THE PEOPLE’S HISTORY OF STEAM

A Thesis
submitted to the Faculty of the
Graduate School of Arts and Sciences
of Georgetown University
in partial fulfillment of the requirements for the
degree of
Master of Arts
in Communication, Culture and Technology.

By

David Zhu Shen, B.A.

Washington, DC
April 24, 2015
Copyright 2015 by David Zhu Shen
All Rights Reserved
THE PEOPLE’S HISTORY OF STEAM

David Zhu Shen, B.A.

Thesis Advisor: Garrison LeMasters, PhD.

ABSTRACT

Valve Software’s proprietary software distribution client Steam is billed as “The Ultimate Entertainment Platform” on Valve’s website. Steam is responsible for selling, distributing and managing video game software to millions of users around the globe through their internet connections. However, in addition to functioning as a direct retail system, Steam also functions as a social network, system of control and surveillance, as well as a site for work and trade. This thesis argues that due to the inclusion of these functions as a part of Steam’s code, those features must now also be considered as a part of the field of activity referred to as ‘play’. Utilizing a combination of archival research, discourse analysis, and digital ethnography, this thesis historicizes Steam’s impact on the field of play, as expressed by users who were forced to adapt to its presence in their lives.
To all of my friends, family, peers, and professors who have helped me in the writing of this thesis, thank you. This would not have been possible without your constant support and love.

Many thanks,

DAVID ZHU SHEN
TABLE OF CONTENTS

Introduction ............................................................................................................. 1
Literature Review..................................................................................................... 6
Method .................................................................................................................... 17
Data Review ........................................................................................................... 21
Discussion ............................................................................................................. 55
Future Research .................................................................................................... 59
Conclusion ............................................................................................................. 61
Bibliography ......................................................................................................... 62
On November 6th, 2013 a dog was sold on the popular website reddit, for $38,000. This dog was not some exceptional breed, nor was it a successful show dog or prize-winning racer. The creature was so rare, though, that experts concluded that there could only be four in the world like it. The valuable dog, an Ethereal Flames Pink War Dog, was not even particularly skilled or resourceful while it plied its daily trade: working as a virtual pack mule in the popular multiplayer online battle arena [MOBA] game, Defense of the Ancients 2 [DOTA2] (2011), produced by Valve Software.

The dog was a piece of code and a folder full of meshes and bitmaps, a tiny, inconsequential distraction from the endless digital stream of stimulus and action provided by the highly-competitive matches played by seven million around the world, matches watched by tens of millions more. Enthusiasm for DOTA2 extends beyond the boundaries of the software, with fans and players taking their discussions and activities all over the web, engaging in cosplay, or traveling thousands of miles to attend competitions in person. It is this sort of extreme enthusiasm for DOTA2 that is partially responsible for the extreme value of such a virtual dog. However, while this may somewhat explain the extremely high value of the dog as a result of huge demand with a limited supply, it does not explain the origin of the dog as a luxury good, or its place inside what is ostensibly a video game meant for play. In order to understand the relationship that the dog has with what we understand to be play, one must

---

1 Yin-Poole, Wesley. "Someone bought a DOTA 2 courier for $38,000". November 6, 2013.
2 http://www.reddit.com/r/Dota2Trade/comments/1q0kxp/auction_ef_pink_war_dog_191_78_123_with_bo/
3 While these acronyms are unwieldy and cumbersome, it is important to observe that these abbreviations comprise the working vocabularies of tens of millions individuals who regularly discuss video games. As was the case with the novel in Enlightened Europe, recorded jazz in the West, these often spontaneous generic designations are not merely determinist critical categories or inventory labels, but instead map the history of a readership's relation to a medium.
4 Cosplay is an act where individuals will dress up in costumes as characters from popular video games, movies, comic books, television shows, and other mediums.
examine the technologies which enable the creation and trade of such objects, specifically Valve Software’s digital distribution platform\(^5\), Steam.

Even for most self-identifying ‘hardcore gamers’, the idea of spending a sum on a virtual dog that could as easily have been used as a down-payment on a house or a new car likely seems absurd. And so in order to understand better how such an absurd transaction could come to pass, we will need to know more about the *Ethereal Flames Pink War Dog* itself, which — since it is neither dog, nor ethereal, nor pink, nor on fire — appears before us as a blackbox\(^6\), concealing its inner workings with the outward appearance dog. Moreover, as the dog’s value is persistent (if not stable), and may be sold or traded again in the future, the *Ethereal Flames Pink War Dog* must be understood as a unit of virtual property, a rivalrous but intangible object that can only be used by one person at a time. The dog’s inner workings are only revealed through its connection to the Steam platform.

On Valve Software’s website, Steam is billed as “The Ultimate Entertainment Platform” and as a “the pioneering game platform that distributes and manages thousands of games directly to a community of more than 65 million players around the world.” Though that description is partly marketing, it does speak to an historical fact: Steam was one of the first services to allow gamers to buy digital, downloadable versions of games instead of relying on their distribution via physical media. Since its release in 2003, Valve has continued to add new features to its distribution platform. Today, Steam functions as a social network, surveillance system, workshop and marketplace for virtual property, property like the *Ethereal Flames Pink War Dog*. In order to explain the dog and its value, and its relationship to play, one must examine the development and history of the Steam, system that allowed it to happen.

---

\(^5\) In this paper, the term *platform* refers to a relatively stable, standardized, and low-level environment designed to support and sustain other higher-level objects as they execute. Intel’s Core i3 chipset is a platform, as are Windows 8 and Facebook.

\(^6\) This term refers to a technological object that has its internal workings are shrouded from sight, and is thus defined by its inputs and outputs.
While Steam’s virtual property market is certainly unique, the presence of micro-economies within game worlds and other virtual online spaces is a relatively–widespread recent phenomenon dating back to the 1990’s. Massively Multiplayer Online [MMO] games such as *Everquest, World of Warcraft, Second Life* and *EVE Online* have engendered sophisticated market economies that have made our traditional notions of play unsatisfactory\(^7\). Throughout most of the 20th Century, scholars have conceived of ludic\(^8\) activity as separate from ordinary life, separated by what Dutch historian and play scholar Johan Huizinga characterized as a ‘magic circle’. His model was rather simple. Inside the circle is the state of play, a fantasy world where the rules outside the circle did not apply\(^9\). MMOs and their complex, multi-tier, and persistent economies suggest, however, that a simple inside/outside dichotomy cannot account for the complex relationships often fostered by these virtual systems.

Conventional inside/outside, work/play relationships are only further complicated by the Ethereal Flames Pink War Dog. Neither Steam nor *DOTA 2* meet typical criteria for synthetic or virtual worlds.\(^10\) Steam appears primarily as a virtual storefront through which to purchase and play games; *DOTA 2*, Valve’s flagship game, is more akin to a game of basketball than it is to a conventional MMO (the most common type of virtual world). However, Steam’s storefront is augmented by various components, including trading rooms, game spaces, forums, and a social network combined into a single discreet application. These components have been designed to interact with each other as a network ostensibly dedicated to entertainment, built with features such as persistent identities, property, surveillance and control. When considering all of these components, the term ‘platform’ becomes

---

\(^7\) See Montola 2005, Consalvo 2009, Lastowka 2010
\(^8\) From *L. ludere*, play, *ludus*, sport.
\(^10\) See Bartle 2004.
insufficient to describe Steam. Rather Steam is more akin to a virtual world as scholars have defined them, synchronous, persistent network of people represented as avatars, that is facilitated by computers.

In addition, Steam is Valve Software’s proprietary content distribution network. Individuals seeking to access the thousands of software titles available through Steam’s catalog are required to install the Steam client on their computer and effectively enter into a contract with Valve through a subscriber agreement that stipulates that Steam is a service and that Valve Software retains all ownership and intellectual property rights of quite nearly everything in the system. This includes the games that are paid for, the virtual dogs, and all communications. The agreement restricts the ways in which the content Steam may be used, as well as stipulates that Valve may terminate without refund any account found to have been in violation of any of these terms. The agreement is a one-way relationship, with Valve in near complete control of the network and its uses. Despite this, Steam is undoubtedly a success for Valve. In September 2014, Valve announced that Steam had over 100 million users and 3,700 games making it the largest digital game distribution platform in PC gaming.

Steam’s success and wide installation base in combination with its chosen medium, video games, has made it more than just another successful digital media storefront or social network. It is the foundation upon which software developers build their titles, and the gateway for consumers to access that software. By creating a new virtual space where the objective is not encouraging players to adopt a “lusory attitude,” but encouraging the purchase of software and other virtual property, the relationships between actors in that virtual space are not comparable to more conventional virtual spaces, nor is it comparable to other retail. Without the explicit or implied lusory attitude of the players,

---

12 Makuch, Eddie. “Steam Reaches 100 Million Users and 3,700 Games” September 14, 2014.
13 The psychological attitude required of a player entering into the play of a game. For example, while it would make more sense for a basketball player to not dribble a ball, they do so anyways because it is what the rules of the game demand. Salen 2003.
the secondary functions of the Steam which control user behavior and limit their rights cannot be dismissed a just rules of a game, as they are in other virtual worlds.

This thesis examines Steam’s history and argues that the field of play must be redefined to account for all the functions in the system which serves as a gatekeeper to play. In the case of Steam, Valve has created a system in which play and profit are compatible concepts by virtue of its system design.
Literature Review

In his book *Homo Ludens*, Johan Huizinga argues that play, *ludus*, is the evolutionary foundation of all human enterprise, and presents heartfelt, if loosely-argued, support for his unprecedented claim. Frustrated by the exclusively mechanistic notion of play that had emerged in early 20th Century science, the renowned Dutch Historian sought to counter what he perceived as crass utilitarianism with a new definition of play: Huizinga makes clear that play is an irrational but voluntary act undertaken by living things. He rejects previous scholarship on play by biologists and other studies with and empirical bent on the grounds that those studies assume that play must serve some function that is *not* play\textsuperscript{14}. Rather than begin with the presumption of an ulterior biological purpose, Huizinga approaches play as an intentionally, necessarily purposeless act. He notes that play is not limited to the sphere of human life, and cannot have its foundation in any rational nexus because that would limit it to mankind.\textsuperscript{15} Huizinga argues that play exists first and foremost for *fun* - a concept that resists any attempt at reduction -- and that any utility derived from play is coincidental. He also notes that play must be voluntary, otherwise it is not play\textsuperscript{16}. Huizinga focuses again on children and animals, observing that they do not have to play, but do so for reasons that are unclear. Additionally, action that is coerced, or ordered is not reflective of the activity that Huizinga recognizes as play, but at best imitation play.

Huizinga’s description of the nature of play is problematic. First, his definition of play is narrow. For Huizinga, play is only voluntary, irrational, superfluous, fun acts, which have no utility or purpose. This definition places play as a luxury, outside of the rational, utilitarian acts that define all things which are not-play. Any play that is outside of this paradigm, Huizinga simply dismisses as lacking the spirit of ‘true’ play, falling upon a “No true Scotsman” fallacy. For example, Huizinga disregards the

\textsuperscript{14} Huizinga, 1955.
\textsuperscript{15} Ibid
\textsuperscript{16} Ibid
phenomenon of professional sports, ostensibly paid play, as only being ‘nominally play’ and lacking spirit.\footnote{Ibid}

In order to separate play from not-play as he saw it, Huizinga proposed that play possesses unique temporal and special qualities which create a ‘magic circle’ around people. For Huizinga, play is separate from “real” life.\footnote{Ibid} The specialness of play is temporal and spacial, such as the lines of a basketball court or card table. The magic circle, the sphere of play, is governed by special rules unique to the conditions of play. Despite his previous assertion of play being freedom, he notes that the magic circle imposes order within its sphere of influence\footnote{Ibid}.

