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STEAMED: EXAMINATIONS OF POWER STRUGGLES ON THE VALUE FORUM

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Thesis

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Abstract

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This study examines *Valve Corporation's Steam* gaming forum to understand how members constitute meaning and overcome perceived system abuses. By going outside the system, into what could be called the meta-system, users augment their power within a *Steam's* structure where they are in a lower power position. Using qualitative analysis and structuring activity theory as a sensemaking mechanism, two incidents involving developer-user conflict were analyzed. The examination found how users were incorporating outside systems into *Steam* to create a system network they could use against developers. Also, several instances of systemic contradiction were found and defined. This paper expands upon structuring activity theory and gives indications for future research.

Keywords: Agency, Structuring activity theory, Online, Community, Digital

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Rationale

Steam is an online distribution platform for video games and software, created and administered by *Valve* Corporation of Bellevue, Washington (*Valve*, 2016). Released as free software for Microsoft Windows, OS X, and Linux operating systems, *Steam* not only provides a point-of-sale service for game developers, it includes a vast social networking service for users with over 125 Million active users (Saed, 2015). This service allows users to write game reviews, send messages, make friends, and join interest groups. The backbone of the social network is the *Steam* forum, connecting users not only to each other, but to developers in a game-centered dialogue system.

The forum has a three-tier hierarchical structure, with *Valve*'s employees at the top, who are empowered to delete threads, banish users, and mediate disputes (How do I dispute, 2015). Below *Valve*'s employees, are developers who can delete, ban, and flag user's/comments on their pages of the forum (How do I dispute, 2015). Finally, at the bottom of the hierarchy are users who have the least amount of power (Rules and Guidelines, 2015). Users are able to report activity and comment within discussion threads, but such reports and comments are subject to review, and possible deletion, by either *Valve* or developers. In addition to the power imbalances, each group has different, yet interconnected, system roles needed to perpetuate the system. Users are needed to purchase games and generate content to attract other users. Developers are needed to supply new games, generating revenue for themselves and for *Valve*. *Valve*'s role is to maintain order and keep the system running.

However, *Steam* is not without trouble; the system's construction lacks sufficient means for users to bring abuses and issues to *Valve* in an efficient manner. This pushes users to engage in

corrective behaviors outside of *Valve*'s system and control so they can find other avenues to voice troubles. Thus, the system is negatively impacted until issues reach a certain level of public awareness to tip off *Value* of needed intervention. Developers may see damage to their reputation when users speak negatively about their business practices and may lead to a reduction in revenue. Users have problems not only with their original issue, but also a dysfunctional system. Exploring and understanding modern online organizational systems such as *Steam* offers insight into the processes of extension across time and space; (Giddens, 1984) that have implications for millions of users, thousands of developers, and other organizations that operate online systems.

Online forums like *Steam* have been examined in the past, such as Sockett and Gossett's (2012) study of online communities where users learned English, but these have primarily focused on inner system workings and not on users crossing organizational boundaries to resolve conflicts. In addition, the theoretical framework of this study, structuring activity theory (SAT), has been used almost exclusively in terms of medical policy. As such, this study will have important academic and practical contributions. On an academic level, *Steam* is a fascinating system to observe since its borders extend beyond traditional organizational boundaries and offer an opportunity to further understanding of conflicts within such systems. Also, using structuring SAT and its methods will help expand this theory to understand how policies and structures are enacted within and across digital systems, such as *Steam*. In addition, as more social interactions go online and communities develop, understanding how these systems can be abused, manipulated, and evolve will be important not only for users and designers but also academics. The practical implications of this study impact all three tiers of *Steam*'s hierarchy. By examining the way conflicts spill outside the system *Valve* may find weaknesses which can be

fixed and allow early intervention into conflicts, thus helping both *Valve* and users. Developers will be able to see examples of how not to act when confronted by users and therefore contain problems to their individual community pages.

Chapter 1: Literature Review

To examine the problems within *Steam* this study explores the basics of online communities as they fit systems theory and analyzes structuring activity theory (SAT) and its use in this study's framework in examining online communities.

Online Communities

Online communities cross national and cultural boundaries and as such are extremely diverse, having levels of participation equal, if not greater than, face-to-face communities. In addition, "Technologies are developed within and can influence and be influenced by the dynamics of the social world" (Barab, Schatz, & Scheckler, 2004, p.26) Within the digital world the social world is enacted on every publicly available site. Examining the connections within the social world of a website helps illuminate aspects of its boundaries and intersections. For example, at first glance Facebook appears to have a clear boundary by being on Facebook or not on Facebook. However, a great amount of overlap exists because multiple sites require Facebook for logging in or allowing comments on their website. Therefore, the boundary between what is and is not Facebook is more porous and this state exists with many other sites including *Steam*.

