the veil can be lifted. That sort of line, of course, gives as much a role to the writer and his writings as is possible to imagine and for that reason is pathetic.”

A framework that does not necessitate the nebulous suspension of belief from its audience, however, is Goffman’s *social framework*. It has been well noted by most, if not all, theorists within the field of MMORPG research (including the above mentioned Castronova^{1 53}, Bainbridge⁵⁷, Taylor⁵⁹ Kelly², Ducheneaut^{14 77}, Yee^{9 15 16 77}, Nickell and Moore^{14 15 77}) that the social framework derived from emotional investment is what keeps a player immersed within, and sometimes outside of, the MMORPG world.

How a player comes to construct the social framework in which their avatar exists is determined, to a large extent, by the avatar’s archetype, which, coincidentally, corresponds with the three core processes that enable frame alignment⁸². Tanks often assume tactical leadership in exchange for being charged with protecting the rest of a group from harm, both a diagnostic and prognostic framing role; damage dealers frame their experiences as competitive in nature, providing motivation framing; and healers often fulfill support or utility roles, a partially prognostic role. If we take the perspective of the fantastical, while player groups may be battling dragons, gargoyles, zombie overlords, or even each other, they are essentially combating oppression, albeit designed oppression, which could be seen as analogous to the Snow and Bendon et al. definition⁸² of a social movement, and with it, comes the emotional investment of all those involved.

It is only through the generation and alignment of social frameworks⁸², whether through guilds, a network of friends, pickup dungeon and raid groups, or the camaraderie of player versus player combat, that a compelling argument for accepting immersion as a response to play can be presented to an

MMORPG participant. However, integration within these social frameworks, in itself, brings its own risks. This thesis argues that, in MMORPGs, this is the dehumanizing subjugation of new players to the whims of a meritocratic hierarchy.

2.3 The origin of Meritocratic mechanics

While it was never intentional, if we look back on MMORPG's deep-seated roots within war games, and, consequently, war and its participants themselves, it is easy to see how this has had a part in MMORPG's adopting a low level rule structure to govern a game's players.

However, the origin of the use of meritocratic mechanics isn't that simple. It can be seen as a two-part process. The first is the inclination for MMORPG's to adopt such a system because of precedent. The second and more dominant reason comes down to a combination of, what is seen as, current technological limitations as well as limitations to how the development of MMORPG's is perceived by its developers.

In order to increase playability and/or accessibility for newer players, most MMORPG's implement design choices, which serve to *categorize* (a term used as an alternative to *discriminate*, problematic, as it is already heavily infused with cultural connotations) players. As Bartle states in *Designing Virtual Worlds*, *"In many cases, the question they actually ask themselves is what categories to have, which rather jumps the gun. The categorization of players is not a fundamental component of virtual world design."*⁵⁵

While Bartle goes into some depth explaining the categories that are typically adopted within a virtual world, such as age, race, and gender, he, also, does not discuss in-depth whether a virtual world calls for categorization or not.

Developers may argue this is due to technological limitations, i.e. how much content can you reasonably fit into and maintain in a virtual world. However, it could also be argued that current methods of development, especially in regards to MMORPGs, are closed, relying on explicit rules and constructed environments. In order to do away with categorization, a fundamental shift in the development paradigm would need to occur i.e. the reliance on implicit dynamics and generated environments, preferably through player input.

As was discussed earlier in the chapter (*how do you play it?*), as an MMORPG matures the categories of race, gender and, especially, class become imbued with cumulative cultural meaning.

However, while, what essentially becomes iconography, can become meaningful to a player through association, it can be argued that categorization creates a false sense of freedom on the part of the player, by offering him or her just enough choice to satiate their need for ownership, or in other words

"I am (I have made, I have chosen) this character."

It is enough to placate the minds of players, obscuring the fact that this categorization, not only takes away a players self-determination (for what is a players optimal mode of play, other than what is dictated by their character choice), but invites discrimination, if it is not considered a form of it already.

And part of this discrimination is the categorization of ability. The use of defined numbers to describe experience (for example, a character's level), or proficiency in a skill (for example, a character's skill in using a pick axe), no matter how obscured (refer Chapter 3.), when there are no other methods of classification (for example popularity in a democracy, religious affiliation in a theocracy, or family ties in an oligarchy) leads to the reorganisation of the society into a meritocratic order, whether or not the developers had this in mind, when designing their virtual world.

2.4 Legitimizing the social order

We have now established *categorization*⁵⁵ as non-essential to the formation of a virtual world. So how then does it provide means for a dominant social group (or *category* if we refer to it in the sense of Bartle's understanding of the virtual world) to maintain a hegemonic position over subordinates?

According to Sidanius and Pratto⁹⁹ in their work regarding *The Hierarchical Flavour to Legitimizing Ideology*¹⁰⁰, in order to ascertain whether power over discourse of an ideology is being exercised one must modify the original Marxist understanding of *false consciousness*,

*"The holding of false or inaccurate beliefs that are contrary to one's own social interest, which thereby contribute to the maintenance of the disadvantaged position of the self or the group."*¹⁰²

Firstly, they suggest that whether or not a belief (which they refer to as myth) is epistemologically false or inaccurate, and consequently, whether or not it is valid, has nothing to do with the belief's power to legitimize inequality (consolidating the dominant social group's position of power). Rather it is the intensity of the person's belief in the truthfulness of the ideology that determines that person's values and ideas on their culture, and, it is that intensity in this *legitimizing myth* that determines the level of maintenance (sometimes leading to defensive militancy) of their under privileged position in society. In that sense, we can also refer to forms of Bartle's concept of *categorization*⁵⁵ used within a virtual world as forms of *legitimizing myths*.

Secondly, they note that not only beliefs that work against the disadvantaged need to be acknowledged but also beliefs that serve to delegitimize or legitimize equality. An example of such a myth (among African Americans) would be, *"African Americans have fewer opportunities in housing, employment*

and education"¹⁰³. Such beliefs circulate within and influence their respective communities.

Sidanius and Pratto argue that in order for hierarchical stratification to occur (whereby those who hold power become increasingly disconnected from those without it) an imbalance in *Hierarchy-Enhancing* (in other words, legitimizing myths which support inequality) and *Hierarchy-Attenuating* (those that support equality) legitimizing myths, favouring those of the *Hierarchy-Enhancing* type. These myths will only be as potent to the extent that they are ingrained within the participants of the social system, sometimes going so far as to declare blind faith⁹⁹.

In order to apply this approach of Social Dominance theory⁹⁹ to legitimizing the social order within an online world, we not only must understand the prevalence and forms of *categorization*⁵⁵ that have come to exist in modern MMORPGs, but also their genesis in pen and paper role playing games, and competitive online gaming (*How do you play it?* This chapter), and how they contribute to the *false consciousness*¹⁰¹ of a meritocracy.

Chapter

3

The Impossible MMORPG

"As I re-enter the virtual world, I discover my mortal remains on the crest of a monadnock. But camped around the cadaver are several blood-red and night-black denizens of the rocky alpine regions.

I run in fast and bend down to touch my corpse. I almost have it. There are trinkets I've been searching for arrayed on the ground in front of me. I reach for them. I lift the first one into the air. And then someone clobbers me in the back of the head with a spiked ebony club."

- R.V. Kelly having a particularly hard time retrieving his corpse in Anarchy

Online

(Massively Multiplayer Online Games, 2004)

This chapter aims to examine why MMORPGs are problematic as a society. As we have already expounded the superficiality and prevalence of *categorization* in all facets of the current iteration of MMORPGs, what this chapter and this thesis is concerned with are the categories that indicate the existence of a form of social dominance at work, that is: *Hierarchy-Enhancing categories* that propagate the image of meritocracy as the determining factor in virtual social justice, when, in fact, it allows those at the upper echelons of power to subvert power distribution structures in favour of socially stratifying power consolidating structures.

As the social structures of meritocracy have already been well established due to the half-century's worth of debate it has incurred, with the similarities between a meritocratic society and a virtual society being undeniable, it would

seem apt to use the same methods of analysing meritocracy in the past, on the MMORPGs of today.

3.1 Providing equal opportunity or driving inequality?

In previous literature concerned with virtual worlds and meritocracy, much has been made about the former's ability to equalise differences between people through a virtual medium, and the latter's usage as a catch-phrase has made it synonymous with the ideal of equal opportunity, particularly when the political sphere interacts with the wider public sphere.

Sherry Turkle noted in her investigations into MUDs (the progenitors to MMORPGs, refer Chapter 2) that they allowed people to cycle through and explore radically different aspects of themselves, previously something of a rare occurrence in people's lives⁶. R.V. Kelly noted his transition into the virtual world was an *"epiphany... stunning, powerful and immediate"*. He saw it as an entirely different *"...universe with its own rules, constraints, culture, ethos, ethics, economy, politics, and inhabitants..."* even going so far as to labelling it *"...better than the real world^{2a}..."* T.L. Taylor experienced, first-hand, the ability for MMORPGs (in her case, *Everquest*), through the transition from interactions via avatar, to interactions face to face, to bring an extraordinary variety of people together in camaraderie. She noted that, while single white teenage males played and were present at real world gatherings, there were also couples, youngsters, retirees, and people of different ethnicities⁵⁹.

An example of the increasingly popular use of the term "meritocracy" was seen in the lead up to Labour's 2005 re-election, when Alan Milburn called for Britain to be a *"...nation based on merit, not class..."*¹⁰⁸ Although the progress of New Labour policy of moving Britain towards a meritocracy has now waned considerably, with the ousting of Gordon Brown from Prime Ministership, and

the diminished prominence of Tony Blair, it, nevertheless, still impresses considerable influence on British politics, particularly in the area of education policy making. However, while public awareness of the issue is waning in Britain, as policy solutions become easier and easier to transfer between neighbours, it can be seen to be waxing in the public and political spheres of Italy and France, particularly after the recent collapse of the Eurozone following the 2008 Global Financial Crisis.

Leftist Italians have latched onto the idea of meritocracy with the 2008 publishing of Roger Abravanel's *Meritocrazia: 4 Proposte*^{109 110 111}. In it, Abravanel advocates four proposals, transposed from other nations with varying levels of meritocratic policies in action.

Firstly, the establishment of a *delivery unit* or efficiency monitoring within the public sector, directly modelled off British New Labour policies, and inspired by the Singaporean public sector. Secondly, the creation of standardized testing within schools, modelled off American SAT reasoning tests. Thirdly, the enforcement of female involvement in corporate management, modelled on the Norwegian law mandating 40% board membership in large and medium companies is reserved for women. And, finally, the systematic deregulation of the entire Italian economy. Ironically, this type of neo-liberalist thought is identical to political sentiment during the era of conservatives Reagan and Thatcher; the only difference now is, this time, the Italian left is advocating it. Both were, arguably, at least partially responsible for the rapid and immense growth in social stratification within western society, particularly in their respective countries and the consolidation of faith in the legitimacy of an economic *laissez faire*.

In France, the recent rejection by elite universities to change admission procedures, brought to light a misguided view of meritocracy. The French government called for the admittance of more disadvantaged students in the name of meritocracy¹¹², when, in fact, the admission rate of only 6% of secondary school graduates had been a direct result of existing meritocratic

educational structures, including the preparation colleges and stringent testing required to apply for these elite universities.

All of this is indicative of the conflicting meanings meritocracy still holds (as outlined in Chapter One): the conflated and romanticized notion of egalitarianism and the harshness of its initial meaning: a principle of wealth distribution determined by Michael Young's formulation of *intelligence plus effort*¹².

In the face of mounting evidence against the viability of a meritocracy, an MMORPGs meritocratic social structure, mitigated by its virtuality, may be the only domain in which such a social structure can partially survive. Using Ruth Lister's four points outlined in her article *Ladder of Opportunity or Engine of Inequality*¹¹³ as examples of *Hierarchy-Enhancing*⁹⁹ legitimizing myths, the next section will explore how they can apply to a virtual world.

3.2 Hierarchy in an MMORPG

Notwithstanding the already discussed Hierarchy Attenuating effects of an MMORPG on a player transitioning from the real to the virtual, effects such as the irrelevance of physical appearance and disability, gender^{6 59} and the well-documented phenomena of disinhibition in its users¹¹⁴, there are a significant number of Hierarchy Enhancing (or Exacerbating) legitimizing myths prevalent within MMORPGs. These are so legitimized that a player-initiated discourse between developers, other players and themselves regarding these legitimizing myths is beyond the scope of most players understanding.

Within the British meritocratic ideal, Lister outlines the major Hierarchy Enhancing legitimizing myths thusly¹¹³:

- a. That the meritocratic distributive mechanism led to economic inequality that undermined its ability to become an allocative mechanism of equal opportunity.

- b. That the above outlined distributive mechanism of economic inequality continually overrides equal opportunity leading to the exacerbation of inequality, and greater social stratification. It also leads to the legitimization of inequality through the propagation of “winner takes all” societal sentiments, and reciprocally, “deservedly a loser” societal sentiments.
- c. That the meritocratic distributive principle tends to be based on fairly narrow definitions of “merit” and what is of value to society. The definitions and values are rarely questioned, despite having significant implications for social justice.
- d. Lister finishes by stating that despite the New Labour tendency to refer to meritocracy and equal worth as nigh interchangeable terms, the extreme inequality potentially created by a meritocracy, within it, undermines the recognition of equal worth. She states that egalitarianism should not be abandoned from examination.

This section aims to compare and discuss evidence of the existence of the first three of Lister’s principles in the virtual worlds of MMORPGs, as the fourth of Lister’s principles falls outside the scope of virtual worlds.

3.3 Meritocratic distribution of inequality

Political scientists Anthony Giddens and Patrick Diamond¹¹⁵, as well as other academics including Arrow⁵⁰, Gould³⁹ and McNamee & Miller Jr.¹¹ have argued that in the long term a meritocracy was essentially a self-defeating distribution principal, with Patrick Diamond stating that, “...*pure meritocracy is incoherent because, without redistribution, one generation’s successful individuals would become the next generation’s embedded caste, hoarding the wealth they had accumulated*”¹¹⁵.”