The concept of the magic circle has been used by numerous scholars examining video games. In his work on virtual economies, Edward Castronova cited the magic circle as a shield that separates the game worlds from the natural\footnote{The term ‘natural’ is used to refer to the physical, tangible world in which people inhabit. In opposition, virtual worlds are as previously defined, persistent spaces facilitated through computers.} world for players\footnote{Castronova 2003.}. However, his research into virtual economies demonstrated that the economies of virtual worlds were connected to our own, breaking down the magic circle. His findings that demonstrated that whether or not an object is part of a game or is digital is irrelevant, rather that willingness to pay, to sacrifice time and effort, is the ultimate arbiter of significance when determining economic value\footnote{Ibid}.

Other scholars from various disciplines have degraded the integrity of the magic circle in the context of virtual worlds and online games. From the legal field, Greg Lastowka’s 2010 book *Virtual Justice* highlights numerous cases in which the affairs of virtual worlds directly impact the legal affairs of individuals. The most notable examples takes place in the sandbox MMO *EVE Online*, in which
players constructed a pyramid scheme inside the game world that defrauded numerous users\textsuperscript{23}. Lastowka notes that virtual worlds are not only games, but that they can be used for other purposes, such as a corporate board meeting taking place in Second Life. The presence of the board meeting in Second Life does not prevent that virtual world from being used as a game space for others, and the game space doesn’t detract from the ability for Second Life to be used as a corporate boardroom.\textsuperscript{24}

Lastowka’s analysis however is limited. Despite his forward thinking viewpoints on virtual property, his analysis of virtual property remains limited to property bound within single application virtual worlds with certain features, such as three dimensional space and markets, features of the most common commoditized virtual worlds such as World of Warcraft and EVE Online. Additionally, despite indicating numerous occasions in which the magic circle is broken and the real world and game world have clear overlap, he remains committed to Huizinga’s definition of play being completely dissociated with ‘real’ life.

In counter to Lastowka’s legal analysis, Joshua Fairfield’s paper “The Magic Circle” (2008) outright rejects the magic circle. Rather than accept an ontology which accepts that virtual worlds are exceptional from the natural world, Fairfield explicitly claims that there is no “virtual” world to be distinguished from the “real” world, but rather that all virtual actions originate with real people and affect real people, only through a computer mediated environment\textsuperscript{25}. In the place of drawing an abstract spatial line to distinguish between when things are ‘real’ versus ‘just play’ or ‘virtual’, Fairfield notes that the magic circle has specific utility regarding gameplay. Magic circles do protect play-acts which are harmless but appear harmful, such as killing opposing avatars. The circle also protects fantasy

\begin{footnotes}
\item[23] Lastowka 2010.
\item[24] Ibid
\end{footnotes}
speech inside the game, as well as helps provide for a level playing field.\textsuperscript{26} Fairfield notes that in this context, the magic circle could also be viewed as a terms of consent between individuals.\textsuperscript{27} 

Fairfield’s analysis of this relationship is in accordance with Lastowka’s observations on the how events in virtual worlds are connected to the events of the natural world. However, consent agreements, a method utilized by many services and virtual worlds including Steam, are fundamentally flawed. In his paper “Privacy Self-Management and the Consent Dilemma” (2013), Daniel Solove observes that practically nobody reads or has the capacity to understand consent agreements which are often extremely long and confusing\textsuperscript{28}.

The exceptional status of virtual worlds is also addressed within the discipline of games studies. Richard Bartle, co-creator of the first MUD, cites that the affordances of virtual worlds makes them unique, and that while they are not all necessarily games, that there is still a magic circle which makes them unique.\textsuperscript{29} Bartle’s application of the magic circle of virtual worlds is similar to Fairfield’s consent based approach. He asserts that individuals who wish to spend time in virtual worlds willingly concede certain freedoms in order to gain new freedoms and possibilities offered by the virtual world\textsuperscript{30}. Bartle also acknowledges that virtual worlds are fundamentally rule based. They are governed by two sets of rules, first being the code of the system, and the second being the rules and expectations of the community\textsuperscript{31}. Bartle clearly articulates a contradiction in the premise in the magic circle concept, between the freedom associated with play and the rigorous control of games. Play is meant to be a fun activity reliant on the lusory attitude of the individual, while games are commonly bound with rules.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{26} Ibid.
\item \textsuperscript{27} Ibid.
\item \textsuperscript{28} Solove 2013.
\item \textsuperscript{29} Bartle 2004.
\item \textsuperscript{30} Ibid.
\item \textsuperscript{31} Ibid.
\end{itemize}
\end{footnotesize}
meant to control player behavior and choice. Digital games are intrinsically systems built through programming\textsuperscript{32} and are thus open to the critiques of systems and programming.

Programming is intrinsically linked with control. In his historical analysis of the rise of information systems, Beniger defines control as “purposeful influence toward a predetermined goal” (Beniger 1986), and additionally goes on to claim that “all control is thus programmed: it depends on physically encoded information, which must include both the goals toward which a process is to be influenced and the procedures for processing additional information toward that end” (Beniger 40).

Beniger’s definition of control with programming thus breaks down as follows:

- Control is the organization of matter and energy
- Control is dictated by programming
- Programming requires a processor to process information for the program

Additionally, control exists within three different temporal frames of reference

- Existence - Maintaining organization, counter to entropy and disorder
- Experience - Adapting goal directed processes to variation and change in conditions
- Evolution - reprogramming less successful goals and procedures, preserving successful ones (Feedback)

From these criteria, Beniger identifies multiple forms of organization control in human society, from the human body, to bureaucratic structures, to mechanical and electronic information processors.

\textsuperscript{32}Salen 2003.
Beniger examined the phenomenon of the rise of the Information Economy through rapid changes in the economy during the 19th century. He argued that the industrialization’s greatest effect was “to speed up a society’s entire material processing system, thereby precipitating what I call a crisis of control, a period in which innovations in information-processing and communication technologies lagged behind those of energy and its application to manufacturing and transportation” (Beniger 1986). Beniger lists a series of historical examples of this, with the safety crisis of railroad management, efficient production and distribution of consumer goods. These crises required a level of organization and control offered in the form of bureaucracy, the apparatus of governmental control which German Sociologist Max Weber
referred to as ‘domination through knowledge’. Beinger explicitly connects the territory of political management and theory with that of cybernetics and communication.

By connecting control and organization across these multiple levels of existence, Beinger firmly establishes the conceptual framework by which cybernetic principles could logically be applied to social systems. However, while cybernetics may have established certain principles connected to governance in writing, their application on the state level in practice had varied levels of success. No single nation’s experience with industrialization is the same and Beniger focuses heavily on American Industrialization. The promise of cybernetic control also appealed to Marxist states looking for command economy solutions.

Throughout the development of 20th century cybernetics, theorists, engineers and political leaders consistently attempted to apply their personal political convictions to their work in cybernetics. In *The Human Use of Human Beings* (1954) Norbert Weiner explicitly goes out of his way to reaffirm his commitment to western liberalism, as well as insist that the principles of western liberalism can coexist with cybernetic control.33

Eden Medina documents the Chilean attempt at creating a nationwide social and economic control system during Chilean President Salvador Allende’s administration. Allende was sympathetic to the idea that cybernetic control would be able to liberate Chilean factory laborers from their managerial overlords and approved the creation of the Cybersyn project with that intent. However, despite the intent to empower workers, the system which routed all economic data from factories all around the country was most useful in suppressing unrest than it was in its original goal.34 Similarly in the USSR, Soviet engineers were unsuccessful in creating a centrally controlled economic management system.35 However, recognizing the potential for new systems of control, the Soviet state intelligence apparatus

33 Weiner 1954.
34 Medina 2006.
35 Gerovitch 2002.
was very successful in adapting cybernetics to bolster their control systems. From Beinger’s orders of
control, the cybernetic control systems attempted in Chile and the USSR can be analogized to more
familiar forms of societal controls, notably bureaucracy. Systems of control are inherently political
systems, and as established above, games are systems of control. Games are inherently political
constructs and are vulnerable to the same kinds of critiques as that have been used on the Chilean and
Soviet cybernetic control systems.

Examining the politics of videogames is matter of scale. Individual games, like individual films
or books, can each have divergent ideas and opinions. However, when examining the function and
output of the digital games industry as a whole, it is not just the politics of entertainment and play that
must be considered, but as an industry. As a global profit driven business, the games industry is
vulnerable to Marxist critiques of its political economy just as any other globalized industry. Two texts
in this tradition that are particularly relevant to the games industry are Games of Empire by Nick Dyer-
Witheford and Greig de Peuter, and A Hacker Manifesto by Mackenzie Wark.

*Games of Empire* asserts that video games represent not just a new commodity, but are the media
form that is most paradigmatic of the modern global hyper-capitalist structure. Operating from
assertions about the paradigmatic ‘Empire’ from the titular book by Hardt and Negri, Dyer-Witheford
and de Peuter clearly articulate the ways in which the gaming industry profits off of the arrangement of
the military, economic and subjective forces of contemporary capitalism, specifically through the
mobilization of immaterial labor. Immaterial labor is defined as labor that creates immaterial
commodities, such as knowledge, communication, and information. While the gaming industry has
historically relied upon various forms of immaterial labor from around the world in order to develop its

---

36 Ibid
38 Ibid.
39 Ibid.
commodities, *Games of Empire* highlights ‘playbor’, a specific form of contemporary immaterial labor that hybridizes enjoyment with work.  

*Games of Empire* discusses primarily discusses playbor in the context of industry labor practices. The book highlights discusses at length the practices of employers, from their recruitment of enthusiastic young gamers trying to break into the industry, as well as treatment of employees at large studios and publishers. Starting with recruitment, gaining entry into game development is especially difficult given the large number of young enthusiasts seeking to work in the industry that they love. More so with PC gaming than console gaming, the industry commonly expects that applicants develop games in their free time in order to demonstrate their value as a potential employee. Additionally, developers and publishers directly foster environments in which employees are both incentivized to work long hours outside of time they are contracted to work. Work in game development is portrayed as a fun privilege, while demands by management are high. Such business practices were forced to change following a class action lawsuit in 2004 following the infamous ‘EA Spouse’ event, which resulted in the reclassification of entry-level workers as hourly wageworkers.

In addition to game industry specific instances of ‘playbor’, *Games of Empire* also highlights the use of video games as training tools for employees. This practice is explicitly meant to encourage employees to train for their work in their free time, with numerous cases of employees engaging with training games outside of work. Dyer-Witheford and de Peuter situate these immaterial labor practices within the context of cognitive capitalism, that is capitalism where the mind of the worker is the primary place of production.

---

40 Ibid.  
41 Ibid.  
42 Ibid.  
43 Ibid.  
44 Ibid.
Dyer-Witheford and de Peuter also argue that playbor extends outside of the games industry and permeates games as well, specifically virtual worlds. Specifically, they argue that massively multiplayer online games such as Blizzard’s *World of Warcraft* are strong conceptual matches for Michel Foucault’s concept of biopower. In *The History of Sexuality Vol. 1*, Foucault describes biopower as the subjugation and control of bodies through disciplinary institutions, such as schools and the military.\(^{45}\) MMOs, Dyer-Witheford and de Peuter argue, are instances in which corporations exercise absolute control over the bodies of users in virtual worlds, through both gameplay features, as well as restrictive EULA and ToS agreements.\(^{46}\) However, this analysis of biopower regimes, as stated earlier limits itself in scope to a single virtual world, which is in turn a single application. Exercise of the control of biopower as it relates to games begins outside of the application itself and in the way that the game is accessed and played. It begins in the information channel which allows users to access the game. Games do not just magically appear installed in users computers, but are accessed through tightly controlled digital distribution networks. These are not addressed in *Games of Empire*.