Further, the construction of an online site has sweeping effects on how users constitute the community. Ren, Kraut, & Kiesler (2007) found the design of an online community alters how people interact and what information or knowledge they gain from the community. For example, allowing users to reply to each other's posts creates an opportunity for dialogue and discussion. Also, *how* this is enacted depends upon the community. Lampe, Wash, Velasquez, & Ozkaya (2010) found a consistent design challenge for online communities is motivating users to contribute to the system's main goal, i.e. getting members to participate and communicate with each other. For those communities that succeed in motivating users, Tedjamulia, Dean, Olsen, &

Albrecht (2005) found the most successful ones had members engaged heavily in knowledge-sharing activities, which created dialogue, and allowed them to respond to community issues.

The difficulty of facilitating user participation makes online communities both fascinating and challenging for this study. As highlighted by Lampe et al. (2010), a majority of content generated by an online community comes from a small fraction of users. This minority of users will be the most vocal and constitute a power distribution as stated by Lampe et al. (2010), “...power law distribution of organizational commitment theories predicts the more affinity a member feels with an organization, the more they contribute to that organization” (p. 1). Therefore, any examination of an online system will disproportionately represent a minority of users. However, these users will be the most invested and best represent the core aspects of the community.

Given how important participation is to the construction of an online community such as *Steam*, understanding how the online forum (system) is structured for users to constitute meaning through their interactions and discussions provides insights into the communicative constitution of the *Steam* community. Second, *Valve* has created the *Steam* platform and its online discussions to generate interest and discussion of the games. The online forums are intentionally constructed, instead of arising from organic interactions by users. To better understand the structural complexity, and flexibility of online systems such as *Steam*, a systems approach is important.

Systems

Poole (2014) defined a system as a “set of interdependent components that form an internally organized whole that operates as one in relation to its environment and to other systems” (p. 50). Alternatively, McPhee, Poole, & Iverson, (2014), define a system as “an

observable pattern of relationships among actors.” Similarly, Morgan (1997) sees systems as, “flows of interaction between members.” This pattern is dynamic and changing in contrast to pre-chaos theory positions on systems, such as structural-functionalism and cybernetics (Poole, 2014), Salem (2002) threw out traditional views on equilibrium and stability to re-contextualize them as temporary points within a larger flow of interaction. No balanced or normal state exists for a system beyond a consistent condition of flux or change, yet it has structure.

For example, Twitter is a seemingly standalone system, but is often utilized in conjunction with Facebook or other social media sites by users who post duplicate information between a Twitter and a Facebook group pages, thus creating more abstract boundaries than a traditional organization. In terms of *Steam*, systems theory helps inform how to view and discuss the varying interactions and feedback taking place between the company (*Valve*), developers, and users. At times the system may run smoothly, but at other moments, users experience problems with developers selling underdeveloped games and various patterns of developer’s abuse. To explain moments of developer abuse, understanding the system of policies and actions is needed.

Structuring activity theory (SAT). SAT seeks to explain the process of policy knowledge and creation as the interactions of people within the organization and outside the system (Canary, 2010). Policy is important to Canary (2009) because organizations use policy to bridge actor (or subject) and organizational (or object) relations across time and space. For example, when a retailer hires a new cashier they teach them the policies for handling money that management has created in the past to ensure consistency and stability with each employee, no matter the time of hiring. In addition, Canary (2010a) sees policy creation as a complex mediated activity whereby a system constrains actors to maintain order and consistency and where people within the system give specific meaning to those policies because they enact them.

This means as a mediated activity, policy allows agents to draw on structures, while those same structures help reproduce and transform systems over time (Canary, 2010a). This type of activity as described by Weick (1988) involves actors coming together in a process that helps to construct meaning. In addition, as stated by Weick (1988), “The product of enactment is not an accident, an afterthought, or a byproduct. Instead, it is an orderly, material, social construction that is subject to multiple interpretations.” So policies are an important part of how organizations are created and sustained by users and therefore important for SAT when examining activity systems.

Though policies influence people and organize actions, they can be difficult to both understand and enact, especially if there are agents from different parts of the system attempting to make the policies work together (Canary, Riforgiate, & Montoya, 2013). While policies have a specific meaning to those who created them actors actively construct meaning from those policies by enacting them. Even when organizations try utilizing technology to create more standard reactions, Canary (2010b) contends it cannot negate the interpretation of policies either on an individual or group level. Beyond its theoretical implications, SAT’s most important feature is to frame organizational policies and actor interpretations of as a living process that changes as those actors create values in interpreting and implementing policies. An example of an organization utilizing SAT is the post office. If management creates a policy stating all workers must check each package before sending it to its destination, various workers interpret this to mean checking packages right when they enter the office, while others understand the policy to mean checking the packages after they have been accepted, but right before they leave. Similarly, for *Steam* the way *Valve* intends a policy to work may be enacted differently by developers and users. These differences in policy implementation create a communicatively

enacted process of organizing that SAT is designed to analyze. This negotiation between the actors, policy, and organization are the main focus of SAT and are highlighted in the four components of SAT: Contradictions, structuration through activity, mediation of social activity, and intersections of activity systems.