Recent reports by the Fabian Commission on Life Chances and Child Poverty (of which, Lister is a contributor of) indicated that evidence suggested that all children from income-poor families, no matter how able, had less chance of achieving success than children coming from more affluent families¹¹⁶.

While it is not unheard of for entire families to participate in MMORPGs (in fact, it is often the case that it is a member of one's family that introduces a person to an MMORPG), family structures play a much more diminished role in a virtual meritocracy. In this environment, however, there are two game mechanics, which can be said to provide a situation analogous to the *inherited wealth* outlined by Patrick Diamond, above.

Groups that can be considered equivalent to an extended family structure are the goal oriented player organizations that are, termed *guilds* (they can also be called *clans*, *corporations*, or a multitude for other terms, depending the MMORPG that is being referred to). As important as guilds are to the virtual social landscape and as a cog in the engine of inequality that is meritocracy, the game mechanic that provides the closest parallel to an immediate family is a player's ability to create and inhabit multiple characters (this concept is discussed in further detail and with more positivity by Turkle⁶ and Taylor⁵⁹), in essence, this stable of characters is a *family of the self*.

Whether or not they are in simultaneous existence within a virtual world^V, as they are being operated by the one player, while that player is under the guise or *virtual mask* of his or her character^{VI}, the player is also unconditionally "looking out" for the other characters he or she can potentially control. So, like a parent to the family, a player's most advanced, or progressed character effectively "raises" the less advanced/progressed characters as they learn to exploit the bounds their own abilities (refer Chapter 2, Section 2.2), through donations of currency, equipment or pulling on societal connections for mentorship. This is not unlike, parental responsibility, such as when a father financially contributes to a prestigious school so that *his* child is afforded the best education, or when a mother pays for a celebrated musician to give *her*

child the finest possible exposure to the arts. Hence, an already advanced player in control of a number of characters could be seen as analogous to an *affluent family* in a virtual meritocracy.

Suffice to say, a player who is not advanced, or a player entirely new to an MMORPG and/or that particular virtual world^{VII}, operating a character (or characters) without access to previously accumulated currency and equipment stockpiles, and without social contacts in the virtual worlds society, could be defined as analogous to an *income-poor family* in a virtual meritocracy.

Hence, we can conclude that a new created (or *birthed*) character can have a radically different experience attempting to achieve success depending on the *immediate family* (a players stable of characters) they originate from. Also, despite not having a generationally defined population^{VIII}, we can see how the meritocratic distributive mechanism leads to an MMORPGs early adopters, or, as Patrick Diamond¹¹⁵ would term, “...one generations successful individuals...” becoming “...the next generation’s embedded caste...”

3.4 Inequality approaching ∞ , introducing the Noob.

Despite the continual conflation of meritocracy with the notion of, what is best termed by David Miller as, *social equality*¹¹⁸, there is no denying the difficulty of treating others as equals when the societal context recognizes everyone as being decidedly *unequal*, where *those who have achieved little and those who have achieved much are deserved of their fate, as is defined by their merit*. It is this amalgamation of conflicting principles that leads to the logical outcome of the continual legitimization and, hence, exacerbation of social stratification.

More than forty years after publishing *The Rise of Meritocracy*, Michael Young, wrote an article in the Guardian, describing his discontent with its widespread

misinterpretation and providing a more literal description of the message he initially tried to disseminate.

In it he described the self-serving mentality, which could lead to an exacerbation of the social stratification legitimized by a meritocratic social structure,

“The business meritocracy is in vogue. If meritocrats believe, as more and more of them are encouraged to, that their advancements come from their own merits, they can feel they deserve whatever they can get...

So assured have the elite become that there is almost no block on the rewards they arrogate to themselves. The old restraints of the business world have been lifted and, as the book predicted, all manner of new ways for people to feather their own nests have been invented and exploited. Salaries and fees have shot up. Generous share option schemes have proliferated. Top bonuses and golden handshakes have multiplied. As a result, general inequality has been becoming more grievous with every year that passes.²³”

This behaviour is not only limited to earthly bound societies, but, the euphoria felt by players when they receive deserved rewards, is vital to maintaining a players engagement, leading to a propagation of this type of MMORPG culture. Because players are divorced from the physicality of themselves and real world responsibility (dissociative anonymity)¹¹⁴, this behaviour is more widespread, polarized and savage in the virtual worlds of MMORPGs. As a result of the competitive ethos that is part and parcel with online multiplayer games and with the ease of which participants can confidently interject in virtual conversations^{59a}, it is even encouraged. Indications of a *toxic* societal shift can be seen in language that evolves over time with the maturation of that culture.

Shifts in the cultural meaning of words from either positive or neutral to derogatory can occur from consistent use out of intended context, for example, newbie^{55c}, which has evolved over time to become noob or nub^{IX 121}, previously

referred to a player who was new to a game. Its use in high-end gaming^{xvii} has led to the infusion of negative connotations – referring to a player perceived to be particularly unskilled, a player of lower status, or being used as an explicit insult¹²⁰. This and other forms of language are derived from the elite (in this case, meritocratically deserved) of the virtual society and permeate a virtual world over time, until they become part of the everyday lexicon of participants, and help propel the status quo within these worlds. As discussed in *Chapter 2. Section 2.4*, this only serves to make common the use of derogation in militant defence of the *false consciousness* that is in place in a virtual world¹⁵⁸.

While it is unknown whether aggressive militant behaviour is evident in all MMORPG players, it is at least evident in the most vocal of players, and is a reflection of the prevalence of the self-serving egotistical ethos, previously outlined by Lister and Young^{23 113}.

Players well versed in the idiolect of the virtual world will understand that the terms, which may be considered openly hostile in reality, have been disempowered through overuse and will dismiss it as no more than mere banter. However, on the other side of the social divide, newer players and lesser-developed players, who are less acclimatized to the cultural norms of the virtual world, are less likely to deflect verbal attacks, as the meritocratic ideal dictates.

Newer players are likely to react in bewilderment and may interpret the unfamiliar territory as being occupied by actively intimidating participants, negatively impacting their play experience at a crucial time in their player lifecycle, that of development⁷⁵. Lesser-developed, lower status players are more likely to be verbally beaten into submission, by others^{114a} and view this as a reflection of their inability to succeed within the virtual world¹²⁰, consolidating, within them, their subordinate status within the virtual world. In either case, it is an instance of social stratification occurring, negatively impacting on the long-term playability of an MMORPG.

3.5 *Damage meters and egos.*

One of the most visible and fundamental flaws of any meritocracy, or would be meritocracy, concerns the simple equation that defines it: the *equation of merit*.

Ability (or intelligence) + effort = merit

That flaw is the highly subjective nature of the entire equation. Who can define the value of ability to society? Who can determine or measure the amount of effort an individual is exerting in anything? And, hence, *who defines merit?*

Inevitably, as is seen in closed corporate meritocracies⁴⁹, those that define the universal ideology of merit, while it is perceived as being of benefit to the wider community, are often the very group of individuals that it serves to benefit most, contributing to the perpetuation of a cultural hegemony.

Take, for example, using Lister's description as a framework¹¹³, a childcare worker and an executive who work in Australia. It could be argued that the childcare worker who is properly qualified, possesses significant skill in childcare, and who commits 100% of their effort to their job at hand is neither lacking in *ability* nor *effort*. And yet, the child's parent, who might be an executive officer of a company, may earn up to fifty times their salary¹²². It is unlikely this executive possesses fifty times the ability and/or exerts fifty times the effort of the childcare worker. The alternative could be a supply and demand issue, where the number of childcare workers significantly outnumbers the work placements on offer, but this cannot be the case with the shortage of childcare placements a well-publicised issue in Australia^{123 124 125 126}. The only remaining explanation is a disconnect between a childcare worker's ability and effort exhibited and the recognition of merit afforded to them in return. The low value placed on this type of work by society results in low levels of remuneration, which in turn leads to childcare workers conferring

a low socioeconomic status unto themselves, and difficulty attracting and retaining workers in this type of industry¹¹³.

As British journalist, Polly Toynbee, once reflected on her experiences as a lowly paid worker¹²⁷,

“Low pay is low status... Just as pay is a cause for boasting among the fat cats, it is equally a source of daily humiliation, for the low paid, seeing how little one hour of their hard work is valued at...”

While the financial remuneration associated with the evaluation of merit is not a relevant issue in MMORPGs (as the value of virtual currency is so fluid, assessment of value is often measured against goods (the best of which cannot be purchased with currency)), the socio-political recognition (which can lead to more favourable treatment in other matters – i.e. the cultivation of social capital) that follows the evaluation of merit is.

However, as is the case in our earthly reality, the evaluation of ability, effort and, hence, merit is also problematic. With no defined governing entity within a virtual world that would dictate the status quo of what defines merit, the status quo has evolved out of the tools of evaluation provided to us by the MMORPG’s developers (they are the entity that could be considered the closest equivalent to a government, dictatorship or even a deity), and, in some cases, third party contributors.

Qualitative evaluation is a difficult proposition, even within guild structures, and, it is, for the most part, impossible in the wider MMORPG community¹²⁸. In her earlier work, *Play Between Worlds*, T.L. Taylor argued that reputation was built on perceived skill, demeanour and even broader values, insight into which could be gained from extended play beside the concerned player and their character^{59b}. However, it could be argued that due to the great deal of homogenisation evident in MMORPGs (refer Chapter 2, Section 2.3.), the rapid formation and shallow nature of player relationships¹⁵, and the combined effects of a virtual character and the online disinhibition effect¹¹⁴, evaluations

of demeanour, broader values and even skill i.e. merit, are, at best, a murky affair.

If the true nature of a user's approach to play cannot be accurately determined, what can only be left is an impression derived from the numerical data concerning the quantitative evaluation of the performance of the concerned player, supplemented by rudimentary actions, which serve to sate pre-existing expectations an audience may possess. This reliance on quantitative assessment defines the nature of wider MMORPG play, where, in most cases, the only consideration when forming a pick up group are vital statistics and, during the course of play, quantifiable performance data, often with the assistance of metering tools, which Taylor observes as holding particular symbolic power as a sociotechnical object¹²⁸. She argues that they can only capture a limited aspect of player contribution, leaving other players contributions not meaningfully accounted for.

And therein lies the issue. Within an MMORPGs virtual world where the only evaluation of quantifiable vital statistics and performance data is interpreted as "merit", a group of "winners" and "losers" becomes readily apparent.

Those that are best served by this form of evaluation are those (classes) that can maximize their impact on the results of numerical performance data. These players are afforded membership within the *affluent* caste of an MMORPG with access to powerful equipment that affords their character the scope to perform above and beyond a regular MMORPG character (refer Chapter 3. Section 3.2.a.).

Those most hampered by this form of evaluation come in two forms. Firstly, it hampers players who choose roles during play that are not numerically quantifiable, for example, crowd controllers (characters whose role is to hamper enemy's by a variety of means such as traps, spells, stunning etc.) and utility healers or damage preventers (characters whose role is to reduce or prevent incoming damage, rather than heal damage inflicted). This is purely because, these actions are difficult to translate into numerical performance

data: a demonstration of the disconnect between ability and effort, and merit¹²⁸. This can be somewhat mitigated with more powerful equipment.

The low value placed on these roles by those that inhabit them, and the virtual society makes choosing these roles less attractive to players. If this becomes widespread, it can affect the balance and playability within the virtual world. MMORPGs developers must then choose to either redesign enemy encounters to so require such player roles that it creates an increase in demand for them, or phase these types of player roles out altogether (limiting the complexity of encounters that developers can create).

Secondly, and more importantly, it can also negatively impact the play experience of the *income-poor* (as outlined above, Chapter 3. Section 3.2.a.). Their outward appearance and/or language used, relatively poor performance in numerical performance data, and their limited access to powerful equipment, becomes universally associated with poor ability and effort. This prevents them from being accepted into player groups that allow them to access more challenging content, which could improve their performance “numbers”, turning into a vicious cycle that leaves the *income-poor* to mire in poverty, reflecting on their own failures on the edges of virtual society, as those that are *affluent* continue to rise to the upper limits of the MMORPG – social stratification has been consolidated as a function of that virtual society.

3.6 The death of MMORPGs, developer life support

With the recent surge in the popularity of the genre, more and more regularly, the *affluent* members within an MMORPG community become deified by other players, and consulted by developers for their insight into the design of content. While player consultation is widely accepted in games development as a means to better tailor a product for its targeted demographic, an MMORPGs

sheer scale and variability in both audience⁹ (in terms of experience and motivations) and content (in terms of catering for different play styles^{55a}) should preclude its developers from designing new content before assessing the wider social landscape. However, often, new content *is* designed with consultation only coming from an *elite* player group. This content only serves to raise the upper limit of an MMORPG, increase the scale at which social stratification can occur and further strengthen the position of the “meritorious” at the top of the social scale.

Inevitably, as social stratification matures the meritocratic social structure, the divide eventually becomes a nigh impossible to bridge chasm. It is important to note, in a virtual world, a player can choose to disconnect from it, essentially committing virtual suicide (suicide, due to the very real player association and emotional investment made with all of their characters^{55b}). As player dissatisfaction becomes more prevalent and the virtual society becomes more toxic in nature, virtual suicides become more widespread on both sides of the divide^{xxxvi}.

High end or *affluent* players naturally disconnect of their own accord as they exhaust their player lifecycle⁷⁵. Bartle terms this type of player loss or *churn* as *drift*^{55b} and it is characterized by players fading interest and bond with an MMORPG as they appear in the virtual world less and less frequently, and eventually, not at all. However, in a meritocracy, with the magnitude of the social divide making it prohibitive for lower status, *income poor* players to replenish their numbers, the population of high end, affluent players slowly and irrevocably diminishes.

Lower end or *income poor* players disconnect from the dissatisfaction at not having their self-perceived ability and effort being adequately rewarded, not uncommon due to the differing nature of MMORPGs from single player games. However, the polarized social stratification, and difficulty of progression in MMORPGs governed by a mature meritocracy, makes churning particularly

prevalent. Bartle terms this type of churn as *sink*^{55b} and it is, typically, a more immediate process than drifting.