McKenzie Wark’s *A Hacker Manifesto v4.0* does address this gap, though not in name directly. Specifically, Wark’s *Manifesto* establishes a new dialectic conflict in the Marxist-Hegelian tradition set in the contemporary information economy. In place of the capitalist/proletarian conflict, Wark frames his dialectic conflict is between the vectoralist and the hacker. Wark defines the vectoralist as a new class that asserts its power through the monopolization of intellectual property and the means of reproducing their value. In dialectic conflict with the vectoralist, Wark positions the hacker. Wark defines the hacker as the class that utilizes information to create new objects. While Wark’s vectoralist/hacker dialectic does not address the gaming industry or individuals who play games, the

---

\(^{45}\) Foucault 1998. \\
\(^{46}\) Dyer-Witheford 2009.
In conclusion, games, especially games set in virtual worlds and online spaces, cannot simply be written off as spaces separate from the natural world. Rather, they are products of the natural world and must be considered as a part of it. Furthermore, given that games are not separate or unique, they must be examined with the same rigor as other objects and phenomena that they are reflective of, namely systems of communicative and economic control.
Method

The research method for this study is an interdisciplinary combination of archival research, discourse analysis, and digital ethnography. It is qualitative, relying on descriptions of collected data in the context of the source. Description is additionally subjective to my own perspective and experience as a system user in addition to my perspective as a researcher.

A combination of methods was chosen, rather than rely on a single method due to the nature of the data collected as well as its interpretations. Archival research was chosen due to the nature of the source of the data. The source of data comes from the online discussion forum NeoGAF (www.neogaf.com). NeoGAF is self-defined as “a nexus of hardcore gamers, enthusiast press, and video game industry developers and publishers. This is a neutral ground where facts and evidence, presented within the confines of civil, inclusive discourse, prevail through careful moderation”, and features an extensive and well-moderated gaming discussion forum. While contribution to the forums requires an approved membership, the discussions themselves are publicly available to read in their entirety. Although there are sections of the forum dedicated to alternative topics of discussion, the primary topic of discussion is video games.

NeoGAF is also not just an archive, but also a discussion. Users on the forum engage in a form of discourse related to their topic. However from media historian Lisa Gitelman’s definition of media, NeoGAF is functionally a part of games as a medium. Gitelman defines media as

“...socially realized structures of communication where structures include technological forms and their associated protocols, and where communication is a cultural practice, a ritualized collocation of people on the same mental page, sharing or engaged with popular ontologies of representation. As such media are unique and complicated historical subjects. Their histories must be social and cultural, not the stories of how one technology leads to another, or of isolated geniuses working their magic on the world”

47 Individuals must apply for access to post with a valid email address from an internet service provider, educational institution, or workplace.
48 Gitelman 2006.
By this definition, discourse and commentary on NeoGAF is not separate from the medium of games, but is a part of it. The discourse from the forum cannot be categorized into a single frame, but in consistency with the central argument, is in the ‘frame’ of play that concerns multiple other ‘frames’ simultaneously.

NeoGAF, however, is more than just a public archive or collection of discourses. The forum is a virtual space for active engagement by a multitude of users who are able to contribute to any discussion, as well as begin discussions of their own. Additionally, users have a loose organizational hierarchy, with administrators and moderators holding power and authority over direction of discussion. The forum is not just a public archive, but a community and virtual space with its own norms, and can only be fully understood as subject to those norms. Thus, interpretation and description of collected data is ethnographic in its nature, reliant on my own understanding of the discourse based on my own experience and time within the virtual space.

NeoGAF was chosen as the forum of study due to the focused nature of the forum and strong moderation policy. While NeoGAF’s forums are open to search through site-specific Google queries, membership is limited. Individuals must be at least thirteen years old and apply to become members with a valid email address provided by an Internet service provider, workplace, or educational institution. Additionally, users must agree that any information shared on the NeoGAF forum, including copyrighted materials and trade secrets, are free for other users to comment on, reproduce, transmit, display, modify, and create derivative works from. These two policies combine to create an online community with enforced and shared community norms, as Gitelman identified in her definition of media. However, this communal consistency is not without its downsides. The NeoGAF community are self-identified as ‘gamers’, an identity tied to issues of gender, race and sexuality, not just consumption
of game media\textsuperscript{49}. From this, we can infer that the NeoGAF community is not entirely representative of the video game playing population, but is rather a group passionate enough about their preferred media to engage in critical, moderated discourse in an independent community.

Having established the site and timeframe for the case study, observation began. Data was collected in the following manner. First, research was conducted of the topic (Steam) through popular game news websites to establish significant points in time and subjects related to the topic. From the results of that research, a timeline was created with keywords to search publicly available user discourse on the subject. Searches were conducted relying on the Google search engine’s site-specific queries on the gaming-focused discussion forum, NeoGAF. Data collection was heavily reliant on the Google search algorithm, due to NeoGAF’s lack of an effective native search function. Collection was done through keyword searches generated from subjects from the timeline, followed by a special string of characters which directed Google to limit search results to the NeoGAF forum (“site:neogaf.com/forum”). Once results were returned, search results were limited by specific ranges of time using Google’s advanced search options. Returned results were in the form of discussion threads containing strings matching the keyword. I then identified threads relevant to the topic and read through them for relevant and important posts.

Forum posts on NeoGAF function in a specific manner. Registered users are able to post discussion threads that have a title and a single post to begin. Other registered users are then able to post in that thread, with their posts being listed in chronological order of their posting. Users are free to post either directly in response to a previous post in the thread, or indirectly.

Following searches, notable posts in relevant threads were collected in a spreadsheet with the following fields of information. First, the title of the thread, the title which guides commentary and discourse within the thread. Secondly, the URL leading to the exact webpage on which the post was

\textsuperscript{49}Shaw, Adrienne. “Do You Identify As A Gamer? Gender, race, sexuality and gamer identity”. June 16, 2011
located was recorded. Though I had to option to record the URL for individual posts, I believed it to be more important to record the location of posts in context with related discourse in a thread. Third, the user’s online name was recorded. Fourth, the content of the post was recorded, though not always in its entirety. Some longer posts were excerpted for most relevant passages. Fifth, the date of the post was recorded. Sixth, a column called ‘tags’, coding the data based on subject of the content. Finally, in the seventh column, I recorded initial notes on the posts as I encountered them.

The worthiness of a post was determined by the title of the thread in which the post was located, as well as characteristics of the post. Specifically, I looked for posts in which users directly discussed Steam as a system, rather than discussing their action within Steam, though note was taken of general trends in discussion threads. Posts which reflected self-awareness of participation in a system were also granted notability. Additionally, notability was granted in cases of disagreement between users discussing the system, as they highlighted a political schism within the community.

Following data collection, I categorized and ordered posts into groups based on topic and time. From the ordered data, I wrote my interpretations of that information, as presented in the following chapter.
Data Review

This chapter examines the history of Steam from the user perspective, based on user discussion from the NeoGAF dedicated gaming forum. This section will first examine user responses to Steam’s introduction. Following that, it will examine user posts in response to Steam’s functions as laid out in the introduction. Those are Steam as retail, control, social networking, control, and trade. As mentioned in the method chapter, users posts cannot be taken at their face value based on the text posted, but rather seen as part of participation in the medium.

Examination of discourse on the topic of Steam on the NeoGAF board demonstrates that Steam users have been aware of those primary functions of Steam as it relates the given function of Steam: play. Before the mass migration of game distribution from physical media to digital media, control, surveillance, work and trade within the field of video games was limited. However, due to the ubiquitous presence of Steam in all functions of PC gaming, those functions are now ever present for all individuals playing games on Steam.

The findings in this section reveal with these functions, despite falling outside of idealized notions of play, have been successfully incorporated into the field of play through its integration to Steam.

Early History and Introduction (2002-2004)

Presented first to the global audience of game developers and publishers who would come to regard it as a vital to their success, Valve’s Steam platform was initially announced at the 2002 Game Developer’s Conference in San Jose, California. Prior to Valve’s announcement, the company’s success came from their popular, critically-acclaimed first-person shooter series, Half-Life. Gamespot.com

50 First-person shooter. Borrowing lightly from literary convention, “first-person” refers typically to games that position the vision of the player as the same as their avatar.
reported that Steam’s purpose was to utilize the growing availability of broadband internet access among Valve’s consumers in order to sell software applications directly to them, as well as automate software updates\textsuperscript{51}. At the time of the announcement, Steam was already in private beta testing. Valve’s success as a company came from their extremely popular first person shooter series, \textit{Half-Life}. \textit{Half-Life} was not only a success on its own however, but because of the popularity of fan-created modifications for the game, most famously \textit{Counter-Strike}. While \textit{Half-Life} is a single player game, \textit{Counter-Strike} is a team based multiplayer game, a game that required users to be connected to a shared game server over the internet.

Valve began publicly pushing its user base towards steam in January 2003 with the release of a major software update to \textit{Counter-Strike}\textsuperscript{52}. By making the newest version only available to users through the Steam client, Valve forced players to either to continue on unsupported software or to switch to the new network in order to continue to play. \textit{Counter-Strike} was so popular that the bandwidth allocated to support Steam was unable to support demand for the game\textsuperscript{53}. Steam officially ended its beta and launched on September 12, 2003\textsuperscript{54}. At launch, the client was only necessary for players seeking to play Valve’s popular competitive multiplayer shooters \textit{Counter-Strike} and \textit{Day of Defeat}. However, pressure to join the network would increased in 2004.

2004 saw the release of Valve’s highly anticipated sequel to \textit{Half-Life}, \textit{Half-Life 2}. Prior to the official street release date for \textit{Half-Life 2} of November 16, 2004, Valve made \textit{Half-Life 2} available for ‘pre-loading’ through Steam. ‘Pre-loading’ meant that Steam users were able to download all of the software and information for \textit{Half-Life 2}, but would be unable to play it until the release date when players would be given access to licenses. Additionally, users who purchased physical copies of \textit{Half-
Life 2 were also required to install Steam onto their computers in order to play the game, which they would have to run in order to play the game. Steam’s network connection to Valve allowed them to ensure that each copy of Half-Life 2 being used had a legitimately obtained license.

During the launch of Half-Life 2, users expressed a variety of opinions regarding the mandatory introduction of Steam into their gaming habits. Many users posting on the NeoGAF forum expressed frustration after experiencing technical issues with buying Half-Life 2. A number of issues were concerned with US citizens living abroad trying to purchase the game through Steam. User ‘sho nuff’ on the release date of November 16th wrote

Has anyone been able to register Steam from a non-US country with a US credit card? All four of my credit cards were turned down tonight (I'm in Japan). I'm assuming that Valve sees a US billing address and a non-US IP address and that sends up a red flag. It also informed me that my primary Visa account had been placed "on hold" so I'm going to need to call Visa tomorrow so I can, you know, ACTUALLY USE MY CREDIT CARD AGAIN. I understand that they need to protect against international fraud, but if they're gonna make me jump through hoops with this Steam shit, then I'll get the boxed version and Vivendi will get the larger percentage of my money. >:(

User sho nuff claims to have experienced the difficulty with the process and the following hassle of having to deal with their credit card company as reason enough to forgo utilizing the digital download process and stick with physical media. User ‘bebbo’ had a similar experience.