The combined effects of *sink* and *drift* often leads to player churn outpacing player gains, or as Bartle terms it, *newbie flow*^{55c}. As the population base of an MMORPG diminishes, so does its attractiveness as a choice for potential new participants, compounding the problem of low newbie flow. Bartle argues fostering stronger community bonds^{55b} can minimize player churn. However, a society governed by the rule of merit, as the majority of virtual worlds are, specifically eschews the formation of a wider community¹².

Many MMORPG franchises that have taken the route of a meritocracy, and subsequently faded into obscurity, but this thesis will choose to focus on one notable franchise, which, at the time of its release, was considered a AAA grade titles^{xv}. Attempting to capitalise on the brutally difficult gameplay and a brutally stratified society, celebrated by high-end MMORPG players, it was poorly received and, subsequently, the development team was disbanded within two months of its release.

3.7 *Hath no FURY*

Created by Brisbane based developer, Auran, over three years, and billed as one of Australia's biggest ever original releases, when *Fury* was finally launched it was called, "*bloated*", "*boring*", "*pestilent*", and "*...what Guild Wars would be like if it got fat and addicted to amphetamines...*"^{138 139 145} It also holds the dubious distinction of being the third shortest-lived MMOG ever to see release (behind Electronic Art's recently deceased *All Points Bulletin* and the all too revolutionary *SEED*)¹³².

In a detailed ethnographic account of Auran's actions during the development of *Fury*, John Banks suggested that the mismanagement of community relations with the co-creative gamer (or beta testers) led to *Fury*'s eventual downfall¹⁴⁶.

In a way, this was the truth; however, the problem was deeper than the communication difficulties between developer and participant-developer or co-creative gamer.

The true problem lay in the motivations of these co-creative gamers, which was acknowledged by Banks as complex and subtle “markets” of “...*reputation, opportunity, learning, recommendation and access...*” The type of co-creative gamer that Auran recruited in their attempt to create a community to surround and nurture Fury’s development was governed by attention seeking, competitive motivations based on the exhibition of merit. This inevitably led to its downfall: in Bartle’s words, Auran invited in too many *killers* and not enough *achievers* or *socialisers*^{55a}.

In the lead up to its release, Adam Carpenter, FURY’s lead designer, stated that, “... *Fury is 100% competition, and the competition exists at all levels...*”¹³³

Players’ progress was determined by their performance in combat with and against other players in three different arenas¹³⁸. Elimination was a pitched battle between two teams, either formed before the battle or at its initiation. Bloodbath was an all-out brawl with no set alliances, although, in practice, this was rarely the case¹³⁹. Vortex was a variation of capture the flag^{xvii}. There were no other means of progression.

Progression was tracked using an array of rankings, ratings and standings, including an Avatar Rank^{xviii}, and the confusing use of skill ratings in a variety of combinations^{xix}. Fury was, also, one of only two major MMORPGs active at the time (the other was Guild Wars) that publicly displayed both group and individual ladder standings¹⁴⁰.

As we have already established, these numerical performance statistics, not only enforce and exacerbate the meritocracy within an MMORPG, but, also create a growing oppositional force to the formation of the strong virtual community that is necessary in minimizing player churn^{55b}. It is interesting to

note that Carpenter was well aware of the systemic flaws with taking this philosophy in games design. In a 2003 article, he wrote,

*"...Many times what appears to be ideal on paper is found unacceptable when actually applied in game, as small differences... become pronounced in the course of using them thousands of times..."*¹⁴²

Fury was unique, in that, at the time of testing, the developers initially implemented procedures specifically targeted at capturing an audience of hard-core players^{xx}, which led to evidence of accelerated social stratification. As a result, Fury was released with the reputation of catering to an already matured meritocratic social order, at which point, it promptly failed as a system.

The path to the collapse of the Fury's competitive meritocratic social structure began in January 2007, almost ten months before the eventual release of the title, with the commencement of testing on the first alpha build^{xvi}. to contain characters and progression. Unlike the accepted closed (limited to personnel within the development house) testing procedures of most MMORPGs^{55d}, instead of the designers, programmers, artists and quality assurance specialists viewing and stress testing the build, invitations targeted towards the more hard-core players within the general public, were issued¹⁴¹.

Lead designer, Carpenter, maintained that the reason for this peculiar method of quality assurance testing was to enable scale testing¹⁴¹. However, even Carpenter, in an earlier article¹⁴², acknowledged there were problems to this method of iterative testing^{xxi}. While it was never publicly disclosed, the open free invitation to test the alpha build was, in reality, probably motivated by Aurans' marketing department. Unable to satisfy the originally predicted January 2007 release date, it was hoped this would sate the appetite of prospective players and garner more media attention¹⁴¹.

The alpha build failed to have the desired effect, however. Its lack of functionality, the low value new player testers placed on the free invitations

and the nature of hard-core players normally used to more polished products, resulted in massive player churn^{xxii} and negative media exposure¹⁴¹.

Meaningful test results could only be achieved by a small pool of exceedingly dedicated players. Because of this, the responsiveness of the development team became a detriment, as design decisions resulted in iterative changes, which were of most benefit to this small pool of players, who, by then, were, comparatively, veterans. This consolidated the position of the hard-core gamer at the top of the social hierarchy and extended the limit at which stratification between these meritorious few and the masses of new testers could occur.

As a result, Fury had difficulty forming a community at a time when the community was specifically being asked to contribute to its development. Where other MMORPGs, which might have had highly meritocratic virtual worlds (such as EVE Online^{xxiv}), were able to cultivate external communities by allowing players to invest their own ideas in the direction of development, the lack of community surrounding Fury indicated the strength of the meritocratic social framework transcending the bounds of its virtual world.

In an attempt at conducting more sizable tests an increasing number of free open alpha invitations were handed out, which, by then, were no longer only targeted towards hard-core players within the general public, but also more casual players. However, as the extremely power hungry alpha build was becoming increasingly complex^{xxiii}, it only served to amplify player churn and generate more negative media coverage. This presented a significant drain on the pool of prospective players who would have otherwise purchased the title at its eventual release. In order to fulfil testing requirements, the effect of massive player churn became systemic.

As the presentation of Fury came closer to the expected AAA release standard, again, and despite interjections from other departments¹⁴¹, the marketing department of Auran intervened. With the commencement of the beta stage of testing, they announced an open beta tournament with cash prizes totalling one million dollars, Fury Challenge. It was believed that the large prize pool

“...above and beyond the reality threshold of most gamers...”¹⁴¹ would attract more players, as it had attracted major media attention.

Teams of players near or at professional competition level promptly joined the Fury open beta and, after a period of acclimatization, became the meritocratic elite. This proved to be the catalyst that tremendously divided the social structures polar opposites: the *income poor* and the *affluent*. Carpenter stated after the competition,

“...Ultimately, I think it caused more problems than it was worth. A lot of uber competitive and highly skilled players who wouldn’t have normally played Fury came in and they drove a lot of the more casual players off...”¹⁴¹

With the focus on the high-stakes encounters between the competitors of the meritocratic elite, those not part of that player group found themselves subjugated through what few arena matches they could participate in and quickly sunk out of existence. With the loss of the lower order social group, the masses, the collapse of Fury’s meritocracy was complete.

The decision to host Fury Challenge had an irreversibly damaging effect on the subsequent testing and release of the title, despite the last-minute removal of a form of performance classification in rank progression, as an attempt to allow for more equality within the MMORPG¹⁴¹.

Fury’s virtual world went “live” at five in the morning on the 16th of October 2007. Suffering from a low population base that mainly consisted of the remnants from Fury Challenge slowly drift churning away^{135 143}, and negative reviews citing the lack of variety, the bloated design and poorly conceived interface, frenetic and confusing action, and the difficulty of facing seasoned veterans just weeks into its release^{138 139}, the majority of the development team responsible for Fury was disbanded two months after its launch¹³⁶.

Fury still had a small number of dedicated supporters in its core player base, and, in order to attract more players Auran applied numerous updates, large prize pool tournaments, and added features, most notably, the inclusion of

non-player versus player content, and the removal of fee-based subscriptions. However the attempt to remedy what existing players perceived as exclusivity only served to alienate those few left. In the end, the collapse of the meritocratic social order had proven to be final and on the 6th of August 2008, the virtual world of Fury disappeared into nothingness¹⁴⁴.

Chapter

4

Case Study of Singapore

We have previously established that MMORPGs, as virtual microcosms of society, are often observed as having similarities to the real world. So, by extension, it begs the question, does the real world bear, in part, any resemblance to a MMORPGs virtual world?

While deep investigation into the political economy of the social control surrounding Singapore is beyond the scope of this chapter, it will briefly discuss the nature and development of the meritocracy of Singapore, and whether it holds any similarities with the meritocracies evident in MMORPGs.

It has been no secret that Lee Kuan Yew has, since the late 1970s, advocated the cultivation of talent/human resources through a rigorous meritocratic system of education and the creation of paternalistic bureaucratic elite to take care of national and international affairs on behalf of the population of Singapore. Observers such as Tan⁸⁵, Bellows⁸³ and Gopinathan⁸⁶ would be inclined to agree with the now "Mentor Minister's" assertion that his bold vision was the reason for the country's success today^{xxxiv}.

Singapore is now the only *Asian Tiger* to still employ a meritocracy. One could say that this was due to an inherently smaller and more easily manageable population base, however, with rising levels of inequality and increasing costs of living (United Nations, Human Development Report 2009), theorists such as Barr⁸⁷ and Huat⁸⁸ have noted cracks appearing in the facade.

4.1 The dilemma of a small country

During the turbulence of the 1950s to, even, the late 1980s, Singapore faced several challenges that foreshadowed its current day economic and political resilience.

The segregation of ethnic groups in Singapore, at this time, was entrenched within the population's psyche, having submitted to British colonial rule for almost 150 years. People referred to themselves as Chinese, Indian or Malaysian, but the term Singaporean did not become widely used until the 1980s. In 1965, due to worries by the Malaysian bureaucracy that the PAP's growing influence might overshadow their belief in *ketuanan melayu* (the institutional belief in the superiority of Malays); Singapore was expelled from the Malaysian state. Political unrest, and widespread rioting, arson and vandalism by students stemming from racial and political tensions incited mainly by the Communist Party of Malaya^{xxix}, continued to plague the Singaporean government until 1971. While visible hatred has subsided, tension between ethnic groups continues to this day^{83 149}.

At the same time, the post pacific war baby boom led to an annual population growth rate of 4.4%, far outpacing the trifling job creation rate resulting from the lack of industry and reliance on entrepot trade activities that were no longer existent. In the years after the PAP was elected (1959), there were more than two graduating students from middle school for each new job created, per year¹⁴⁹.

For Lee Kuan Yew, the greatest dilemma for Singapore became the question of what was required to best employ the nations burgeoning population of unskilled and unemployed workers.

With no other choice, the political leadership had only Singapore's geographical position to exploit. Towards the late 1960s, as other south-east

Asian economies began lagging from the long term effects of Import Substitution Industrialisation, Singapore began a process of revisiting its economic roots as a trade based industrial nation.

In order to fulfil the mandate of an Export Oriented Industrial development strategy (or EOI) of the 1970s, Lee Kuan Yew's People's Action Party saw the development of the *only* resource readily and abundantly available, human resource, as *paramount* to Singapore's ongoing existence¹⁴⁹. This necessitated the creation of an extensive and rigorous education system that would greatly motivate its participants to excel¹⁴⁸.

To best cultivate Singapore's human resources through education, the political leadership eventually settled on a system in 1978 that would seed the progression of its society towards meritocracy. This would seem as no surprise with Singapore's deep ties to Britain and the popularity Labour's conflated egalitarian interpretation of meritocracy at the time (in fact, the PAP was formed by English university educated professionals)¹⁴⁹.

4.2 The making of Lee Kuan Yew's machine

Britain had a robust system of government, which kept in check the influence of Labour's manifesto, *Let us face the future*. However, this was not the case in Singapore where, after accusations of Communism^{xxxiii}, and arrangements with the labour factions, the PAP has now dominated the Singaporean political sphere with unbroken legislative assembly rule since the party's initial election in 1959⁹¹.

This absolute political dominance, combined with a wandering, leaderless opposition, allowed Lee Kuan Yew to pursue the long-term social engineering projects he had been unabashedly vocal about, and a proponent for.

For the first decade of its independence, the PAP acted on their most pressing issue of unemployment and the poverty stricken living conditions as a result of it. The Housing and Development Board was set up in 1960 and funds were funnelled into it that allowed it to create jobs clearing the existing shanty towns, and constructing and allowing people to purchase and move into low cost high density housing^{83 149}.

At roughly the same time as the establishment of the Housing and Development Board, the Ministry of Education was also set up (1959), and all educational responsibilities as well as the construction of new schools were passed onto the organisation. The perceived centrality of the continued improvement of Singapore's workforce to the survival of the city-state was indicated by the expenditure on education in the ministry's first decade. In the first year of its independence, the government spent almost 29 per cent of the total national expenditure on education. This peaked in 1964 with almost 32 per cent of that year's total national expenditure spent on education (by comparison Australia spent a little more than 1.6 per cent of total national expenditure on education in 1964)^{147 149}.

The importance placed on education by the PAP seemed to be embraced by the Singaporean population as indicated by the rapid increase in school enrolments, particularly in secondary schools, where the secondary population more than tripled between 1959 and 1968¹⁴⁹. However, entry into secondary colleges was not guaranteed. Students had to pass Primary School Leaving Examinations (PSLE) before being able to move into secondary education, and it became apparent that there were thousands of less academically inclined students who either did not pass the examinations or left entirely, prior to completion. At the same time, with the influx of multinational corporations, the political leadership saw a need to develop technically skilled individuals to provide manpower for Singapore's growing industries. In 1964, the first indications of the coming meritocratic system appeared in the form of vocationally based (as opposed to academically based) secondary colleges. As it became apparent that the limited enrolment into vocational institutes would

not be enough to sate industry demand, the Technical Education Department was set up in 1968 and, in the following year, it was determined that all lower academic secondary students were also required to have two years of vocational training.

A concerted mandate for a rethinking of education strategy, though, did not emerge until 1978, after numerous and haphazard attempts at addressing the high attrition rate and low status and morale of teachers^{xxx}, as one Member for Parliament pointed out,

“The point is we were so concerned with objects and objectives that we lost sight of the fact that we were dealing with children and people¹⁴⁹”

However, instead of re-engaging with the student and teacher population, a total overhaul was instituted based on the recommendations of the “Goh Report”, a document produced by a committee of systems engineers and chaired by the then Deputy Prime Minister (Dr. Goh Keng Swee). In the document, it was determined that the push for universal bilingual literacy had proven ineffective and it was recommended that those pupils without the ability to excel academically be screened out and prepared for vocational careers.

With eerie similarities to the social development of Britain in Young’s fictitious essay, Singapore had truly begun its *Rise of Meritocracy*.

4.3 Singapore today, for richer and poorer

Over thirty years have passed since the implementation of the “Goh Report”. An entire generation of Singaporeans have filtered through its education system and meritocracy has become entrenched as the status quo.

It is often referred to as a technocracy, in reference to the terms utopic use in the early 1920s in the United States^{xxxI}. However, in practice, it has turned out to have more in similar with its literal Greek translation (*tekhne* and *kratos*, literally meaning, *rule by skill*, analogous to the *equation of merit* (Chapter 3, Section 3.2.c.)) than its previous utopian ideals of “technology making society better”. In fact, the definition outlined by Howard Scott in a 1965 communiqué to J.K. Faulkner, an associate professor of economics from Western Washington State College, is almost indistinguishable from the definition of Meritocracy created by Young seven years earlier. Both Scott and Young developed these concepts independently of each other.

However, the use of the term technocracy, conflated, simultaneously, with egalitarianism and the utopian visions of the 1920s, along with the undeniably tremendous economic growth Singapore has experienced since the 1980s, has helped the PAP surreptitiously arrest the power over ideological discourse from the public, *for why fix that which is not broken?*

While the thirty year autocracy of Egypt was being toppled in early 2011, Lee Kuan Yew’s (who still holds the position of Minister Mentor) PAP continued to hold unbroken rule over Singapore, with sometimes 100 per cent majority in the legislative assembly, now lasting over sixty years. It has left the supposedly democratically governed population unwilling and/or apathetic to political change, and a minority opposition unable to provide little more than petty criticism of current government policies, much less create viable alternative governmental policies. The shortcomings of the political opposition became painfully aware in a 2001 interview of Warren Fernandez, now the deputy editor and foreign editor of Singapore’s *Straits Times*,

“Consider the case of Singapore Democratic Alliance candidate Sin Kek Tong. Five years ago, I interviewed him at a press conference held at an HDB void deck, in the run-up to the 1997 elections. What plans, I asked do you have for Braddell Heights, the ward he hoped to contest. ‘I have no plans,’ he replied cheerfully, insisting that he was only an opposition candidate. Out of

desperation, my colleagues and I threw him a lifeline. What about upgrading, covered walkways, better transport? 'Yes, yes, I will do that,' he replied. 'Any more ideas?'"

(Fernandez, 2001, Dep. Ed. The Straits Times)

The inability and/or unwillingness to even provide pretence of holding the PAP accountable has meant that the PAP members of the bureaucratic elite have come to embody the very essence of a meritocratic elite. Disconnected from society, they have been allowed to thrive on cronyism and nepotism on a systemic scale, and have, in the meantime, neglected or wilfully ignored the societal problems, which have emerged from this system of governance.

There can be no greater example of nepotism than the Prime Ministership of Lee Kuan Yew's son, Lee Hsien Loong. While Lee Hsien Loong is undoubtedly well equipped for the job, having studied at Trinity College, Cambridge University and Harvard University's Kennedy School of Government, his rise to power has been a product of the exploitation of the inequalities prevalent in Singapore's now matured meritocracy.

With the understanding by the political leadership that Singapore needed to move from a manufacturing centric economy, not least because of the lack of local natural resources, to knowledge based economy, in 1997, the development strategy for education shifted from one of a survival based efficiency driven system to a truly meritocratic system – an ability driven education system. Drawing inspiration from the American system of education, students are tracked all throughout their academic lifecycle and streamed according to their perceived “ability”. However, as can be seen in Figure A.¹⁴⁹ it created a complicated system of education that not only limited the instances in which students could excel once they were assessed and streamed after leaving Primary level education, but it rapidly promoted more academically gifted students and less academically inclined students were left to mire in a curriculum that had been left untouched since its initial inception in 1978, with virtually no chance of advanced tertiary study¹⁴⁹. It also, again,

brought to light the question of assessment, as emphasis was placed on technically based courses, such as engineering, mathematics and technologies, with more artistic, social and cultural studies less favourably viewed in the structured examinations assessing ability.

As can be seen, there are numerous deficiencies inextricably linked to the stratification provided by the education system, however one prominent issue is the concept of multi-racialism. Multi-racialism (often likened

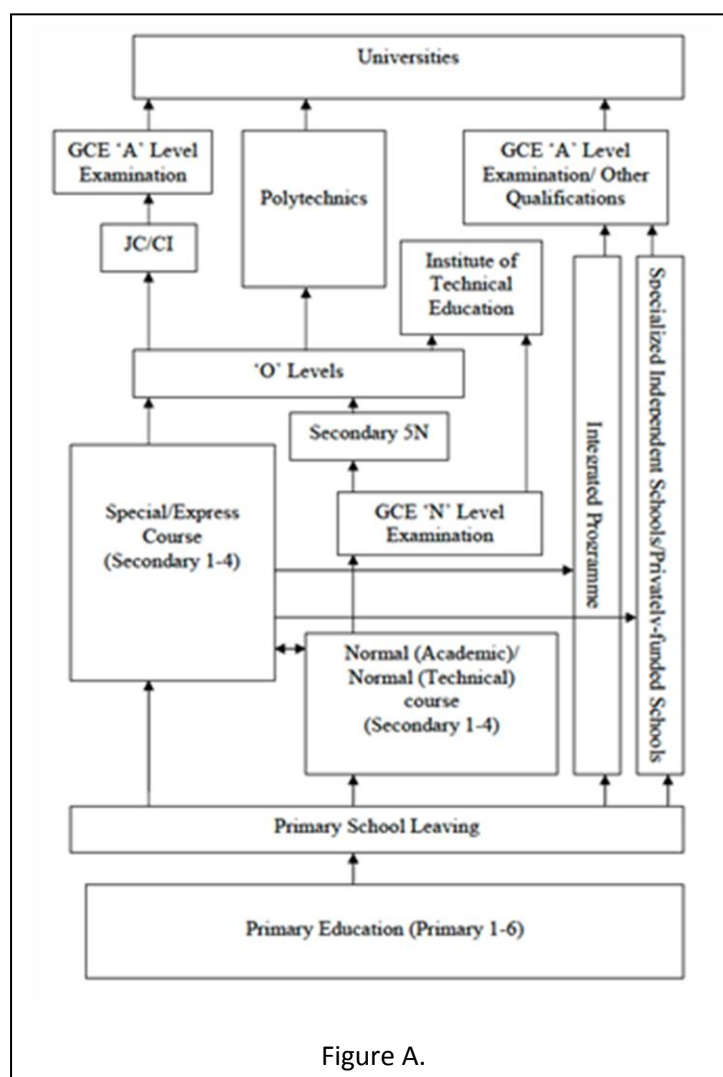


Figure A.

to multi-culturalism in Australia) purports to recognize ethnic minorities as full members of a nation, while still maintaining their own cultural and religious mores. However, theorists such as Barr and Low⁹⁰ argued that these race specific community organizations, and especially after 1989 with the creation of EA and SINDA, and the ascendancy of CDAC, had become more concerned with assimilation into a predominantly Chinese society, rather than inter-communal tolerance.

Rather than the pressure to assimilate abating, recent rises in militant Islamist activity led to the apathetic response of letting the pressure to assimilate continue to intensify. The *Straight Times Interactive*, reported on the 25th of July, 2003, Lee Kuan Yew's dialogue with union leaders,

[Lee] also noted that Malay women who put on the Muslim tudung, the headscarf, were finding it especially hard to find jobs. He said: 'they complain that when the employer asks them: "Do you wear a tudung?" when they say "yes", the employer says: "I'm looking for a Chinese".'

While conceding the issue was indeed 'a problem', he also said it was a reality of living in a multiracial society. Instead of launching into another feat of social engineering to combat this pervasive discrimination, as he so often did in the past, Lee Kuan Yew displayed traits, which indicated the calcification of the polarized meritocratic social order.

Another example of the failure of PAP's faith in the meritocratic ideology can be seen in the increasingly highly paid bureaucratic sector comprised, predominantly, of individuals of Chinese origin (as a result of the initial dominance of the Chinese ethnic group during the formative years of Singapore, which led to a generation of wealth that outpaced other ethnic groups). With the establishment of Singapore as an independent city-state, Lee Kuan Yew implemented a plan to recruit the best and brightest from all facets of Singaporean society, from academics and entrepreneurs to military personnel, filling the ranks of a new bureaucratic elite, which was given the paternalistic role of guiding the development of Singapore.

It was Lee Kaun Yew's deeply held belief in the applicability of "talent" to better any situation that was the basis for the legitimization of the Singaporean political process. He saw "talent" as a tangible quality derived from one's genetic heritage and sought to identify this talent from an early age in school and then funnel all resources into nurturing this "talent", exposing them to ever more challenging intellectual tests and then selecting and rewarding the best. The chances of surviving this process and entering the bureaucratic elite were so rare that, as Lee Kuan Yew^{94 85} vividly claimed if *"...all the top 300 [civil servants and political elite] were to crash in one Jumbo jet, then Singapore will disintegrate..."*

However, the subtext of the above statement is indicative of the current problems in the public sector. The previously mentioned hampering of the democratic process facilitated the creation of a meritocracy fostering a bureaucratic elite, politically and psychologically insulated from reproach, thoroughly disconnected from society, and designed to administer ambitious and broad policies to socially engineer the Singaporean society. As Pellizzoni⁹² said of a technocracy, *"...the elite is suitably 'protected' against the rest of society and is able to perform its tasks efficiently."* or, as Lee Hsien Loong⁹³ would put it *"...in almost laboratory conditions"*.

This has led to the increasingly invasive micromanagement of all facets of life by the bureaucratic elite under the pretence of doing what is best for the Singaporean population, including a considerable investment in manufacturing and infrastructure development as a by-product of the policies of the Housing and Development Board. Of this, Lee Kuan Yew was quoted saying in *Straits Times* on the 20th of April, 1987⁹¹,

"I am often accused of interfering in the private lives of citizens...Had I not done that, we wouldn't be here today. And I say without the slightest remorse: that we wouldn't be here, we would not have made economic progress, if we had not intervened on very personal matters - who your neighbour is, how you live, the noise you make, how you spit, or what language you use. We decide what is right. Never mind what the people think."

As a consequence of the extreme exclusivity of the bureaucratic elite, and the majority of industry bodies and infrastructure projects owned wholly by the government or through a government linked company, in a technically driven job market, there are relatively few employment opportunities that are not strictly regulated or overseen by the government. This has led to an increasing number of highly skilled Singaporeans, dissatisfied by the government controlled career advancement and emphasis placed on the bureaucratic career path, emigrating to where their level of education is more highly valued.

Even the now Minister Mentor (Lee Kuan Yew) has admitted to the significant problem of *brain drain* occurring in the city-state¹⁵².

As a result of the combination of the streamed and stratified education process, the highly strenuous bureaucratic selection process and the emphasis placed on Chinese assimilation, rather than cultural tolerance, theorists such as Barr, Tan and Bellows, have noted the indications of accepted legitimized discrimination being inculcated into the social elite, outlined above by Sidanius and Pratto. It is a clear sign of the consolidation of meritocracy as a divisive force in the modern Singaporean society.

4.4 Comparisons between the virtual and the real

Unfortunately, it seems that the political leadership of Singapore failed to heed to warning signs that initially sparked the “Goh Report” in 1978, and have continued to be “...so concerned with objects and objectives that we lost sight of the fact that we were dealing with children and people¹⁴⁹...”

The actions of Singapore’s political leadership and their consequences have proven analogous to that of MMORPGs. If we compare Singapore’s current situation with Lister’s principles concerned with the problems of the meritocratic ideal (Chapter 3, Section 3.2) we can begin to see commonality between the social structure of meritocratic MMORPGs and Singapore.

Firstly, that the meritocratic distributive mechanism has led to inequality that has undermined its ability to be an allocative mechanism of equal opportunity. Examples of which, can be seen in the Singaporean education system and the selection of members of the bureaucratic elite. This is analogous to the progression system in place in MMORPGs and the exclusivity of access to end game content^{xxvii}.

The most visible assessment of merit is in the form of grading for the Singaporean education system and progressive levelling in MMORPGs. This automatically predisposes positions of power to those of higher grading, which is an indicator of relative experience, irrelevant of an individual's ability. As a result, for Singapore, those that are expedited through the education system are more likely to occupy the limited placements within the bureaucratic elite than the students progressing at a standard pace, and those who are thrust into the vocationally based education system are excluded from possible selection altogether. Players in MMORPGs are also subject to the same issues in progression. Those player characters that advance faster within the virtual world (nearly always the more *hard-core* player group^{xx}) typically are the first to be able to generate the critical mass and occupy the positions of end-game^{xxxv} conquering guilds. More

typical players form the bulk of the virtual world community and usually form more casual player groups, occasionally making forays into the end game, but rarely being able to overcome obstacles¹⁵. Players who are less inclined to participate in multiplayer activities, such as guilds and grouped enemy encounters do not reach end-game^{xxxv} content at all (Figure B.).