Living in Japan I had the same problem through steam. None of my US cards worked. So I contacted steam-billing and talked to them over about a week and a half. The problem is that if your IP does not match the country of your billing address it kills your attempt. So basically I explained my situation to them, they took a week+ to reply and say they were working on it and then 2-3 days later they told me to give it a try and it should work...and it did. So yea they'll fix it for you, but be prepared to wait a week before they do.

User ‘bebbo’, unlike ‘sho nuff’, worked through the customer service process prior to the release date, and was able to purchase the game through Steam, though the process took significantly longer than it would have had he simply bought a physical copy.
Other users more simply objected to the mandatory inclusion of the Steam client as a prerequisite for playing the new game. User redlink posted the following in a thread from December 2, 2004 titled “Any way to avoid this Steam crap?” (Post edited for space).

I did use Steam to install it...
But these mandatory updates are ridiculous...
I don't want to play HL2: Deathmatch Rise of the D-Day blah blah blah...
I just wanna double click on my CD Drive and play the game...
:)
I can understand patches or in game fuzes, new models, etc...
But stuff I don't want or need?

User redlink explicitly states that he views Steam as something he doesn’t want, something which gets in the way of his expected gaming experience of clicking on his disc drive (this infers that he owns a physical copy of the game media) and then immediately jumping into his game experience.

Additionally, they express frustration at the mandatory software updates and additional software that was a part of his installation process. Other users in the thread echoed similar sentiments.

In contrast to user redlink and others in the same thread complaining about Steam, user Burger replied in support of the system, and claimed that it was the users who were deficient.

Steam doesn't suck, you suck, at getting the answers you need in a prompt and efficient manner.

Instead of giving up on what is the best content delivery system ever made for a videogame, and proclaiming that it 'sucks', why not head over to the support section at http://www.steampowered.com

Some people don't understand how EASY Steam makes your whole HL2 experience. There have been, hell, 5 odd patches released for HL2 since it's release. Normally that would seem excessive, but with Steam, Valve can (and have) fix one simple problem within HOURS of discovering it.

Normally a publisher would add a fix to a list of fixes, to be released in a block patch after testing and Q/A.

Instead of jumping on a que at fileplanet to get "Half-Life 2 non-cumulative Patch 1.034 (requires version 1.022-1.028).exe" your game does it for you.
If you don't know how to use Steam, use the support system, or have a look at the FAQ's posted in the steampowered forums. You will find all the answers you need there.

User Burger makes the claim that Steam is ‘the best content delivery system ever made for a video game’ and explicitly refers to the ease of software updates as part of that reason. From their perspective, Steam has made their experience with the new game easier, a stark contrast to the previous users experience and has no problem with the addition of new software to his game experience. In the same thread, user TekunoRobby expressed more specific criticisms of Steam.

The few things that I don't like about Steam is that: (a) the frontend is ugly (b) it needs to be run and it takes up resources (b) it's a bit more complicated than the simple install game and run of the previous era.

Of course those points are completely nonexistent but they have to atleast count for something.

User TekunoRobby expresses the most nuanced and articulate opinions in the thread. Where the previously cited users are arguing with what appears to be from a fairly emotional state, user TekunoRobby explicitly cites his criticisms of the system. Those are in the order they stated, difficulty with the user interface, Steam’s allocation of computer resources, and that this new system is a more complicated way of accessing games than in the past. This last point resonates with other users criticizing the introduction of Steam into their experience, although in more clear terms.

Retail

At Steam’s outset and launch it only supported a small handful of software titles developed by Valve in addition to popular fan developed software modifications that Valve purchased the intellectual property rights to. Beginning in 2005, Valve began to make deals with independent and third party developers to begin selling their titles on the Steam platform, beginning with the titles *Darwinia* and *Rag Doll Kung Fu*. However, in October 2006, Valve made their first deal with a large third party
developer to begin offering software titles from their PC catalog on the Steam service\textsuperscript{55}. Following the move by Activision, other large third party publishers began moving their PC game catalogs onto Steam. By May 25, 2008, Steam discussion had become large enough on the NeoGAF forum that user Tony Rocky Horror created a dedicated thread for all Steam news and announcements. In the original post, user Tony Rocky Horror listed the major third party publishers active on Steam, including 2K Games, Activision, Eidos, Epic, iD Software, Majesco, Popcap, Rockstar Games, Sega, Strategy First, THQ, and Ubisoft.

For users, the transition from physical to digital distribution was not a smooth one. Many of the games offered on Steam were also available for purchase on different hardware platforms, as well as in different forms of media, and at times users who chose to purchase the game through Steam found issue with their purchase. In a thread dedicated discussion of Dark Messiah of Might and Magic, a game published by Ubisoft and release on October 25, 2006 on Steam users voiced a number of concerns about the retail process through Steam, especially as it compared to the more familiar process of purchasing physical media.

One of the major complaints by users was the difference in release date for Steam compared to the physical media. For users seeking to purchase a physical media copy of the game, copies began selling on October 24, a full day before Steam began granting software licenses for users who had purchased the game through the platform. However, similar to Half-Life 2, users who purchased the game prior to the release date were able to pre-load the games files onto their hard drive before being able to play. User jarosh took the the NeoGAF thread to express his unhappiness with that situation.

it's ridiculous that i have to wait two days longer than most of you to play this game, even though ALL THE FILES are on my hd. :(

\textsuperscript{55} Thorson, Tor. "Activision Unscrews Valve" October 12, 2006.
User jarosh’s post highlights a distinct dissonance between the user expectation of property and ownership and the commodity being sold by Valve and Steam. Although the user is in possession of a computer hard drive with the necessary information on it to play the game he has purchased, he is unable to play it because the commodity in question is not the software itself. In the case of physical media discs, this distinction was moot since the developer had not put in place any necessary network connection in order to run the software from the physical disc.

Other user complaints stemmed from the price of the game on Steam, compared to prices for physical game copies. User Defcon expressed in the discussion thread for Dark Messiah regarding its pricing, as well as pricing regarding other games offered on Steam.

Steam is the biggest pile of crap, so it doesn't surprise me. I hate how all the games being offered on it are the same as retail price or even more expensive. What's the point?

Defcon raises the question, if digital games allow developers and publishers to cut production costs, then why are those cuts not reflected in the final cost of the product for consumers?

Greater discussion of that question was raised in a March 25, 2008 thread titled “Steam vs. iTunes: Why can’t Valve cut their digital prices in a similar way?”, posted by user Akia.

I'm arguing with a friend how why he should switch to buying games on Steam instead of pirating them. He's been throwing excuses at me for the last hour. I've refuted all [of] them and then he threw this question at me:

If Apple can get away with going 99cents a song why can't Valve make all Steam games discounted?

I'm stumped help PC-GAF!

The comparative discussion between Steam and iTunes identifies two major points. The first is users on NeoGAF view video games and music as different forms of media that cannot be compared without historicizing the medium. Users recognize that the transition from selling physical media to selling digital media was not a voluntary decision by the recording industry, but was forced through a disruption of file sharing services such as Napster. Steam and its adoption by actors in the gaming
industry on the other hand reflects a proactive move. Additionally it should be noted that PC games and music have been used in explicitly different ways. Before digital music files and file sharing services, computer interaction was not an integral part of enjoying music as a medium. Games however have always involved computers, and when Steam was released, games increasingly required an internet connection. In this way, Steam was built upon the practices and technologies that gamers already interacted with, rather than disrupting the industry the way digital distribution did for music.

In addition to raised the question of differences between two media forms, music and games, user Akia clearly states his position in the original post his position on two major issues, physical versus digital media sales, as well as purchasing media versus pirating it. Akia’s position is one supporting legitimate purchase of digital media.

In the thread, a number of users offer differing reasons for why game prices on Steam were so high. User FLEABttn claimed with great certainty “Pressure from brick and [mortar] /thread”. The comment ‘/thread’ mean to be reference to a coding shorthand for ‘close the thread’. The discussion of the ‘brick and mortar’, or physical media retail practices as they differ from direct, digital retail is expanded upon by user Metal Gear!.

Okay, let's break down the Steam vs. Retail thing to get it out of the way.

Retail - Retailers like Best Buy and Circuit City and GameStop are the customers, they pay FULL WHOLESALE PRICE for every game beforehand. The publisher gets all of their money UPFRONT. Any discounts you receive are the retailer EATING INTO THEIR OWN PROFIT MARGIN, often to the point of charging you EVEN LESS THAN THEY PAID WHOLESALE. They are willing to do this in order to get you into the store in the hopes you will buy one of the hundreds of other types of products that they sell, or to get rid of old inventory that is taking up PHYSICAL SPACE that they need for new games.

Steam - Publishers (or in some cases developers themselves) are selling DIRECTLY TO YOU, with Valve getting a 40% cut off the top. There is no incentive for them to lure you into the store to buy other things and no physical inventory to get rid of. Furthermore, if a game is also published physically for retail, they have contracts with the retailers to NOT DISCOUNT the game more than X% for X amount of months, otherwise the retailers will not buy millions of copies of the game for resale right off the bat.
Now, let's compare Steam to iTunes

iTunes - $1 a track/$10 a CD price is not significantly cheaper than the retail price of $12-$15 anyway. Same with movies for $15 newer movies/$10 older movies, or TV Shows for $2 and episode and $30-40 per season. Also, iTunes takes only ~30% off the top of the transaction in most cases, less than Steam, sure, but they also do not guarantee free re-downloads of your entire library in perpetuity.

“Metal Gear!” demonstrates sophisticated knowledge of the business difference between direct digital sales and physical media retailers. Of the points they raise, ‘Metal Gear!’ demonstrates an understanding of how the difference between digital and physical goods fundamentally change issues of supply chain management that affect the final cost of commodity for consumers. In comparison to iTunes, they also point out the cost between albums on iTunes is not significantly different compared to what physical sales were.

User Tideas offered another possible explanation for Steam’s pricing structure. (formatted for space).

I assume Steam charges more than retail because they can, know that people will pay for it. maybe a reasoning is that you can the extra convenience of not paying tax and not having to drive to a store to buy it. until steam gets some competition for DD [digital distribution], their price will probably stay a bit higher or same as retail

Tideas’ explanation is based on two key points. First that purchasing through Steam is more convenient for users, and second that at that time Steam had no competition, giving them no incentive to lure users away from other services. User Tideas’ comments reflect that they see Steam as competition not with other services, but with physical media retail spaces.

Other users challenged the premise of the argument that Steam is expensive, or at least as expensive as retail, in addition to commenting on the comparison between iTunes and Steam. User Spire points out how Steam utilizes sales, a common business practice in physical retail spaces, in addition to historicizing iTunes rise to prominence.
A. Steam has sales and discounts on games on a weekly basis. Plus they offer packs (like the Id Superpack, for example) which bundle several games and sell the pack for cheaper than those games would be individually at retail or even on Steam. Also, if you preorder on Steam, you get a discount and sometimes access to preorder bonuses like the TF2 beta.

B. iTunes sells songs for $.99 because the RIAA was scared shitless of music pirating/Napster/etc. and was willing to cut a deal with Apple as long as they got a piece of the pie. Now that digital distro is huge and spreading, the record labels are eager to get out of the shitty deal they cut with Apple and are sticking their stuff in other places, like the Amazon mp3 store. The same thing happened with the iTunes video content store, although in a much more compressed timespan.

User lexi contributed 2 points to the conversation. They identify a major difference in policy between iTunes and Steam, specifically referring to iTunes limitation on number of times purchased media can be downloaded, only after showing contempt for gaming publishing companies.

Steamp prices are already good enough for most publishers. Other publishers like to anally fuck you.

Also, you don't need to 'backup' shit you fucking bought. What a shitty excuse for an online store iTunes is if you can only 'own it 5 times'. Why Steam is one of the only digital stores to get this fucking concept down boggles the mind.

User lexi’s contempt for publishing companies is not dissimilar to the contempt user FLEABttn had for the stores which sold games.

European users on Steam shared that they were saving significant amounts of money on Steam at this time due to Steam listing prices in USD, rather than Euros. User Nander stated in the “Steam vs. iTunes” thread “The best thing about Steam is that even though I’m in Europe all prices are in dollars. Which means games on Steam suddenly got real cheap :).” Other users in the thread echoed this same sentiment. This standardization of pricing across nations however, would not last.

On December 12, 2008, Steam began regional pricing in local currencies for the United Kingdom and Europe. Users located in the United Kingdom would begin paying in pounds and
European users would begin paying in euros\textsuperscript{56}. Initial discussion of the issue came up in a thread dedicated to Steam news and announcements. Users from the UK initially began discussion of the issue when the functionality was added in a thread dedicated to Steam news and announcements. Users bee, ghst, and “Kamikazie!” all initially expressed their happiness and approval over the adjustment. User bee shared on 12/12/2008 that \textit{Call of Duty 4}, a popular military themed action game published by Activision, was being sold on Steam at £29.99.

Six days after the announcement that Steam would be switching to regional currency, user Ledsen created a dedicated thread to the issue. However, unlike the previous discussion, Ledsen focused on the perspective not from the perspective of users from the UK, but from the nations which used the euro as their currency. The following is an excerpt from the original post.

> The exchange rate they used was 1 dollar = 1 euro (edit: not for all games, but for many. If you have more information on before/after prices, please share). The actual exchange rate is 1 dollar = 0.69 euro. Even if you take into account that some prices were "lowered" from say $49 to €45, that's still a price increase between 20-50% for most games.

Numerous users chimed in on the thread, belittling the decision, and contributing it to Valve’s drive for profits as a company. User BeeDog posted in the thread: “Many games on Steam were overpriced as is (when I could go and pick up the retail copy for a lower price), but this is just pure bullshit.” User wolfmat shared: “I've always said "Fuck Valve", but for entirely different reasons. Yet another reason to raise the middle finger. These guys are greedy as shit.” This sentiment was echoed by numerous other users, upset with the new high standard prices for EU citizens. While many users were upset, others were more able to articulate their concerns. User Draft posted: “Steam needs better competition. Their pricing is the best example of this. Left to run amock, Valve will continue to gouge.” The most upset users seem unable to reconcile the reality that games are made for profit by developers and producers. By connecting directly with their users, Valve inadvertently also brought their own concerns close to

\textsuperscript{56} Walker, John. "Steam Goes European - Prices Go Crazy" December 12, 2008
that of their consumers, while in the past such ire would have been reserved for physical retail spaces.

User Draft attribute’s what they saw as price gouging to a market imbalance. This was supported by other users claiming that Steam’s prices persuaded to instead purchase physical media copies rather than pay a higher price through Steam.

Other users used the thread to engage in discussion regarding the role of economics as it relates to digital media pricing. User Big Chief Crazy Cone posted:

The prices are ridiculous for Euros, but that’s just because the Euro is only currency that’s worth anything right now. They’re pricing for the future. They can afford to do that because it’s digital, whereas retailers cannot. Retailers need to price for inventory movement, Valve has potentially infinite inventory and they don’t make money wholesale, they make it per unit. It’s the reality of their business model. Right now it sucks, but when currencies become sane again, the prices will be much better. By contrast, would you prefer that the prices change every month? Sure you would. But publishers and Valve can’t have estimated sales be based on fluctuating, predicted future currency values, despite the fact that those values may affect sales. Publishers view Steam as expendable (in comparison to retail), so Valve has to obey their price demands or else they won’t have any content. The extra value that Steam may/not offer over retail has been argued to death, so I won’t mention that. The import tax mentioned is also an important consideration, but I don’t know Euro policy on that. Remember that the new prices INCLUDE VAT, which was not the case before (I think, I live in the US). So now you have two much easier options to buy games, it just so happens that those options suck right now. Valve thought the benefit of easier payment and most likely increased publisher support outweighed the short-term consumer cost.

Big Chief Crazy Cone’s post raises multiple issues, but most saliently he points out to users that this apparent imbalance in pricing between users in euro nations versus the UK and US was primarily related to the 2008 economic recession. He speculated that as the US economy recovered, EU users would see their prices become more fair again, a proposition which would eventually prove to be correct.

While Steam’s relatively high retail prices continued to bother users, one of the most successful retail practices pursued by Valve through Steam has been their regular sales. In the dedicated Steam thread created for Tony Rocky Horror, the vast majority of thread discussion is dedicated to the acquisition of new games. Discourse in the original thread focused on the retail aspect of Steam. Users
regularly discussed new games that were available on Steam, as well as games which were available for sale at any given time.

Steam initially offered sales semi-regularly at two times throughout the week, one during the middle of the week, and another for the weekend. However, in addition to regular sales, beginning during the 2007 winter holiday season, Steam began having extended sales with extreme discounts of games, discounts of up to 50% reduced from normal retail price. This practice was repeated again in 2008, and became a regular fixture in every following holiday season. In addition to the holiday sales, beginning in 2010 Valve began running extensive sales during the summer, and finally adding autumn and Halloween sales in 2011.

User discourse surrounding the seasonal event sales garnered significantly different discourse than the regular weekly sales. Seasonal event sales were given dedicated threads for discussion of the sale. This can be attributed to a number of reasons. First, the seasonal event sales lasted significantly longer than the regular weekly sales, lasting as long as two weeks. Secondly, the discounts offered during the seasonal event sales, regularly offered extremely deep discounts on highly desired games. These sales often made many users feel compelled to buy games, even though they expressed a desire to not spend money on those games. During the 2009 Holiday Sale, user duffy on December 23, 2009 posted “Well there goes my money for the next two weeks. Fuuuuuck”, a sentiment shared by many users. Certain users expressed that this was due to a fear of missing out on the sale, and if they wanted the game later they would have to pay a higher price. Other users shared that they would be setting strict budgets for themselves throughout the sale.

57 Miller, Ross. “Steam’s Last Minute Christmas Sale: 10-50% off everything” December 24, 2007
58 Miller, Ross. “Steam's Holiday sale boasts 10-75% off everything”
59 Valve. “Perils of Summer” Steam Sale beings today.” June 24, 2010
60 Valve. “Steam Halloween Sale Now On!” October 27, 2011
Notably, users began using images, rather than just text, to communicate their anticipation and excitement inside the sale threads.

Valve’s new retail relationship is much closer and more intimate than before, a relationship noted by Valve in an interview with the Washington Post from . Rather than just produce games for users, Valve
and Steam now function as gatekeepers to the magic circle of play. However as gatekeepers, they require both money as well as mandatory installation inside their users computers.

**Community Development**

As mentioned above, Steam was initially rolled out as a mandatory component of *Counter-Strike*, a popular multiplayer game. However despite this, Steam’s initial launch failed to support or facilitate community building within the client. When seeking to play a multiplayer game on Steam’s platform such as Counter-Strike, Steam did little more than provide a list of active servers for a user to join. Social options were limited to creating and maintaining a friends list through Steam of other accounts that accepted a user’s friend request. This changed in September 2007 when Valve announced the addition of community features to Steam, features including profile pages for users, the ability to form groups with other players, schedule games with others, automated matchmaking, and engage in voice over IP (VOIP) chat through the Steam client.

On June 19, 2007, User Mrbob created a thread dedicated to discussion of Steam’s community features. User response to the announcement in the thread was overwhelmingly positive. Specifically, users immediately began comparing the announced services offered by Steam to Windows Live, a comparable service offered by Microsoft that required monthly payments. User’s also discussed the role Valve and Steam would play in the larger video game industry if the Steam community features were successful.

Numerous users pointed to Valve’s success with *Counter-Strike* and other networked multiplayer shooters as a causal factor in Valve’s decision to improve Steam’s community features. User EphemeralDream posted on June 19th, 2007

---

Pretty awesome news. Counter-Strike original is nearly unplayable for someone like me who never played it that much to begin with but this could really refresh the Valve titles. Valve not only set the initial precedent for DD but continues to raise the bar as the service gets older. Really commendable effort on Valve's part.

EphemeralDream points out that by strengthening community and automating game finding features, older games such as Counter-Strike could become more accessible to new players of those games. User WARCOCK reinforced the connection between Counter-Strike with the new community features.

WHAT STARTED ALL OF THIS? REALLY WHAT? WHAT?
COUNTERSTRIKE, PRAISE YOUR MESSIAH.

Other used the discussion thread in order to offer more general praises of Steam as a platform. As noted in an earlier section, Steam’s initial launch was met with hostility by many users who felt it was intrusive, expensive, and impeded in their play customs. However, by 2007 and the introduction of Steam, numerous users were publicly stating the benefits of Steam, and how they felt the system had changed. User mandiller posted:

Steam is brilliant. It has it's kinks like anything else but it does a great job. Hassle free game patching, installing, buying, downloading etc.

Basically all the PC games I play are on Steam. I just bought Trackmania United off it and I'm loving it.

More developers are jumping on board every day, if you don't use steam yet you're part of the problem (also you weird 'gametap' people......Steam has Sam & Max as well you know :)

User mandiller’s post has three major points. First, at the time of his post Steam’s early issues with functionality are no longer an issue. Secondly, that Steam is beginning to dominate more and more of the user’s gaming time. Finally, the user expresses happiness with greater availability of games through a single point of access, Steam. While none of these is directly related to Steam’s community features, in combination, all of these features represent a greater investment of money, time, and social capital into a single system.
Finally, one of the Steam communities last features, and one which users were most mixed upon was the addition of being able to see what other users were playing, as well as displaying how well an individual played certain games on their profile page. By publicly displaying this information, it gave users the ability to monitor not only what individuals in each others' groups were playing, but also how well they played certain games. By strengthening an individual’s personal presences and adding information to their accounts, Steam gave users the ability to monitor each other, a phenomenon which will be expanded upon in the next section.

Control and Surveillance

From its original inception, Valve has used Steam to monitor and control access to its software. From the launch of its open beta, Steam has been used to check that users connecting to the network have legitimately obtained versions of the software in question, as well as ensure that player do not cheat in certain games. Additionally, Valve has always allowed users to opt-in to hardware and software surveys of their users systems. Valve also publicly displays on the Steam website how many users are online, playing what game, at any given time.

A. DRM

Steam’s primary user control mechanism relies on a practice commonly known as digital rights management (DRM). DRM refers a to a variety of practices meant to protect access to copyright software services. In this sense, Steam is by definition DRM. On November 23, 2004 following the initial release of Half-Life 2, Valve announced that they had indefinitely suspended nearly 20,000 accounts following their attempts to play Half-Life 2 without purchasing it. Valve claimed that detecting
the fraudulent copies of the software was extremely easy for them to detect. Users on the NeoGAF forum regularly expressed a core ideology, one of distaste for any software sold which has DRM functions. In contradiction with this stance however is their vocal and financial support for Steam.