Secondly, that the distributive mechanism continually overrides equal opportunity leading to the exacerbation of inequality, which is indicated by the normalization of discrimination, not only of the

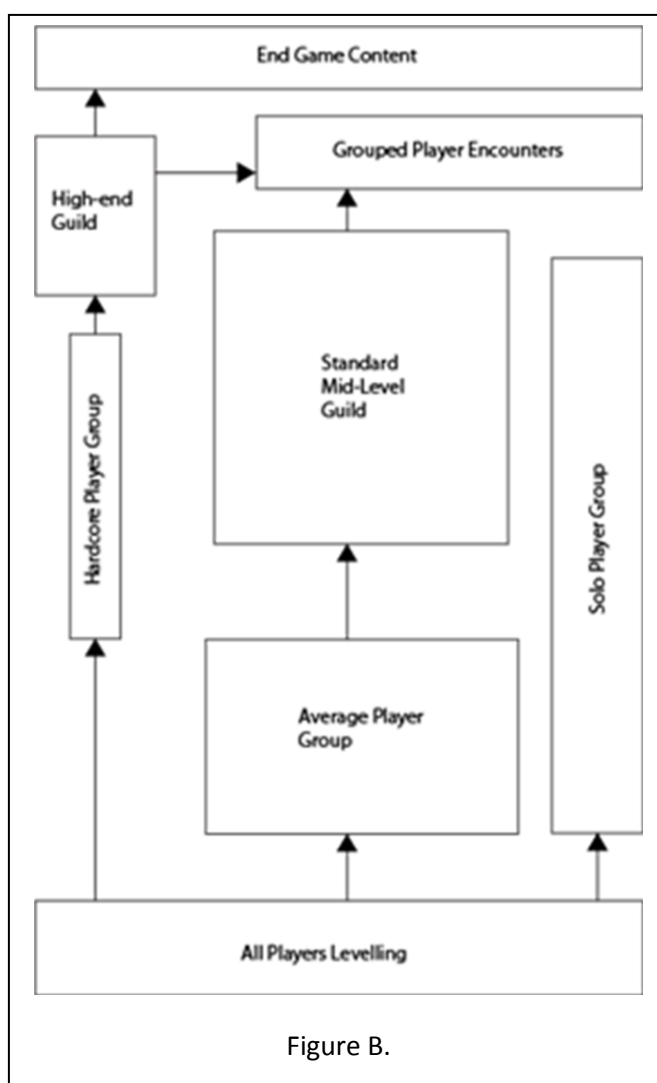


Figure B.

less academically inclined, who have been left to flounder in a vocational education system that has not been developed since its inception, but now, also the predominantly Indian and Malay castes who have not enjoyed the same benefits that have trickled onto the Chinese segment of the population who have typically dominated the bureaucratic elite. As Barr noted in the *Charade of Meritocracy*⁸⁷ the normalization of discrimination has led Chinese to believe that they “...*must be much smarter and harder working than the minority Indians and Malays. [Considering] the distribution of the top jobs in various arms of the Singapore government service in the 1990s...*”^{xxxii} A misinterpretation of Singapore’s growing socioeconomic inequality.

The same can be said in MMORPGs as well, where the derogation of the language (Chapter 3, Section 3.2.b.) within the virtual world can be seen as an indicator of the normalization of discrimination. After the first wave of new players to appear at the launch of an MMORPG virtual world, an isolated new player may be derided for their lack of knowledge and/or skill, when in fact; they lack the very support structures afforded to player groups to develop that allow that kind of knowledge to develop. Their low character level also provides a disincentive for others to provide that support, as the return on social capital investment may take a significant period of time. All of this leaves that new player disenfranchised and less likely to participate.

This is evidence that proves true Young’s prediction of the long-term effects of meritocracy on the psyche of the meritocratic elite²³. But the long-term effects of meritocracy is not just limited to normalization of discrimination, it also concerns the calcification of structures of inequality aptly described by Patrick Diamond who stated that, “...*pure meritocracy is incoherent because, without redistribution, one generation’s successful individuals would become the next generation’s embedded caste, hoarding the wealth they had accumulated*”¹¹⁵. While the Lee dynasty is the most visible example of a family based *embedded caste*, the general comparative socioeconomic advantage of Chinese-Singaporeans provides aspects of an *embedded caste*. This includes the advantage of speaking Chinese language in gaining

employment, despite the fact that the national language of Singapore is Malay, the success of Chinese speaking schools, who are able to leverage on the wealth of Chinese benefactors (whose children attend these schools), and the overwhelming Chinese majority in governmental and corporate executive positions^{xxxii}.

The issue of the existence of castes, however, is not just confined to the real world. Within the virtual world of an MMORPG, the ethnic caste of the Chinese in Singapore is equivalent to high-end guilds and the hard-core player group as a whole, while the family based embedded caste, like the Lee dynasty, can be likened to the stable of characters a player has under their control. Not only are these player groups relatively affluent in comparison to the general player population within a virtual world, but also new characters affiliated with these player groups are immediately provided with access to the support structures and wealth that allow them to rapidly ascend into a position within exclusive high-end guilds at the expense of other player characters who may not have access to such support (namely, new players).

This can extend beyond the realms of the virtual world when the use of player based co-creative expertise is employed as part of an MMORPG's development. As was the case in the failed Auran franchise, *Fury* (Chapter 3, Section 3.4), the consultation of elite player groups, far from improving gameplay for the entire MMORPG player population, only served to increase the scope for which social stratification between the meritorious and less meritorious could occur, by introducing new mechanics that only aided the consolidation of the social position of that elite player group.

And, finally, the very emphasis on a technology driven meritocracy (i.e. technocracy) inherently precludes more artistic and cultural pursuits from being valued as meritorious within society. The lack of appreciation for the development of cultural artefacts, combined with the stifling of ideological discourse by the PAP, has led to the continuation of racial tensions and anxiety in ethnic groups over losing their cultural identity⁸⁸.

The assessment of merit is also problematic within MMORPGs. The systemic reliance on numeric performance data (as outlined in Chapter 3, Section 3.2.c) fails to recognize the efforts of classes and playing styles, which produce results not easily interpretable using numbers. This provides a disincentive for players to choose such classes and play styles. While it may not be readily apparent, the lack of these classes and play styles, especially if they were originally designed to be unique to the genre, can limit the scope of the content the developer is able to create and eventually lead to the loss of an MMORPG's cultural identity.

While there are differences in the forms in which Lister's principles exist within Singapore and MMORPGs, the applicability of them to both worlds inextricably links their development as societies.

Currently, meritocracy still provides Singaporeans mobile, effective, and modern governance, and the associated positive ideologies (such as egalitarianism) are, undeniably, still attractive to society, especially those of developing nations. Though, as Barr⁹¹ noted, it is, nevertheless "*...riddled with distortions and failings that seem to make a mockery of the basic principles of its legitimacy...*"

Similarly, while the use of meritocratic distribute structures in MMORPGs still provides players with incentives to continue to participate with these virtual worlds and can lead a select few developers to commercial success, they too, are riddled with problems in the progression of the society within them.

Will these inconsistencies bring Singapore to an explosion of revolutionary sentiment in the public consciousness as Young described at the end of *The Rise of Meritocracy*, or, will we see, instead the slow churn of Singaporean's, as displayed by MMORPGs, slowly kill the nation.

The current evidence points to the latter, with Singapore exhibiting signs of a skills *brain drain*, further affirming the link between the social structure of MMORPGs and the real world meritocracy of Singapore¹⁵².

Conclusion

This thesis has explored the underlying forces beneath the often conflated notion of meritocracy and has discovered that, at its core, far from providing equality of opportunity for all, it is a polarizing engine of inequality, with the distributive mechanism hitting new members of a society that is afflicted with it, the hardest.

It is because of this that this thesis determined that the use of meritocracy in its current form as the engine of progression within MMORPGs does not provide a viable means for long-term societal sustainability. Still, the unfortunate truth is that, currently, there is not a viable alternative to this kind of designed scarcity (in an environment that should preclude scarcity) that would provide motivation for players to continue to invest within an MMORPG virtual world. Unless real world changes in the societal understanding of scarcity, inequality and the thirst to be at the top of the resultant power structures occur, a virtual world's unending abundance in all virtual resources barring time itself, which are divorced from the physicality of real world scarcity, will continue to fall outside the scope of the human psyche.

However, it was determined in chapter two that while MMORPGs are currently the most prevalent form of meritocratic social structures, they were not the first type of multiplayer form of structured play, either virtual or physical, to employ these structures, and that these structures were in fact inherited from a long line of predecessors, ultimately, starting with army officer training exercises from the Prussian army, Kriegsspiel, and the 16th century art of improvisational theatre, Commedia dell'arte. The strength of the meritocratic social structure has allowed it to survive all these iterations of structured play, and, while it is beyond the scope of this thesis, whether or not meritocracy is a function of human society in all its spheres, and whether it can be proven to be analogous to Social Darwinism, deserves further investigation.

In its final chapter, this thesis has determined that the effects of meritocracy on MMORPG virtual worlds were mirrored by the real world. By comparing it to one of the last remaining nation to employ a meritocratic system of education and job advancement, Singapore, it was determined that, the same polarizing force for inequality were also apparent in this society. The similarities it bore to the progression of the MMORPG social structure, begged the question whether MMORPGs could provide an adequate simulation as to the future of Singapore, and, by extension, whether MMORPGs could provide adequate simulations for the future of other units of human society, whether they be developing or industrial nations, educational systems and/or workforces. Although it is not explored in this thesis, it, also, deserves the attention of further investigation.

Finally, it can be said that MMORPGs represent a new frontier for society¹, allowing us to explore and experiment, for the first time, in a reality not of earthly origins. Not only can they provide a new form of spatial experience, but also further lower the barriers to communication, providing the closest analogy to getting coffee with friends. They can advance theories in viral and bacterial transmission, the development of social movements and expand our perception of identity. They are an incarnation of hyper-reality and a demonstration of Borges's *Del rigor en la ciencia* (1946).

In fact, MMORPGs could eventually feed society's need to innovate and progress. But, while the process has already begun with a new breed of scholars such as Edward Castronova, Constance Steinkhueler and Nick Yee, more must be done to overcome the trivialization of MMORPGs as a leisurely past time, before the power of another world can be fully utilized. On the other hand, MMORPG scholars must also restrain themselves from euphoric sentiments that can arise from the investigation of a new, dynamic and, admittedly, entertaining field of study.

While this thesis was mainly concerned with the various incarnations of meritocracy, both real and virtual, it aimed to bring to light not only the

natural human tendency to gravitate towards organized social structures, but also the importance of MMORPGs as a microcosm of human society and human nature, and, in the pursuit of understanding human beings, the power of MMORPGs as a testing ground for sociological experimentation cannot be underestimated.

As an overweight, and crude little boy on South Park, perceptively once said, on the matter of the significance of World of Warcraft,

“You can just hang around outside in the sun all day, tossing a ball around, or you can sit at your computer and do something that matters!”

- Eric Cartman, directed at Stan Marsh and Kyle Broflovski
(South Park (Episode 147) – “Make Love, not Warcraft”, 2006)

Glossary

- I. Although, it could be argued we have now entered the sixth generation, marked by the explosion in MMORPG titles (today there are over 315 active¹⁰⁵, although a recent Niko Partners study indicated market saturation¹⁰⁶), and the relative ease of access, with many of these being, initially, free to play (often more advanced equipment and features required the investment of earthly currency).
- II. In 2008, World of Warcraft held a 66.2% market share, which grew from a market share of 52.9% in 2006, although cultural differences have limited its impact in Asia¹⁰⁴. It is expected to continue to grow, as its market monopoly, similar to the position of Facebook in the social networking landscape, becomes a necessary normalcy for MMORPG players.
- III. Virtual worlds, particularly more mature ones, have had many updates applied to them by developers, either to implement new features or correct faults in existing ones.
- IV. Though he finds the question clumsy and problematic.⁸¹
- V. Simultaneously operating more than one character at a time is termed *boxing* usually prefixed by the number of characters being operated at one time, e.g. two characters is *dual-boxing*¹¹⁷
- VI. As it can be argued that a player is freer to explore more radically different behaviour¹¹⁴ from their earthly bound *social masks*, as social masks allow a person to more freely explore different aspects of themselves than their *private masks*

- VII. Use of the term, *or*, because in many MMORPGs, particularly ones with a large user base, the user base may be split into many different virtual worlds (contained within computer servers). In most cases these different virtual worlds are estranged from each other.
- VIII. Although, it could be argued that the time it takes for early adopters to reach the upper limits of content within an MMORPG could be considered the first (and only) defined generation, notwithstanding expansion packs.
- IX. L33t sub-culture¹²¹ was derived from the very beginnings of home internet usage, where there was a definitive split between average commercial and personal consumers, and “elite” (from where the term l33t is derived, pronounced “leet”) users who were able to exploit the content of the internet at a very primitive level.
- X. Refer to: Zaheer Hussain and Mark D. Griffiths. *CyberPsychology & Behavior*. December 2009, 12(6): 747-753.
- XI. A group that either plays through a dungeon or raid, cobbled together from a range of complementary classes, who more often than not, have never met each other)
- XII. In MMORPGs, a character’s attributes, such as strength, agility and intelligence are numerically defined, a throwback to pen and paper Dungeons and Dragons game mechanics.
- XIII. In the case of World of Warcraft, addons such as Damage Meters¹²⁹ and Gear Score¹³⁰, which serve to more easily

calculate what was previously more difficult to.

- xiv. Although, it can be argued this type of mentality limits the types of complex encounters MMORPGs developers can create, leading to tedious gameplay lacking in variety.
- xv. AAA grade titles are typified by massive development and marketing budgets, for example, Final Fantasy XI had a development budget of between \$16 and \$24 million in 2002. They, typically, have higher production values than any other grade of game, are vetted more tightly by its producers, and distributed through traditional avenues before others (although this trend is shifting).
- xvi. Alpha testing is the stage of testing within a development cycle that precedes beta testing, or in the case of Fury, pre-beta testing. At this stage, only the mechanics of the game are being tested, with the build (version of the game) often lacking visual detail, description and cohesive transitions between different areas within the games environment. It is also often not optimized to run on consumer systems/consoles, and has to be compiled (built, as opposed to pre-built in beta and release builds) before testing. Often testing is limited to the in-house Quality Assurance (QA) team in this stage of testing.
- xvii. Capture the flag is a standard game type most often found in first person shooters (FPS). It involves opposing teams, usually two, defending a flag, or an object that represents a flag, that is located in their home base, usually a team's point of origin (otherwise known as a spawn point, where they are rebirthed when they die). In order to win, they must

also steal the opponents' flag and return it to their home base, without letting their own flag get stolen.

- XVIII. Avatar Rank is an indication of how advanced a player's character is. It is akin the "level" in more traditional MMORPGs.
- XIX. Skill Rating was applied to each combination of Avatar Rank, Primary Archetype and Game Type. Auran maintained that this allowed players to freely swap between different game types and characters without losing any skills already developed with their previous character. However, with estimates of between 240 and 4000 different combinations available, it became more confusing than informative.
- XX. While the term *hard-core* when applied to MMORPG players is a relative term, it is generally used in reference to players who consistently spend more time engaged in play in virtual worlds than the mean (typically in excess of 23 hours per week³). These players are also typically of the more experienced and *affluent* variety.
- XXI. Scale testing was derived from an Adam Carpenter's (Fury design lead) earlier work on applying risk analysis in order the balance RPG's (to balance is to find the ideal level of difficulty for players and content). In a Gamasutra article published in 2003, Carpenter outlined the iterative method for achieving such balance revolving around two steps. Firstly, modelling predicted player outcomes using risk analysis database software, and then implementing it to compare the modelled outcomes to outcomes created by real players. A problem to this type of testing was the total

inability for it to take into account unforeseen player actions. An example Carpenter outlined came from Asheron's Call 2, when certain changes in the mechanics of magic wielding mages meant the group dynamic within the game changed to make tanking classes, such as warriors, less prevalent, resulting in unforeseen methods of progression. Carpenter concluded, in such cases, the entire modelled prediction and scale testing would have to be re-modelled and tested to include such variables.

XXII. Acceptable Player Churn is when the gain and loss of player population that still allows for the maintaining MMORPG developer to come to a positive financial outcome at the end of each subscription or defined period. This period is usually measured in months, quarters and years. A smaller independent MMORPG will require a smaller population to allow it to subsist, and that smaller population is usually accompanied by a fiercely loyal community, resulting in lower player churn (MUD2 developed by Richard Bartle had a churn of only 4%), a higher player churn for small MMORPGs is usually detrimental as they do not have the resources to attract the numbers of new players to cover losses in player population. A large globally distributed MMORPG often has the resources to sustain higher levels of player churning^{55c}.

XXIII. The other factor that inhibited more casual players from participating within the alpha build stage of testing, was that the build was only available in a high render version, that is, the only available models, textures and lighting effects created so far, by Fury's developers were of extremely high quality, there were no lower quality

versions. This meant the only computers able to run the build at a usable level were on the cutting edge of technology, a type of machine only the most dedicated hard-core gamer might own.

XXIV. EVE Online, while not implementing all suggestions, is notable for taking player advice in improving the MMORPG. As an independent game development house, managing the relatively small self-sustaining population base within EVE, it has the advantage of being able to be extremely mobile and responsive to player requests. While EVE is known for its brutally competitive community, it has not suffered from the collapse of meritocratic structures as other MMORPGs have because of some unique features. Firstly, the virtual world (or universe in this instance) is so incredibly vast that, while there are areas of heightened player concentration, the relative distance between any two players as well as the complex interface, more akin to a simulation, makes it difficult to assess the progression of another. Secondly, EVE is unique in that the ability for a player to “level up” skills is automated so they do not have to be online to train. Thirdly, and most importantly, unlike even the most difficult of MMORPGs, the cost of failure is so incredibly high (you *permanently* lose your spacecraft) that it provides an oppositional force to progression. As soon as players enter EVE they are not encouraged to purchase the best spacecraft and fittings, as it will make them highly attractive targets to other less scrupulous players practicing pirating. So, often, players eschew formidable battleships in favour of cheaper, more nimble and less visible spacecraft.

- xxv. Beta testing is meant to be the final stage of testing before a title goes “gold” (enters production) and is the released, though it is not uncommon for developers to backtrack from beta testing to more development and alpha stage testing if there are major issues in the beta stage of testing. Beta testing is often involves open external testing of the game in, essentially, its entirety. At this point, the developer, ideally, would like to only be dealing with bugs and balancing issues (balancing is the term used to refer to how evenly players feel the game performs i.e. it isn’t too hard nor too easy, and no one class or species outperforms another dramatically).
- xxvi. A server (whether new or existing) going “live” means that a server has been made active, online and clients are able to access it.
- xxvii. (Referring to the type of play that occurs when a player has reached *level cap* (levelling experience can no longer be gained through a characters actions) or just the upper limits of game content, otherwise known as the *end game*).
- xxviii. Import Substitution Industrialisation (ISI) is economic and trade policy that aims to replace imported goods and services with domestically derived goods and services. Most notably employed by Latin American nations after the Great Depression of the 1930s, when foreign demand for goods sharply declined. It gained theoretical grounding through, Argentinian economist, Prebisch-Singer Thesis in the 1950s¹⁵⁶.

XXIX. The CPM (Communist Party of Malaya) was founded in 1930 after the dissolving of the South Seas Communist Party, which was a direct offshoot of a clandestine CCP (Chinese Communist Party) operation in Singapore. While active in Thailand and Dutch East-Indies (now Indonesia), its main responsibilities lay in Malaysia and Singapore. Following the outlawing of the party by British Rule, and the Japanese invasion of World War II, the CPM grew increasingly and militantly xenophobic. They were heavily involved in the guerrilla warfare following the Malayan state of emergency in 1948. They lay down arms in 1989.

XXX. Prior to 1978 several different ministers attempted to reform the educational system, at one point, there were three different ministers in the space of 15 months. Teacher morale was also low at the time, with around two per cent of the teaching workforce resigning each year since 1973. Students pre-maturely leaving school were also high enough to impact the enrolments of secondary colleges, with the number of places in these colleges consistently being unfilled. Between 1971 and 1974, on average, for every 1000 children enrolled into primary education, over 20 per cent would leave within nine years without meaningful skills or qualifications¹⁴⁹.

XXXI. Although the term *technocracy* has been in recorded existence as early as 1919, with the advent of the Technical Alliance in the US, it was used almost exclusively by this organisation as a utopic term referring to the ability of technology and its user to solve societal problems. It quickly faded from the public consciousness when the group disbanded in 1921, and has only since returned from

the periphery of the public sphere when it was used as a rationale in the *Goh Report*.

- xxxii. Of the top 30 GLCs only two (6.7%) were chaired by non-Chinese in 1991 (and neither of the non-Chinese was a Malay). Of the 38 people who were represented on the most GLC boards in 1998, only two (5.3%) were non-Chinese (and neither of the non-Chinese was a Malay). Of the 78 “core people” on statutory boards and GLCs in 1998, seven (9%) were non-Chinese (and one of the non-Chinese was a Malay)⁸⁷.
- xxxiii. Ironically, the accusations of Communism employed by Lee Kuan Yew to usurp the PAP leadership during the party’s developmental period between 1955 and 1959, have also been the basis of the questionable imprisonment of political opponents all throughout Singapore’s history⁹¹.
- xxxiv. Singapore is a country of fewer than 5 million people on a land mass smaller than three hundred square miles and yet it has come to be the world's most globalized country (KOF Globalization Index, 2010)⁸³. Its citizens generate the eighth highest gross domestic product per capita, an estimated AUD\$50,300 in 2009 (CIA World Fact book, 2010); and it's government, not including an array of government linked companies (GLC's), controls an investment portfolio in excess of US\$100 billion⁸⁴.
- xxxv. End-game typically refers to a situation within a game where the “end” of the particular game is within sight. Originally used in the context of chess, when few pieces were left on the board, in the context of an MMORPG it refers to the state a player’s avatar/character that allows for the *potential* to complete all possible aspects of the game. For most MMORPG’s this occurs when an avatar/character reaches their maximum level (i.e. they cannot gain any more numerically categorized experience, otherwise known

as level cap (this does not mean a player cannot *have new experiences*)).

XXXVI. While actual numbers of players leaving/churning from an MMORPG are generally not released by developers, the chart (Figure 1.) gives an indication as to when player loss comes to eclipse the *newbie flow* of a given franchise within its MMORPG lifecycle^{155a}. The exception is Runescape, however, Runescape is a free to play MMORPG (there are no subscription fees) and, as such, its growth in subscription numbers is not indicative of how many subscribers are actually actively participating (it does not cost players money to maintain their account, even if they do not play).

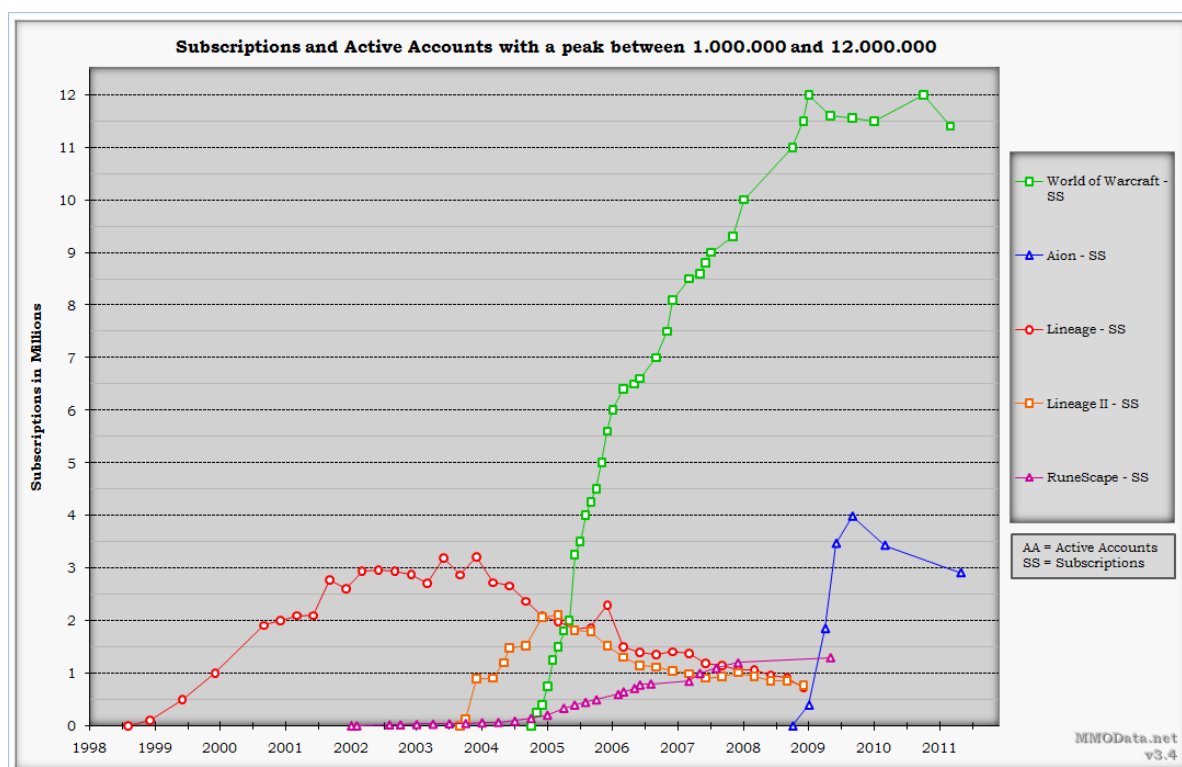


Figure 1.

Bibliography

- ¹ Castronova, Edward. "Virtual Worlds: A First Hand Account of Market and Society on the Cyberian Frontier." Working Paper. CESifo, 2001. Print.
- ² Kelly, R.V. *Massively Multiplayer Online Role Playing Games*. London, UK: McFarland & Company, 2004. Print.
a. p. 1-11
- ³ Yee, Nick. "Shared Data". 2009. The Daedalus Project. March 17 2010.
<<http://www.nickyee.com/daedalus/docs/shared-data.php>>.
- ⁴ Bartle, Richard. "Virtual Worldliness." New York Law School Law Review 2004. Print.
- ⁵ Dibbell, Julian. "Owned! Intellectual Property in the Age of Ebayers, Gold Farmers, and Other Enemies of the Virtual State or, How I Learned to Stop Worrying and Love the End-User License Agreement." *The State of Play: Law, Games and Virtual Worlds*. Ed. Jack M. Balkin, Beth Simone Noveck. New York: New York University Press, 2006. Print.
- ⁶ Turkle, Sherry. *Life on the Screen*. Flint Touchstone ed. New York, NY: Flint Touchstone, 1995. Print.
- ⁷ Caroline Bradley, Michael Froomkin. "Virtual Worlds, Real Rules: Using Virtual Worlds to Test Legal Rules." *State of Play: Law, Games and Virtual Worlds*. Ed. Jack M. Balkin, Beth Simone Noveck. New York: New York Law School Law Review, 2004. Print.
- ⁸ Balicer, Ran D. "Modelling Infectious Diseases: Dissemination through Online Role-Playing Games." *Epidemiology* 19 2 (2007): 260-61. Print.
- ⁹ Yee, Nick. "The Demographics, Motivations and Derived Experiences of Users of Massively-Multiuser Online Graphical Environments." Stanford University, 2006. Print.
- ¹⁰ Woodcock, Bruce. "Total Mmog Active Subscriptions - Absolute Contribution". 2008. MMOGChart.com. 19/03 2010.
<<http://www.mmogchart.com/charts/>>.
- ¹¹ Stephen J. McNamee, Robert K. Miller Jr. *The Meritocracy Myth*. Lanham: Rowman & Littlefield Publishing Group, 2004. Print.
- ¹² Young, Michael Dunlop. *The Rise of the Meritocracy*. London: Thames and Hudson, 1958. Print.