This can be attributed to the methods of DRM control implemented by Valve. First, Valve and Steam place no limit on the number of times software licenses may be activated on a machine. While this does not stop other companies from attaching additional DRM to the software they sell through Steam, the vast majority of software licenses on Steam have no activation limits. Users on NeoGAF have been especially vocal regarding this practice. In a thread from November 11, 2008 titled “Steam download games vs. Disc based game…” users on NeoGAF debated the merits of physical versus digital media. DRM came up as a significant issue between the two media forms.

While many users participated in the thread only to say that they supported purchasing through Steam without any reasoning given, one exchange between two users in the thread was particularly notable. User Vaporek posted in support of Steam, reasoning that physical media was a burden for consumers.

I would argue that buying the access rights to download from a server as much as you want is definitely better than being tied down to a little plastic disk.

Vaporek’s posts indicates that they feel physical media can become a burden on consumers, and that by transitioning to purchasing software licenses, consumers are in some way more free than before. However, pushing back against this statement, user Joseph Merrick posted:

say what? just backup your disc on your hdd if you want. wtf? I've started getting downloads over discs myself, but steam drm is a piece of shit. if it was available on gamersgate I'd suggest this over the disc one (y)

Joseph Merrick’s point, while combative in tone, makes two main points. First, that once the game is installed onto a computer’s hard drive, there is no distinguishable difference. Secondly, they strongly

---

dislike Steam’s DRM practices and have turned to an alternative digital distribution service. When
pushed on the subject of why he hates Steam, he responded: “uh. you need to have steam running, what
isn't wrong with that?” User Vaporek responded to his concern:

You may not like Steams DRM, but it still gives the consumer more legal rights than a retail disk purchase does. I don't particularly like the DRM either, especially when there's 3rd party DRM on top of what steam already provides. But, it's the kind of DRM I can live with since it grants more rights than I previously had.

Vaporek’s rebuttal to Joseph Merrick highlights the disparity of the relationship between the consumers and Valve. Their response that they can ‘live with it’ is telling. They do not like the arrangement, but they tolerate it.

User brain_stew provides anecdotal evidence to the convenience of Steam’s arrangement.

After just upgrading to Vista and as a result having to reinstall everything, you better believe that I wish every one of my games was on Steam. It makes life so easy, its a right pain to find the discs/product keys for everything else, then have to install games one at a time and waste time patching them after that. Yer, Steam is a Godsend in my eyes.

Honestly, Steam brings so much to a gaming PC, that I'd have it installed even if I didn't own any Steam games. Its a great piece of software that uses close to zero resources.

By consolidating all of his gaming investments into a single system, brain_stew was able to quickly and easily access his purchased games after transitioning to a new operating system for his computer.

brain_stew’s story is a prime case of greater efficiency being offered by Steam’s service as a result of their control over a user’s purchases.

Joseph Merrick’s point that Steam must be running in order for a user to play a game is also an incomplete definition of Steam’s DRM practices. While Steam does indeed require that users run the Steam client in order to play their games, they do not necessarily need to be connected to the Steam network in order to play. Steam allows users to play games without a network connection in ‘offline mode’. Offline mode, however, is still limited. User’s are required to be connected to the network at
least once in order to verify the legitimacy of their software, as well as run Steam during the time they are playing the game.

In comparison other companies, notably Electronic Arts and Activision Blizzard, require a network connection in order to play their games no matter what. Though Steam has featured an offline mode since at least 2006, many users did not know about it as late as 2011. In the dedicated Steam discussion thread for 2011, users were still asking whether or not playing games on Steam required a constant network connection.

B. Cheating

Steam’s origin was a platform for competitive games, and even today, the most popular games played on the Steam network are competitive multiplayer games, games such as *DOTA* and *Counter-Strike*. Valve’s reliance on the communities that engage in these games has given them a vested interest in maintaining a fair play environment for users. User discourse on NeoGAF reveals that the presence of cheaters\(^\text{64}\) quite literally ruins the game for non-cheaters to the point that they would rather not play. In a publicly released email from 2001, Valve employee Eric Smith acknowledged the problem of cheaters in their online games\(^\text{65}\). In 2002, Valve released their anti-cheat system, Valve Anti-Cheat (VAC) for *Counter-Strike*. Administrators running *Counter-Strike* servers\(^\text{66}\) could opt to have Valve’s anti-cheat protection. Users who were caught using illegal software modifications in game servers protected by

---

\(^64\)This section defines cheating as acts which require the user to break from the lusory attitude of a game. So rather than adhere to the rules of the game, they place their desired outcome over the attitude which makes the game possible. In video games, this often relies on modifications to the software of a game, a practice colloquially referred to as ‘hacking’.


\(^66\)As mentioned, competitive games where Valve has an interest in preventing cheating are not persistent worlds, but instanced games with a clear start and end point, similar to traditional team sports. Games however are typically hosted a third party server.
VAC would be banned first for 24 hours, with escalating penalties up to five years\(^67\). In 2005, Valve changed the VAC policy to lifetime bans on the first infraction\(^68\).

Today, VAC is used to protect all competitive games developed by Valve, in addition to a number of third party games available on Steam. Accounts banned through the VAC system face numerous penalties, as listed on the Steam support website\(^69\). First, banned accounts are unable to connect to game servers protected by VAC in the game they were caught cheating. Additionally, banned accounts are unable to utilize Steam’s ability to transfer software licenses to other accounts, preventing users who are caught cheating from moving their game licenses to a new account and playing without penalties. Additionally, being caught cheating is grounds for Valve to seize any virtual property owned by the user related to the game they have been caught cheating in.

The VAC system functions by scanning the software files for the game that it seeks to protect, scanning for known cheats (referred to as hacks) and flagging accounts that are caught cheating. On Valve’s VAC FAQ website, it is also revealed that VAC relies on people to report new forms of cheating as they are developed to Valve to add to the VAC protection. Oftentimes, this means that as long as a hack’s existence is not known to Valve the VAC system will not prevent it. In contrast to the automated protections offered by Valve, game servers, especially privately owned game servers which are very common, featured the ability to implement rules to kick players from games. That power either lay with specially designated server administrators, or through a specially programmed ability to allow users to democratically kick players from a game for suspected cheating. Despite the presence of cheaters and existence of VAC throughout nearly the entirety of Steam’s existence, VAC as a discussion topic was virtually non-existence until 2010. Discussion of VAC and its effects however was not focused on its effectiveness in catching cheaters, but on its penalties. User

\(^67\) BBC. “Online cheaters face games ban” August 29, 2002.
\(^68\) http://vacbanned.com/static/informations
\(^69\) Taken from Valve’s FAQ on VAC: https://support.steampowered.com/kb_article.php?ref=4044-qdhj-5691
discourse reveals that, while it is commonly accepted that cheaters ruin games and ruin the lusory experience of other users, their presence is seen as something of an inevitability. What users have been most worried about however are the potential threat having their access to play revoked by Valve without recourse.

While discussion of cheating and VAC was rather limited, users regularly discussed losing access to their Steam accounts and struggling with Steam’s customer support to gain back access to their accounts. In July 2010, user ubersnug shared an anecdote on the NeoGAF forum about losing access to his Steam account following a disputed payment. ubersnug claimed that, while he was innocent of any wrongdoing, Valve customer support was unwilling to talk with him to negotiate regaining access to his account. While ubersnug’s anecdote was not related to cheating or VAC, user mithos used the topic of discussion to comment on Valve’s policy enforcement.

This is why I have stayed away from Steam up until just a month ago when i got orangebox, their ARROGANCE that they never are wrong whether its Steam/VAC issues, they are NEVER WRONG, you are either a scammer/hacker, Steam/VAC are untouchable and NEVER WRONG.

User mithos’ inclusion of VAC in their comment demonstrates the view that Valve’s control over user accounts is excessive, connected the prevention and punishment for cheating in combination with the prevention and punishment for fraud. In direct response to mithos’ comment, user Red Scarlet pushed back, asking mithos: “Tell us how you really feel. You really hate DD on the whole [if I recall correctly]. It's evil and all that.” In response to Red Scarlet’s question, mithos responded

Yes in the current form supplied DD service I am against, because its "Devils Playground", you never know when or for what you gonna get stabbed in the back for because its a close kept secret.

And I like to control my purchased games, not let someone else control them, if they wanna control them better give them to me free of charge, if I pay for them I decide what I can or cannot do.

But hey I must be crazy for wanting to control what I payed for, right?
Hope it works out in the end for the OP, but personally I think the issues should not be allowed to happen in the first place they (Steam) need to take some responsibility when they fail to do things they say they will do.

User mithos’ directly associates his personal grievance with Steam to the control Steam places over users.

In a thread the following month started on July 16 titled “VAC anticheat - is it any good?” users discussed the merits of VAC directly. Numerous users commented that they did not believe that VAC was an effective tool, given that VAC-protected servers still regularly had cheaters playing games on those servers. Users commented that VAC was practically invisible. This invisibility users attributed to how it would not instantaneously ban cheaters on detection of a hack, in addition to its perceived ineffectiveness. Users additionally tended to support human cheat prevention through administrators, rather than rely on automated tools.

In September 2011, user taoofjord started a thread titled “Valve Anti Cheat (VAC) is scary. So is Valve’s Customer Support”. User taoofjord notes that in the VAC2 update from 2005, certain modifications to single player games would trigger VAC bans. Additionally, VAC bans are never overturned. While taoofjord maintained that they would never cheat, they still feared punishment and loss of control over access to their account, which in turn would mean a loss of access to possibly hundreds of dollars of investment.

...a few years ago I had lost the password to my first Steam account. That account was also connected to a hotmail account that I had closed before realizing that my Steam account was connected to it. Yes, it was a stupid move on my part. However, my attempts to contact Valve for help, so that I could verify my Steam account and get a password reset were futile. They never responded. I had, perhaps, about $700 worth of games on there... all lost because I couldn't get in contact with them. I understand that I got myself in that position but most companies allow you to contact them on the phone and help you sort it out. That Valve didn't (still doesn't?) allow that option still irks me to this day.

I'm curious if anyone else is a little bit worries about Valve's customer support, of if anyone has any similar stories to share. Now that most of us here drop hundreds of dollars on Steam it's more important than ever for us to have confidence in Valve that they will make sure they look after their customers and correct any mistakes they make.
Despite a significant difference in opinion of digital distribution and of Steam in general, user taoofjord echoed the same fear of punitive actions taken by Valve without recourse. Also unlike mithos, taoofjord’s anecdote tells of a specific instance where Valve’s customer support was unwilling to allow him to recoup a $700 loss, a much more tangible instance of loss of control compared to mithos’ general expression of fear.

Finally, complicating the issue is that user opinion on cheating in games, especially single player games which occasionally make use of VAC, is not uniform. While cheating in competitive games is often frowned upon, attitudes towards the presence of cheating in games is more ambiguous. In a January 2015, user TheSpoiler created a thread title “Thank you, based PC gaming, for bringing back cheat codes”. TheSpoiler says in the thread “I love you, cheat tables, for making my games goofy as fuck and just fun”. While there were other users who felt the same way, user NZOO commented in the thread that they would never cheat due to fear of a VAC ban. Even though other thread participants pointed out to him that VAC bans generally only applied to multiplayer games, the threat of a ban, of loss of control was ostensibly enough to shape a users play habits, even in cases where cheating was of no harm.