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- ¹³ Oldenberg, Ray. *The Great Good Place: Cafes, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How They Get You through the Day*. New York: Paragon House, 1989. Print.
- ¹⁴ Nicolas Ducheneaut, Robert J. Moore, Eric Nickell. "Virtual "Third Places": A Case Study of Sociability in Massively Multiplayer Games: An Examination of the "Third Places" of Swg." *Other Players Conference*. Ed. J.H. Smith, M. Sicarts. Print.
- ¹⁵ Nicolas Ducheneaut, Nicholas Yee, Robert J. Moore, Eric Nickell. "Alone Together? Exploring the Social Dynamics of Massively Multiplayer Online Games." *Games and Performance*. Print.
- ¹⁶ Yee, Nicholas. "The Psychology of Massively Multi-User Online Role-Playing Games." *Avatars at Work and Play: Collaboration and Interaction in Shard Virtual Environments*. Ed. R. Schroder, A. Axelsson. London, UK: Springer-Verlag, 2006. Print.
- ¹⁷ Tanner, Lindsey. "Is Video-Game Addiction a Mental Disorder?". 2007. X-Play. Ed. Webb, Morgan. The Associated Press. 19/03 2010. <<http://www.msnbc.msn.com/id/19354827/>>.
- ¹⁸ Khan, Mohamed K. Emotional and Behavioral Effects, Including Addictive Potential, of Video Games: American Medical Association, 2007. Print.
- ¹⁹ Kevin Kelly, Howard Rheingold. "The Dragon Ate My Homework." *Wired* 1993. Print.
- ²⁰ CBC-TV. *Top Gun: When a Video Gaming Obsession Turns to Addiction and Tragedy*. 2009.
- ²¹ Quartermaine, Braden. "Stress over Teen's 'Addiction'." (2007). 09/03/2010 <<http://www.perthnow.com.au/news/western-australia/stress-over-teens-addiction/story-e6frg13u-1111113958526>>.
- ²² Jaime L. Napier, John T. Jost. "Why Are Conservatives Happier Than Liberals?" *Psychological Science* 19 6 (2008): 565-72. Print.
- ²³ Young, M. (2001). Down with meritocracy: The man who coined the word four decades ago wishes Tony Blair would stop using it. *The Guardian*.
- ²⁴ Labour Party. "Let Us Face the Future: A Declaration of Labour Policy for the Consideration of the Nation ". Ed. Manifesto, Election. London, UK, 1945. Print.

- ²⁵ Young, Michael. "Introduction to the Transaction Edition." *The Rise of Meritocracy*. Transaction ed. New Brunswick, NJ: Transaction Publishers, 1994. xi-xvii. Print.
- ²⁶ Adams, James Truslow. *The Epic of America*. New York: Blue Ribbon Books, 1931. Print.
- ²⁷ Association, Independence Hall. "The Declaration of Independence, July 4, 1776". 1995. 23/03/2010.
<<http://www.ushistory.org/declaration/document/>>.
- ²⁸ Weber, Max. *The Protestant Ethic and the Spirit of Capitalism*. Trans. Kahlberg, Stephen. Los Angeles: Roxbury Publishing, 1905. Print.
- ²⁹ Calvin, John. "Calvin's Commentaries Complete". 2007. Ed. Gaede, Skip. Calvin Translation Society: Online Bible Project. 26/03 2010.
<<http://www.ccel.org/ccel/calvin/calcom34.xii.vii.html>>.
- ³⁰ Brown, Gordon. "An Age of Aspiration Can Benefit Everyone". London, UK, 2010. (3rd January 2010): *The Observer*. 15th March 2010.
<<http://www.guardian.co.uk/politics/2010/jan/03/gordon-brown-education-aspiration>>.
- ³¹ Twin Galaxies International. "Twin Galaxies: The Official Electronic Scoreboard". 2010. March 28th 2010. <<http://www.twingalaxies.com/index.aspx>>.
- ³² Press, Oxford University. "Merit." *Compact Oxford English Dictionary*. Oxford, UK: Oxford University Press, 2010. Print.
- ³³ Steinkuehler, Constance A. "Why Game (Culture) Studies Now? ." *Games and Culture 1* (2006): 97-102. Print.
- ³⁴ Patel, Deepti. "Equal Opportunities Have Never Been More Relevant". 2010. Public. *The Guardian*. April 5th 2010.
<<http://www.guardianpublic.co.uk/equal-opportunities-ethnic-minorities-parekh-report>>.
- ³⁵ Duffy, Jonathan. "The Rise of the Meritocracy". London, UK, 2004. BBC News. BBC. April 5th 2010. <http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/magazine/4035181.stm>.
- ³⁶ Wooldridge, Adrian. *Meritocracy and the 'Classless Society'*. London, UK: Social Market Foundation, 1995. Print.
- ³⁷ Jackson, Brian. *Streaming*. Routledge & Kegan Paul, 1964. 141. Print.
- ³⁸ Critical Social Issues in American Education: Democracy and Meaning in a Globalizing World. Ed. H. Svi Shapiro, David E. Purpel. 3rd ed: Routledge, 2004. Print.

-
- ³⁹ *The Bell Curve Debate*. Ed. Russell Jacoby, Naomi Glauberman. 1st ed: Three Rivers Press, 1995. Print.
- ⁴⁰ Jencks, Christopher. *Inequality a Reassessment of the Effect*. 1st ed: Harper 1972. Print.
- ⁴¹ Herrnstein, Richard J. *I.Q. In the Meritocracy*. 1st ed: Little, Brown & Co., 1973. Print.
- ⁴² Richard J. Herrnstein, Charles Murray. *Bell Curve: Intelligence and Class Structure in American Life*. 1st Paperback ed: Free Press, 1996. Print.
- ⁴³ Eckland, Bruce K. "Genetics and Sociology: A Reconsideration." *Atlantic Monthly* 32 (1967): 173-94. Print.
- ⁴⁴ Jensen, Arthur R. "How Much Can We Boost IQ and Scholastic Achievement." *Harvard Educational Review* 39 (1969): 1-123. Print.
- ⁴⁵ Jensen, Arthur R. "Genetic and Behaviour Effects of Nonrandom Mating." *Human Variation: Biopsychology of Age, Race and Sex*. Ed. R.T. Osborne, C.E. Noble, and N. Weyl. New York, NY: Academic Press, 1978. 51-105. Print.
- ⁴⁶ Kalmonick, Paul. *The Just Meritocracy: IQ, Class Mobility, and American Social Policy*. Westport, CT: Praeger Publishers, 2005. Print.
- ⁴⁷ Gottfredson, Linda S. "Mainstream Science on Intelligence." *Wall Street Journal* (1994). Print.
- ⁴⁸ Blair, Tony. "Let Us Face the Future: The 1945 Anniversary Lecture." London, UK: Fabian Society, 1995. Print.
- ⁴⁹ Heemin Kim, Glenn Parker. "When Meritocracies Fail" *Journal of Economic Behavior & Organization* 28 1 (1995): 1-9. Print.
- ⁵⁰ *Meritocracy and Economic Inequality*. Ed. Kenneth Arrow, Samuel Bowles, Steven N. Durlauf: Princeton University Press, 2000. Print.
- ⁵¹ Schar, John. *Equality of Opportunity and Beyond*. 1967. Print.
- ⁵² *The Origins of Universal Grant: An Anthology of Historical Writings on Basic Capital and Basic Income*. Ed. John Cunliffe, Guido Erreygers. Print.
- ⁵³ Castronova, Edward. *Synthetic Worlds: The Business and Culture of Online Games*. London, UK: University of Chicago Press, 2005. Print.
- ⁵⁴ Robin Hunicke, Marc LeBlanc, Robert Zubek. "Mda: A Formal Approach to Game Design and Game Research." *Game Developers Conference*. Ed. Print.

-
- ⁵⁵ Bartle, Richard A. *Designing Virtual Worlds*. Indianapolis, Indiana: New Riders, 2004. Print.
a. p. 126-141
b. p. 224-225
c. p. 142-145
d. p. 89-92
- ⁵⁶ Castronova, Edward. *Exodus to the Virtual World*. New York, NY: Palgrave Macmillan, 2007. Print.
- ⁵⁷ Bainbridge, William Sims. *The Warcraft Civilization: Social Science in a Virtual World*. Cambridge, Massachusetts: MIT Press, 2010. Print.
- ⁵⁸ Y. B. Kafai, W. A. Sandoval, N. Enyedy, A. S. Nixon, & F. Herrera ed. *Learning in Massively Multiplayer Online Games*. Proceedings of the Sixth International Conference of the Learning Sciences. 2004. Print.
- ⁵⁹ Taylor, T. L. *Play between Worlds: Exploring Online Game Culture*. MIT Press Paperback ed. Cambridge, Massachusetts: MIT Press, 2006. Print.
a. p. 43-52
b. p. 43-45
- ⁶⁰ "China Imposes Online Gaming Curbs ". 2005. BBC News. April 28th 2010. <<http://news.bbc.co.uk/2/hi/technology/4183340.stm>>.
- ⁶¹ Steinkuehler, Constance A. "Cognition and Literacy in Massively Multiplayer Online Games." *Handbook of Research on New Literacies*. Ed. J. Coiro, M. Knobel, C. Lankshear, & D. Leu. Mahwah NJ: Erlbaum, 2008. Print.
- ⁶² Koster, Raph. "Declaring the Rights of Players." *State of Play: Law, Games and Virtual Worlds*. Ed. Jack M. Balkin, Beth Simone Noveck. New York, NY: New York University Press, 2006. Print.
- ⁶³ *State of Play: Law, Games, and Virtual Worlds*. State of Play. Ed. Jack M. Balkin, Beth Simone Noveck. New York, NY: New York University Press, 2006. Print.
- ⁶⁴ Grimmelman, James. "Virtual Power Politics." *State of Play: Law, Games and Virtual Worlds*. Ed. Jack M. Balkin, Beth Simone Noveck. New York, NY: New York University Press, 2006. Print.
- ⁶⁵ Ducheneaut, Nicolas. "Nicolas Ducheneaut's Publications". 2010. May 3rd 2010. <<http://www2.parc.com/csl/members/nicolas/publications.html>>.
- ⁶⁶ Yee, Nick. "Nick Yee's Homepage". 2010. Curriculum Vitae. May 3rd 2010. <<http://www.nickyee.com/cv.html>>.

- ⁶⁷ "When Studying Muds, a Form of Role Playing Game on the Internet, It Is Clear That There Is a Society." Ed. Bartle, Richard A. Twente, Netherlands: University of Twente, 1998. Print.
- ⁶⁸ Barton, Matt. "The History of Computer Role-Playing Games Part 1: The Early Years (1980-1983)." (2007). May 11th, 2010
<http://www.gamasutra.com/features/20070223a/barton_pfv.htm>.
- ⁶⁹ Barton, Matt. "The History of Computer Role-Playing Games Part 2: The Golden Age(1985-1993) " (2007). May 11th, 2010
<http://www.gamasutra.com/features/20070223b/barton_01.shtml>.
- ⁷⁰ Barton, Matt. "The History of Computer Role-Playing Games Part 3: The Platinum and Modern Ages (1994-2004)." (2007). May 11th, 2010
<http://www.gamasutra.com/view/feature/1571/the_history_of_compute_r_.php?print=1>.
- ⁷¹ Spearman, Charles. *The Nature of Intelligence and the Principles of Cognition*. London, UK: Macmillan, 1923. Print.
- ⁷² Ron Safko, David Brake. "The Social Media Bible: Tactics, Tools, and Strategies for Business Success." New York, NY: Wiley, 2009. Print.
- ⁷³ Fine, Gary Alan. *Shared Fantasy*. London, UK: University of Chicago Press, 1993. Print.
- ⁷⁴ Hide, Nick. "Diary of a World of Warcraft Addict: Part One". 2006. June 4th, 2010. <<http://crave.cnet.co.uk/gamesgear/0,39029441,49285482,00.htm>>.
- ⁷⁵ Yee, Nick. "Player Life-Cycle". 2007. *The Daedalus Project*. June 8th 2010.
<<http://www.nickyee.com/daedalus/archives/001588.php>>.
- ⁷⁶ Green, Brian. "Rethinking the Trinity of Mmo Design". 2009. *Gamasutra Features*. June 14th 2010.
<http://www.gamasutra.com/view/feature/4219/rethinking_the_trinity_of_mmo_.php>.
- ⁷⁷ Nicolas Ducheneaut, Nicholas Yee, Robert J. Moore, Eric Nickell. "Building an Mmo with Mass Appeal." *Games and Culture* 1 4 (2006): 281-317. Print.
- ⁷⁸ Boethius. "Theorycrafting Think Tank". 2008. Ed. Boethius. June 14th 2010.
<http://elitistjerks.com/f47/t21302-theorycrafting_think_tank/>.
- ⁷⁹ Aggathon. "Why We Do What We Do (an in Depth Explanation of Ehp and Icc 3.3.3 Tanking Mechanics) ". 2009. *TankSpot*. June 14th 2010.
<<http://www.tankspot.com/showthread.php?66564-Why-We-Do-What-We-Do-%28An-in-depth-explanation-of-EHP-and-ICC-3.3.3-tanking-mechanics%29>>.

-
- ⁸⁰ König, Thomas. "Frame Analysis: Theoretical Preliminaries". 2005. *Frame Analysis*. Ed. König, Thomas. June 14th 2010.
<<http://www.ccsr.ac.uk/methods/publications/frameanalysis/>>.
- ⁸¹ Goffman, Erving. *Frame Analysis: An Essay on the Organization of Experience*. Ed. Berger, Bennett. Boston, MA: Northeastern University Press, 1986. Print.
- ⁸² David A. Snow, E. Burke Rochford, Jr., Steven K. Worden, Robert D. Benford. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51 4 (1986): 464-81. Print.
- ⁸³ Bellows, T. J. (2009). "Meritocracy and the Singapore Political System." *Asian Journal of Political Science* 17(1): 24-44.
- ⁸⁴ Rozanov, A. (2005). "Who holds the wealth of nations?" *State Street Global Advisors* 15(3).
- ⁸⁵ Tan, K. P. (2008). "Meritocracy and Elitism in a Global City: Ideological Shifts in Singapore." *International Political Science Review* 29(7).
- ⁸⁶ Gopinathan, S. (1999). "Preparing for the Next Rung: economic restructuring and educational reform in Singapore." *Journal of Education and Work* 12(3): 295-308.
- ⁸⁷ Barr, M. D. (2006). *The Charade of Meritocracy*. Far Eastern Economic Review.
- ⁸⁸ Huat, C. B. (2003). "Multiculturalism in Singapore: An Instrument of Social Control." *Race & Class* 44(58).
- ⁸⁹ Moore, R. Q. (2000). "Multi-racialism and Meritocracy: Singapore's Approach to Race and Inequality." *Review of Social Economy* 58(3): 339-360.
- ⁹⁰ Low, M. D. B. J. (2005). "Assimilation as multiracialism: The case of Singapore's Malays." *Asian Ethnicity* 6(3): 161-182.
- ⁹¹ Barr, M. D. (2006). "Beyond Technocracy: The Culture of Elite Governance in Lee Hsien Loong's Singapore." *Asian Studies Review* 30: 1-17.
- ⁹² Pellizzoni, L. (2001). "The myth of the best argument: Power, deliberation and reason." *British Journal of Sociology* 52(1): 59-86.
- ⁹³ Loong, L. H. (2005). Speech by Prime Minister Lee Hsien Loong at the 2005 Administrative Service Dinner, 24th March, Sprinter.
- ⁹⁴ Yew, L. K. (1998). "Singapore's Fate Depends on 300 Men," in Han Fook Kwang.
- ⁹⁵ Porter, G. (1995). "Where we've been, where we're going." *Inter*Action*(1).
- ⁹⁶ Rilstone, A. (1995). "Role-Playing Games: An Overview." *Inter*Action*(1).

-
- ⁹⁷ Horrocks, D. (2004). "The Perfect Planet: Comics, Games and World-Building." Retrieved September 4th, 2010, from <http://www.hicksville.co.nz/PerfectPlanet.htm>.
- ⁹⁸ Carlin, G. (1997). *Brain Droppings*.
- ⁹⁹ Pratto, F, Sidanius J. (1999). Social Dominance. Cambridge, Cambridge University Press.
- ¹⁰⁰ John T. Jost, Major B. (2001). The Psychology of Legitimacy. Cambridge, Cambridge University Press.
- ¹⁰¹ Engels, F. (1968). Engels to Franz Mehring - London, July 14, 1893. Marx and Engels Correspondence. D. T. S. Ryan, International Publishers.
- ¹⁰² Staub, E. (1989). The roots of evil: The origins of genocide and other group violence. New York, Cambridge University Press.
- ¹⁰³ Gallup, A. M. (2006). The Gallup poll: public opinion 2004, Rowman & Littlefield Publishers.
- ¹⁰⁴ Woodcock, B. (2008). "MMOG Subscriptions Market Share." from <http://www.mmogchart.com/Chart7.html>. Accessed January 5th, 2011.
- ¹⁰⁵ Cyber Creations Incorporated. (2011). "MMORPG.com." Retrieved January 5th, 2011, from <http://www.mmorpg.com/>.
- ¹⁰⁶ Bennett, C. (2010). "Study: MMO Use Declines As Social Games Take Hold In Chin." Retrieved January 5th, 2010, from http://www.gamasutra.com/view/news/29874/Study_MMO_Use_Declines_As_Social_Games_Take_Hold_In_China.php.
- ¹⁰⁷ Moses, A. (2010). "Addiction alarm sounds as Facebook goes mobile " Sydney Morning Herald. Retrieved January 5th, 2011, from <http://www.smh.com.au/digital-life/digital-life-news/addiction-alarm-sounds-as-facebook-goes-mobile-20101104-17f5h.html>.
- ¹⁰⁸ Milburn, A. (2005). *Labour Values*. Fabian Commission on Life Chances and Child Poverty, Fabian Society: p. 77-80.
- ¹⁰⁹ Abravanel, R. (2008). *Meritocrazia*, SAGGI.
- ¹¹⁰ Margari, P. (2008, May 31, 2008). "Four recipes to save Italy: "Meritocrazia" by Roger Abravanel." Retrieved January 16th, 2011, from <http://livepaola.wordpress.com/2008/05/31/four-recipes-to-save-italy-meritocracy-meritocrazia-by-roger-abravanel/>.
- ¹¹¹ Antonuuci, L. (2010, October 14th, 2010). "Lost in translation: British 'meritocracy' in Italy." Retrieved January 15th, 2011, from

<https://inequalitiesblog.wordpress.com/2010/10/14/lost-in-translation-british-meritocracy-in-italy/>.

- ¹¹² Lichfield, J. (2010). "Revolt at Sarkozy's attempts to open Grandes Ecoles to poorer students." Retrieved January 17th, 2011, from <http://www.independent.co.uk/news/world/europe/revolt-at-sarkozys-attempts-to-open-igrandes-ecoles-to-poorer-students-1859016.html>.
- ¹¹³ Lister, R. (2006). Ladder of Opportunity or Engine of Inequality? The Rise and Rise of Meritocracy. G. Dench. Oxford, UK, Blackwell Publishing: 232-236.
- ¹¹⁴ Suler, J. (2004). "The Online Disinhibition Effect." CyberPsychology and Behaviour 7(3): 321-326.
a. p. 322-324
- ¹¹⁵ Patrick Diamond, A. G. (2005). The new egalitarianism: economic inequality. The New Egalitarianism. Cambridge, Polity: 108.
- ¹¹⁶ Fabian Commission on Life Chances and Child Poverty. (2005). Why Life Chances Matter. Narrowing the Gap, Fabian Society: 47.
- ¹¹⁷ Dual-Boxing.com (2010). "Dual-Boxing Guides." Retrieved January 18th, 2011, from <http://www.dual-boxing.com/wiki/index.php/Guides>.
- ¹¹⁸ Miller, D. (1997). What type of equality should the left pursue? *Equality*, London, IPPR.
- ¹¹⁹ (2011). Conversation held in Stormwind, Jubei'thos US Server, World of Warcraft, Blizzard Entertainment.
- ¹²⁰ Kendall, L. (2008). "'Noobs' and 'chicks' on Animation Portal: power and status in a community of practice." *International Journal Web Based Communities* 4(4): 497-499.
- ¹²¹ Sherbloom, B. (2002). Hackers, Gamers and Lamers: The Use of l33t in the Computer Sub-Culture.
- ¹²² Suh, J. Y. (2009). Analysis of CEO Compensation: Australian Evidence. School of Finance and Economics. Sydney, University of Technology Sydney. PhD.
- ¹²³ Schubert, M. (2010). "Childcare: 'new places not answer' ". Retrieved January 19th, 2011, from <http://www.theage.com.au/national/childcare-new-places-not-answer-20100428-tsid.html>.

- ¹²⁴ Browne, R. (2010). "Childcare on the table after birth-rate high ". Retrieved January 19th, 2011, from <http://www.smh.com.au/federal-election/childcare-on-the-table-after-birthrate-high-20100807-11pca.html>.
- ¹²⁵ Topsfield, J. (2010). "Greens query childcare data ". Retrieved January 19th, 2011, from <http://www.smh.com.au/federal-election/greens-query-childcare-data-20100719-10huk.html>.
- ¹²⁶ O'Malley, N. (2006). "Low pay blamed for child-care shortage." Retrieved January 19th, 2011, from <http://www.smh.com.au/news/national/low-pay-blamed-for-childcare-shortage/2006/01/20/1137734154382.html>.
- ¹²⁷ Toynbee, P. (2002). *Hard Work: a Challenge to Low pay*. London, The Smith Institue. p. 35
- ¹²⁸ Taylor, T. L. (2008). Does World of Warcraft Change Everything? *Digital Play, Culture and Identity: A World of Warcraft Reader*. H. G. Corneliussen & J. W. Rettberg. Massachusetts, MIT Press: p. 187-201.
- ¹²⁹ Zarnivooop (2009, January 12th, 2011). "Skada Damage Meter." Retrieved January 20th, 2011, from <http://www.wowace.com/addons/skada/>.
- ¹³⁰ Mirrikat45 (2009, January 20th, 2011). "GearScore / PlayerScore." Retrieved January 20th, 2011, from <http://wow.curseforge.com/addons/gearscore/>.
- ¹³¹ Staff, IGN. (2002). "Final Fantasy XI -- Big Plans, Big Money." Retrieved January 21st, 2011, from <http://au.ps2.ign.com/articles/359/359081p1.html>.
- ¹³² Fogel, S. (2010, September 20th, 2010). "Four of the Shortest-Lived MMOs." Retrieved January 29th, 2011, from http://www.gamezone.com/editorials/item/four_of_the_shortest-lived_mmos/.
- ¹³³ Carpenter, A. (2007, May 25th, 2007). "Fury Developer Journal: Adam Carpenter, Lead Designer ". Retrieved January 29th, 2011, from <http://www.mmorpg.com/gamelist.cfm/game/252/feature/1253/Adam-Carpenter-Lead-Designer.html>.
- ¹³⁴ Koh, C. (2007, July 17th, 2007). "Fury: E3 Update ". Retrieved January 29th, 2011, from <http://www.mmorpg.com/gamelist.cfm/game/252/feature/1340/E3-Update.html>.
- ¹³⁵ Caelia, A. (2007, October 16th, 2007). "Fury: Launch-Day Preview." Retrieved January 29th, 2011, from <http://www.mmorpg.com/gamelist.cfm/game/252/feature/1511/LaunchDay-Preview.html>.

-
- ¹³⁶ Wood, J. (2007, December 13th, 2007). "Editorial - What Happened to Auran?". Retrieved 2011, January 29th, from <http://www.mmorpg.com/gamelist.cfm/setview/features/loadFeature/1628/gameID/252>.
- ¹³⁷ Metacritic (2011). "Fury." Retrieved January 29th, 2011, from <http://www.metacritic.com/game/pc/fury>.
- ¹³⁸ VanOrd, K. (2007, November 3rd, 2007). "Fury Review." Retrieved January 29th, 2011, from <http://au.gamespot.com/pc/rpg/fury/review.html>.
- ¹³⁹ Onyett, C. (2007, October 24th, 2007). "Fury Review." Retrieved January 29th, 2011, from <http://au.pc.ign.com/articles/830/830124p1.html>.
- ¹⁴⁰ Auran (2007). Fury Stats - Overview. Fury Team's Blog, IGN. **2011**.
- ¹⁴¹ schild (2007, December 7th, 2007). "Interview/Postmortem with Adam Carpenter of Auran." Retrieved January 29th, 2011, from <http://f13.net/index.php?itemid=626>.
- ¹⁴² Carpenter, A. (2003, June 11th, 2003). "Applying Risk Analysis To Play-Balance RPGs." Retrieved January 29th, 2011, from http://www.gamasutra.com/view/feature/2843/applying_risk_analysis_to_.php.
- ¹⁴³ Cross, K. (2007, October 17th, 2007). "Fury News - Launch Day Plus One." Retrieved January 29th, 2011, from <http://www.mmorpg.com/gamelist.cfm/game/252/view/news/page/1/read/8995/Fury-Launch-Day-Plus-One.html>.
- ¹⁴⁴ Thompson, M. (2008, August 5th, 2008). "MMO Fury issues death rattle, ceases breathing." Retrieved January 29th, 2011, from <http://arstechnica.com/gaming/news/2008/08/mmo-fury-issues-death-rattle-ceases-breathing.ars>.
- ¹⁴⁵ Fahey, R. (2007, 20th November, 2007). "Fury." Retrieved January 30th, 2011, from <http://www.eurogamer.net/articles/fury-review>.
- ¹⁴⁶ Banks, J. (2009). "Co-creative expertise : Auran Games and Fury - a case study." Media International Australia : incorporating Culture and Policy(130): 77-89.
- ¹⁴⁷ ABS (1965). Year Book Australia 1965, Australian Bureau of Statistics.
- ¹⁴⁸ Crawford, L. (2002). "Towards an ability-driven education system in Singapore: Problems and opportunities." REACT 21(1): 1-12.
- ¹⁴⁹ Boon, C.G. Gopinathan, S. (2006). The Development of Education in Singapore since 1965. Asia Education Study Tour for African Policy Makers.

- ¹⁵⁰ (1976). Straits Times.
- ¹⁵¹ Doulin, A. (2008). What Auran did wrong. Doolwind's Game Coding Blog. 2011.
- ¹⁵² Yew, L. K. (2008). TRANSCRIPT OF MINISTER MENTOR LEE KUAN YEW'S INTERVIEW WITH ARNAUD DE BORCHGRAVE OF UPI. ISTANA.
- ¹⁵³ Darren Chappell, V. E., Mark N. O. Davies and Mark Griffiths (2006). "EverQuest —It's Just a Computer Game Right? An Interpretative Phenomenological Analysis of Online Gaming Addiction " International Journal of Mental Health and Addiction 4(3): 205-216.
- ¹⁵⁴ Brand, C. (1996). The g Factor: General Intelligence and Its Implications. London, UK, John Wiley & Sons.
- ¹⁵⁵ Geel, I. V. (2011, June 26th). "Total Active Subscriptions." Retrieved June 26th, 2011, from <http://users.telenet.be/mmodata/Charts/TotalSubs.png>
a. <http://users.telenet.be/mmodata/Charts/Subs-1.png>
- ¹⁵⁶ Toye, R. Toye, J. (2003) "The origins and interpretations of the Singer-Prebisch Thesis". *History of Political Economy* 2003 35: 437-446
- ¹⁵⁷ Kaptelinin, V. (1993) "Activity Theory: Implications for Human Computer Interaction." Context and consciousness: activity theory and human-computer interaction, Cambridge, Massachusetts: MIT Press, 1996: 104-121. Print.
- ¹⁵⁸ Hussain, Z. Griffiths, M.D. "The Attitudes, Feelings, and Experiences of Online Gamers: A Qualitative Analysis" *CyberPsychology & Behavior*. December 2009, 12(6): 747-753.