**Property, Work, and Trade**

In his 2005 paper on the subject, Joshua Fairfield defined virtual property as rivalrous, persistent, interconnected code, with a significant focus on the rivalrousness. Generally, code is non-rivalrous. One person’s use of code does not preclude another individual. However, certain forms of code are deliberately programmed to be rivalrous, with exclusive rights of access. By operating from this definition, nearly every facet and object of interaction within Steam is virtual property. This section will examine the types of virtual property that Steam manages, from the basic game licenses to the
outrageously rare Ethereal Pink Flames War Dog, from the user perspective. Additionally, it will examine how the changes in the design of virtual property in Steam effects user discourse.

A. Steam Account and Value Accumulation

Steam trades in multiple kinds of virtual property, though arguably most important form of virtual property on Steam is the user account. The user account is the access point to the Steam network, in addition to the avatar which represents individuals on the network. All software license purchases made through the Steam store are attached to the account, in addition to other forms of virtual property sold through Steam. Having access to an account gives an individual full access to any game licenses purchased on that account. No two accounts are alike, and only one person can access an account at any given time. Additionally, according to the mandatory end user agreement, accounts are not transferable. In this sense, the account is both the property of an individual, in addition to serving as the individual’s avatar on the network.

As a function of both identity and ownership, users on NeoGAF have routinely prioritized the security of their Steam account. On July 3, 2008, user FuKuy posted a thread title “INDIGNATED: Trying to steal my STEAM account”. In the original post for the thread, user FuKuy told a story about how an individual with the user name “ADMINISTRADOR SEGURO VAC” contacted him through Steam’s internal chat client, posed as a VAC administrator, and asked FuKuy for his account information and password. User FuKuy shared the chat log in the form of a partial screen captured image. The shared chat showed that user FuKuy communicates with others in Spanish on Steam, but shared the story in English on the NeoGAF forum.

Responding users posted comments suggesting empathy with FuKuy’s incident. Users claimed that such attempts to steal account information were commonplace, while also making jokes about the individual attempting the scam. In one example of a joke about the episode, user Totz pointed out that at
The desire to steal accounts is undoubtedly somewhat associated with the dollar value of the virtual property accumulated inside accounts. User taoofjord from the previous section shared a story claiming a loss of access to an account with over $700 dollars worth of games on it. While taoofjord shared the value of his account in the process of posting a complaint about Valve’s customer service, the practice of sharing account value was regularly observed by users throughout the dedicated Steam threads. Using third party websites which could calculate the value of a users account, NeoGAF commenters beginning as early as 2008 began sharing the value number of their Steam account, based on the total number of software licenses attached to the account. Users in the 2008 discussion boasted accounts ranging in value from nothing to over a thousand dollars, with dozens of games in their account. The practice was also observed in later discussions.

The value of an account served as a point of pride for many users. In the 2008 discussion, user Wired commented “Ah new way of measuring the e-penis eh? ‘You own 72 Steam Games worth ~ $727.36’[.] I lose :(" The term e-penis suggested that user Wired saw this as a way for users to boast about their dedication to the network, and that since users had already shared accounts with significant more value than his, Wired felt somewhat inadequate in comparison to others. Still, Wired’s account was still larger than many of the other users who shared their account value. Most users who shared had accounts worth a few hundred dollars. During this time, users would use the value of their Steam accounts as an item for barter. In a discussion thread dedicated to facilitate buying, selling, and trading games, user knicks posted his entire Steam account as open for sale or trade. However, user knicks’ offer was uncommon, which is unsurprising given how many functions that the Steam account fulfilled.
Steam offered more efficient forms of inter-user commerce beginning in December of 2007 with the introduction of the feature of being able to purchase games as gifts for others on Steam. Users were given the option to purchase games for others through the Steam client, a feature that users took advantage of in the dedicated buy/sell/trade thread on NeoGAF. However, this system is limited so that users could only gift games which had not yet been ‘claimed’ by an account. Games which had been played, games which had been added to a user’s library are unavailable for trade. Following the introduction of this feature, users trading games on NeoGAF regularly introduced Steam gifts right to the pool of items available for bartering.

B. Team Fortress 2 and Work

*Team Fortress 2* (TF2) is a popular competitive shooting game developed by Valve and released in 2007. In TF2, players are divided into two team who must fight against one another within a set field for a set period of time. Each player on each team must choose to play as one of nine different avatars for each match. Each avatar, referred to as a class, has a dramatically different appearance and uses dramatically different guns. Like Valve’s other popular competitive shooting games, TF2 places the player in the first person perspective of their avatar for the game. Following the games release, Valve continued to develop content for TF2. One form of new content developed for the game included new items for each of the nine classes. Players were given the opportunity to gain access to new guns for each class for achieving specific goals within the game. The new guns functioned as a reward for dedicated players.

In 2009, this system was changed again. On May 21, 2009, Valve released a major update for TF2. In addition to adding new guns to the game as they had in the past, guns which modified each of the nine different classes abilities, Valve also added a new type of item to the game, the cosmetic item.

---

70 Martin, Joe. “Steam adds gifting service for Christmas”. December 19, 2007
Unlike the items added before the May 21, 2009 update, the new cosmetic items had no effect on the game beyond their presence. They were, as the name implied, only cosmetic. In addition to the new items, Valve released a new method for users to obtain items based on the amount of time players spent playing the game, replacing the previous method of rewarding dedicated or exceptional play. The new method was based on time and random number generation. Every 25 minutes, players would be given a one in four chance to receive a new weapon, and every four hours would be given a 1/28 chance to receive a new cosmetic item. Items would be stored in their ‘backpack’, an inventory of all their items. The new ‘backpack’ could hold up to fifty items, and users could have multiple of each item.

Upon its initial introduction, users on NeoGAF were extremely confused by the new method of obtaining items. In a thread dedicated to discussion of TF2, on the day of the update numerous different users posted questions in the thread about the new system of obtaining items. Many did not understand the criteria they needed to meet to be awarded new items and posted seeking advice in various TF2 threads. On the day of the update a few hours the update went live, user webrunner posted the question: “How *do* you get them? It's not listed in the patch notes.” In discussion of the patch notes, users only guidance that they would ‘find’ items. Five days after the update released, while no users had knowledge on the specifics of the system, user Oreoleo posted the following claim to a user asking about the drop system: “It just pops up. You don't even pick it up off the ground. There is literally nothing the user can do on his end to speed up the process other than play the game a lot.”

The adjustment in item awarding provoked immediate negative responses from users on the board. Many of them specifically complained about the arbitrary method of attainment, as opposed to the previous method of meeting clear objectives. User Weenerz posted the complaint: “The loot system sucks its so random. If I wanted RNG I would play an MMO.” Weenerz comments contains a few coded

---

71 “Item Drop System” Official TF2 Wiki.  
72 Patch notes refer to literature released alongside a software update, detailing the changes for users.
terms. First, ‘loot’ as a broad term in gaming refers to prizes won in a game, in this case the new items. ‘RNG’ refers to random number generation, a commonly applied method to randomize outcomes in video games. Finally and most important however, is Weenerz comparison of the system to the same system found in MMOs. MMOs routinely feature game objectives require extreme time investments in order to successfully complete. This is commonly critiqued as developers abusing system design to encourage dedicated players to engage for longer periods of time in their product. However this also gives users incentives to cheat the system, whether through procedural assistance from third party software, or purchasing virtual with legal tender. This final concern was mentioned in conjunction with Weenerz discussion by user Blizzard. “The only problem is, people will use a cheat program/script/server to get [the items] now, I assume, while the people who play fair won't even have a legitimate way to unlock deterministically, unlike before.”User Blizzard uses a notable term of his own, deterministically. His claim reflects an underlying belief that play should rewarded, rather than just time investment. The initial item system was deterministic, if user completed a specific challenge, they would be rewarded with a specific item. Following the update, users began to realize that they would not be able to affect that outcome, other than to invest longer and longer period of time into the game.

A new, more deterministic system was implemented on December 17, 2009 with the addition of a ‘crafting’ system. With the new update, a system was implemented allowing users to obtain specific items through an in-game exchange system. With the new system, users would be able to convert items found through the random item drop system into a specific new item. Users were provided with ‘blueprints’ for these items. Creating new items required the conversion of numerous other items, and were referred to as recipes. As with the previous update, the crafting update came with little support or clarity from Valve. In discussion of the game, users posted their questions about the new system and learned from users who had told others about their experience with the game. The discussion thread
documents a communal learning system as users collaborate and share information about the new
system as it was implemented.

This system received another major update on September 30, 2010. Introduced features were an
in-game store which allowed them to directly purchase items from Valve with legal tender, and the
ability for players to trade with one another, creating an open market for in-game items. Users gained the
ability to trade their items from TF2 as currency to trade with one another. However, with the assistance
from third party services such as PayPal, as well as the presence of a store where tradeable items could
be purchased with legal tender, various other currencies were introduced to the market in addition to
game items. Additionally, a new class of item was added to the game, the supply crate. Supply crates
were items obtained through the random item system that had no use, either as a cosmetic or a weapon.
However, each crate contained one of a specific series of items. In order to open crates, players were
required to purchase keys from the new in-game store. Throughout this period, Valve continued to add
new items to the game, both weapons and cosmetic items. However in addition to items developed by
Valve, Valve also began adding items developed by individuals in the community. Additionally, not
all items to the game were of equal value. Specific added items were extremely rare being only available
as a randomly acquired item, or could only be acquired with extremely low probability from a supply
crate. These updates were met with mixed reaction by NeoGAF posters.

Some users immediately began trading and purchasing items with enthusiasm, using the thread to
post what they had and what they wanted. User “(_._.)” posted that they were “playing TF2 forum like
the stock market. I’m up three hats atm, haha”. User “(_._.)”’s post represents the dramatic shift in what
could be deemed play within TF2. Originally, the game was purely focused on the competitive and
action elements, with absolutely no presence of market forces or virtual property for users. However, the

73 “Nice Goin’ Pardner.” Team Fortress 2
introduction of virtual property, market forces, time-based property rewards totally opened up the game for new kinds of play outside of shooting other players’ avatars. Not all users appreciated this new kind of play in TF2, though based on the number of posts such users were in the minority. Based on posts in the discussion threads, buying, trading and selling items was immensely popular among users and trade discussion began to dominate discourse related to TF2 on the forum.

On July 31, 2011, user “The Technomancer” posted a thread dedicated solely to trading TF2 items, separating trade discourse from the primary discussion thread for TF2. In the original post, “The Technomancer” included a significant amount of information about the system, such as average prices of items in dollars, tips on avoiding scams, as well as advice on gaining the greatest return from the random drop system. In the thread, users would post the items they had that were willing to trade, as well as ask for items they sought. The following post is an example of a typical post from the TF2 trading thread, posted on August 2, 2011 by user Boonoo (formatted for space):

Looking to unload my vintage hats. Trading for a non-vintage copy+refined. (also open to different hats + metal, so feel free to offer).
Here's what I have.

Tippler's Tricorne
Mining Light
Safe'n'sound
Slim Dome
Baseball Bills
Ritzy Ricks
Otolaryngologists' Mirror
Rubber Glove
Bonk Helm
Soldier's Stash
Camera Beard x2

I also have a Green Confetti Tough Guy's Toque that I'd love to trade for pretty much any other unusual except for Heavy and Spy hats.
http://steamcommunity.com/id/boonoo
Such as post was typical for the thread, with a listing of what the user had to trade, what they wanted, as well as their publicly facing account information to connect with other users on the network.

At this point, TF2 had developed a complex market based economy based on players gaining virtual property through playing the game, and buying, selling and trading such virtual property. This market however would continue to expand within the Steam client itself in the Summer of 2011.

**Steam Trading**

On August 9, 2011, Valve merged the TF2 market economy with the existing game license economy with the introduction of the Steam Trading beta\(^74\). Announced on the TF2 website, users would be able to trade TF2 items for gifted (unclaimed) game licenses with one another, as well as trade game licenses. Immediately, users participating in the dedicated TF2 trading thread began to include gift game licenses as part of their desired items. Posts in the dedicated TF2 trading thread more or less looked the same, only that in addition to TF2 items being listed as items for barter, so too were game licenses. However, a new thread dedicated to this form of game trading was immediately posted by user SalsaShark on August 9, 2011. Additionally, a thread was posted on the same day by user Archie to discuss the change in the system itself.

In the thread discussing the system change, initial reaction posts by users reflected a range of feelings about the new system. Some users were supportive, while others found it absurd, such as user EmCeeGramr, who posted the following:

\(^74\)“Introducing Steam Trading Beta” Team Fortress 2.
User Jintor posted: “Hats for games? HATS FOR GAMES? I can't parse this”. Posts like user EmCeeGramr’s and other skeptics with the new system reflected a cognitive dissonance. Hats is used as a general term referring to the items gained in TF2, and though the system of trade by this time was nearly a year old, many users still found it absurd that such items could have the same value as a game license. Despite a number of users who found such a system absurd, by this time the TF2 trading thread was operating in full swing, and the new thread posted just a few hours after the announcement dedicated to this new avenue for trading became active as well.

Posts in the new trading thread were formatted similarly to that of the TF2 trading thread. Users would post the items that they wanted to trade along with their Steam contact information. However, despite the merging of the TF2 market with the game license market, the two threads primarily traded in different forms of property. The Steam Trading thread primarily featured individuals trying to trade game licenses, and TF2 item trading was still primarily contained within the TF2 trading thread.

Finally, in December 2012, Valve added a community market to Steam. The Steam community market allowed users to sell their TF2 items on Steam, rather than resorting to markets outside of Steam’s control. Sales on on the community market are charged a 15% transaction fee paid by the buyer, with 100% of the sale going to the seller. However, the Steam market was and is still not completely

---

open. At its launch, the maximum price allowed to sell an item was set at $200 (it has since been raised to $400). Additionally, any transactions on the Steam market would have to conducted through a user’s “Steam Wallet” account, meaning that all proceeds from sales on the Steam market could not be withdrawn and spent elsewhere, but only on Steam.

User response to this development, compared to past changes, was rather tepid. By this point, users had accepted the market of items and games Valve had implemented into Steam. A number of users, including Archie and Salsashark voiced disappointment that users would be unable to trade games they had already played, a common practice among physical game media. Other users were glad with the centralization of the market in Steam's client. User drkOne posted “THIS IS BIG. No more trading with shady people and dealing with scams.” Other individuals who did not care about TF2 items saw it as an opportunity to offload items earned playing TF2. Regardless of user opinion on the matter, by 2012 users had accepted the market as a part of their play experience.
Discussion

Steam has been publicly available for twelve years. Over that span of time, its has grown to become what many users on NeoGAF complain is effectively a monopoly on digital game distribution. However, beyond its history as a successful business plan, as a persistant system, Steam has changed dramatically from its inception over a decade ago.

When it was first released, Steam’s only function was to deliver software updates for Valve developed games. Following that, it expanded its functions to retail, control, social networking, and most recently as a system which generates virtual property as a reward for time invested in playing games. From the perspective of users, Steam’s history is one of constantly adding new characteristics to the field of play that serve as new forms of control in the service of generating profit for Valve.

It is important to conceive of Steam not just as something related to video games and play, but as a purposive, programmed, goal-directed control system as Beniger describes in *The Control Revolution*. Steam’s evolution, especially as it relates to play, is strikingly similar to how Beniger describes the evolution of technological control systems. Steam’s evolution has revolved around the growing assimilation of previously dissociated practices into a single system working towards a predetermined, programmed objective. Thus, it is imperative to understand what the objective of the system is. Ostensibly, Steam as it is billed by Valve is focused on providing entertainment for its users through play. However, it is also a source of profit for Valve Software, third party publishers, and users who create and trade virtual property.

Scholars of play have debated over the relationship between profit and play for many years. However, it is not those scholars who have built Steam, but Valve, a privately owned company with a clear leader in co-founder and managing director Gabe Newell. As a public figure, Gabe Newell has regularly publicly stated his views on his own vision of Steam and its role in resolving problems he saw
in the state of the video game industry. From his public statements, a clear operating philosophy can be drawn from his personally expressed viewpoints to the functions in Steam.

In his keynote address at the 2009 Design, Innovate, Communicate, Entertain (DICE) Summit, Newell discussed Steam’s history and development from his perspective. Notably, he insisted that the shift from physical commodity distribution to digital distribution wasn’t only about “replacing bits on optical media and moving them to bits over wire”, but would result in directly integrating customers into the production and development of products. Newell discussed Steam not as a product, but as an ongoing service and commodity for customers which would provide greater ‘value’ for customers.

Using the example of DRM, Newell pointed out that for most customers, DRM decreased the value of a product, an opinion reflected on the NeoGAF boards.

DRM is perceived as a technology issue as to how do we keep customers from stealing our products. It has the opposite effect of intended. So when DRM gets associated with a product, it actually decreases the service value. All of a sudden I'm uncertain, can I move this product to another machine? What happens if I have a hardware failure? Are there -- how am I going to be able to play this when I go to a cyber cafe with my friends? Rather than increasing the service value, DRM is [de]creasing it.

Steam’s DRM practices stand directly in contrast to the DRM practices Newell described in the keynote. Similar to Steam’s DRM strategy, Newell addressed views on the social component of play, views which were directly reflected in the implementation of Steam’s community features. Steam’s integration of social networking and communication features into its platform

They don't want to hear from an advertising agency, they don't want to hear from PR people. They want to hear directly from the people creating the experience that's valuable to them. They also want to hear what their friends say. They want to argue and bicker, but they also want to see what other people are valuing in this experience and sharing with them. That's a big part of -- part of the entertainment experience. Having that shared enthusiasm. And if they're satisfied with playing with a bunch of people.

---

While both of these features can easily be seen as meeting an existing market demand, they demonstrate a consistency between Steam’s functions and the publicly stated beliefs of Steam’s creators.

This consistency is most striking regarding Newell’s perspective on the role of property and play. On February 1, 2013, Newell gave a lecture at the University of Texas’ Lyndon B. Johnson School of Public Policy where he explicitly laid down his views on the role of play and productivity. Newell directly acknowledged the phenomenon of micro-economies within game worlds, but saw it as a problem that the investment of time put into those game worlds lacked liquidity, and could not be easily moved from one world to another.

There’s sort of an appalling thing that will happen where somebody will play your game for 20 hours a week for four years, and then the value of that all goes to zero. So its like you bought a house, and made a bunch of improvements on that house, and when you move to your new house you have to start over, you get no value from the investment that you made. Clearly these markets and auction houses are valuable, or the assets that you accrued were valuable to you enough to justify this tremendous expenditure of your time, but games seem to have this whimsical notion of your property rights.’

In contrast to the idea of a time investment in a virtual space being limited to that virtual space, Steam’s system of virtual property production and trading with TF2 directly allows users to convert their time investment in TF2 into money, or into other games. Just as wage earners are remunerated for the time they have labored, Newell has built a system which remunerates players for time spent playing games developed by the company he owns. Similar to the Chilean and Soviet control systems of the past, the political values of Steam are a direct reflection of the beliefs of its creators. Regardless of whether or not play in the past was indistinguishable with labor, in the new digital space where Steam and Valve reign the distinction has become irrelevant as a result of the ideology of its creators being programmed into Steam’s code. The initial retail version of TF2 lacked any those features, but were given them as a result of Newell’s and Valve’s beliefs over what that system should provide, rather than adhere to a preexisting notions of what the outcomes of play should be.
Steam encodes into law the connection between virtual worlds and the natural world. While the work of previous scholars have observed and debated over the connection of virtual worlds and play, as well as the connections from the virtual world to the natural world, Steam functions as a connective tissue which ties those disparate spaces. Because of Steam, games no longer end at their physical and programmed borders, but have the capability to extend into one another as a result of the virtual world Valve has built. Steam is not just a virtual world, but a functional metaverse allowing users to efficiently connect their labor from the natural world to their play-time investment inside virtual worlds.
Future Research

This study and its conclusions are fundamentally limited due to the method of data collection. Firstly, as a purely qualitative study from a limited community, this study has no insight as to the opinions of the rest of the Steam user base, but only from users active within the NeoGAF forum, a small group that may not be representative of the entire population of individuals using Steam. Even within the NeoGAF forum, my method was limited by my own subjectivity, as well as by the vast amounts of discourse on the topic. Beyond the threads I considered, many thousands of pages of forum posts on discussions both directly and indirectly related to Steam still exist. Additionally, by relying solely on discussion forum posts, the study was reliant upon interpretation of discourse that is in many ways unreliable. Posts are not always intended to be read literally, relying on interpretation and description based on my own perspective. Finally, this study focused solely on user reaction to interaction with the Steam system, and did not place a heavy emphasis on the system itself. No examination was done of any part of Steam’s explicit design or programming, only of discourse surrounding it.

Future research into the development and history of Steam should examine both the system itself, as well as the creators themselves. While Gabe Newell functions very much as the public facing leader of Valve, this study fails to take into account the company of Valve itself, and of the individuals who code and build the system.

Additionally, Steam is just one of many digital distribution services. While it is certainly unique in many ways, within the field of digital game distribution, it is not without competition. Future study of play in digital space must take into account these other systems.

This study had no, or little examination of Valve’s two other games which have property systems similar to TF2, Counter-Strike: Global Offensive, and DOTA2. While the systems of property production
are similar, and can be traded without concern due to Steam’s trading features, each game contains a unique community of players that may or may not have different viewpoints on Steam and its functions.

Finally, with the emergence of concerns about property, control and labor within the field of play demands further examination of the field of play from the Marxist and Hegelian perspectives. Steam bears a resemblance to what McKenzie Wark coined as a vectoral economy, an economy which competes for the control of information. Wark argues that since information has been characterized as property, a new class conflict has been born between vectoralists (those who control information channels) and hackers (those engage as a unique subject within a system, rather than just as a commodified user) just as Marx framed capitalism as a conflict between the bourgeoisie and proletariat.

As a system which engages regularly with these concerns, future research should examine the role of Steam as a participant within such an economic structure.
Conclusion

In the dedicated Steam thread from 2010, user Odrion posted in the dedicated Steam discussion thread that “I have no problem with Valve becoming huge. I can see them as the benevolent dictator of PC gaming.” While the term ‘dictator’ is hyperbolic, throughout the twelve years that it has been available to the public, Steam’s progression from a limited system focused on delivering software updates to a dominant, popular force the realm of play cannot be ignored. It is also a service, that despite its totalitarian nature, millions of individuals have signed onto because of the promise of fun and play as rewards for participation.

Due to this, there is no reason to suspect that Steam will be going away anytime soon either, and in just twelve years has reached unprecedented heights in the constantly expanding realm of digital play. However, Steam demonstrates that the realm of digital play is even less defined that it was in the past. Surveillance, trade, work, social networking, and retail have all been directly integrated into the field of play, expanding and bridging its function in society beyond just ‘fun’.
Bibliography