Contradictions. All social systems exhibit some form of contradiction occurs through formalized aspects of the structure or through differing interpretations by system actors. Contradictions also arise from different activity systems interacting together with a common goal but in a specific situation. As such, contradictions cannot be easily repaired, instead they serve as what Canary (2010b) calls “generative mechanisms” to further knowledge and policy creation as the contradiction is worked through in that situation (p. 36). An example of the generative knowledge processes is given by Canary (2010a) in relation to policy relating to private schools:

The legitimation/allocation tension emerged early in knowledge development of policy provisions regarding private schools. The latest version of IDEA requires that public school districts use a portion of their “Part B” special education funds to provide services to children who attend private schools located within district boundaries. The previous version of IDEA required districts to provide services to private school students who lived in district boundaries, regardless of the location of the private school. Because this district is in a low-income area, the previous version of the law resulted in about four children using these required services in the school district each year. However, five private schools are located in the district’s boundaries, meaning the district is required to provide services for significantly more children to comply with policy changes. Accordingly, the director was motivated to discuss private school issues across related activity

systems to develop collective policy knowledge that would help manage, if not resolve, this structural contradiction. (p. 192-193).

In *Steam* many possible sources of contradiction arise not only from the system's structure, but from system actors such as *Valve*, the developers and users. This leads to the first research question:

- RQ 1) What sources of contradiction contribute, if at all, to user and developer conflicts?

Structuration through activity and mediation of social activity. A key aspect of SAT is the cyclical nature of action. Specifically, how a structure both enables and constrains activities, while being shaped by those activities. The facilitation of this cycle occurs through what Canary (2010b) calls “modalities,” linking aspects between a structure and an activity (p. 30). Modalities can be any resources through which structure mediates an activity, such as rules, policies, social norms. As such, modalities are similar to the mediating resources present in structuration theory. For example, *Steam*'s discussion rules are designed to enable large-scale user discussions. However, the rules also constrain the conversation as the rule on discussing piracy states, “Any discussion of piracy will result in a permanent ban from the *Steam* Community...” (Rules and Guidelines, 2015). In order to enact this policy a post would have to be deemed a “discussion of piracy” and then be acted upon by possibly banning that member or taking other actions such as issuing a warning. Technically issuing a warning is not part of the policy (structure) but that structure is only produced through actions that draw upon that policy.

The cyclical nature of a system is not bound only to mediators within the system; interactions between different activity systems seeking common objects are enabled and constrained by broad pre-existing social structures or elements (Canary, 2010b, p.33). These

elements shape the knowledge produced and alter systems over time as agents generate knowledge and policy through them. For example, if a bar opened in a conservative small town it probably would not feature nude dancers as the pre-existing social structures would set the town against the bar. In *Steam*, some preexisting structures include previous version of rules and unstated traditions passed on by previous communities surrounding gaming. Therefore, examining the mediation of social activity may help in identifying influences of pre-existing social structures that influence user's ability to act (agency) and community decision making. For example, a set of previous rules influencing how the current rules are interpreted.

Agency. A critical component of communication theory and systems theory, agency is the ability of an actor to influence systems (Giddens, 1984). This can be through acts such as replicating or perpetuating a system, like *George Jetson* pressing his button to keep the factory running. Or, it can mean him smashing the machinery to bits and creating something new from the parts. In communication studies agency is understood according to one of three viewpoints: the Montreal School, Luhmannian, and Structuration.

The Montreal School conceives of agency as a feature not only of humans, but also objects (Cooren, 2015). That is, objects can have organizational impacts similar to humans. For example, a pothole can cause a cyclist's tire to pop and veer into oncoming traffic, causing a major accident. The pothole displays agency in that it constrains and enables the agency of others. Yet, this view does not deprive people of agency, as stated by Cooren (2015), "Humans may display forms of agency that are different from those of documents or acids, yet recognizing that other beings do things does not imply depriving humans of their agency" (p. 475). How objects gain this form of agency is unknown, but the Luhmannian view offers a possible explanation.

For Luhmannians, agency can originate from an object, but a human agent must enact the agency (Schoeneborn, Blaschke, Cooren, McPhee, Seidl, & Taylor, 2014). Another way to understand this conception comes from Brummans (2015) who sees agency as only an aspect of human activity, but which can come from external objects. This means agency is a sufficient, but not a necessary condition of an object. Instead, to produce agency requires the beliefs and interpretations of human actors. Returning to the cyclist example, the hole's "agency" could not act without the human's presence. Without the cyclist, the hole is only a hole. Koschmann (2015) provides another example in the form of rituals, "organizational rituals can possess agency—they can make a difference in consequential ways not reducible to human intentions and purposes—and we can explain ritual agency from a distinctly communicative perspective" (p. 230). If viewed as an axis, the Luhmannian's agency would balance in the center between Montreal School and structurational perspectives. On one side, would be the objects having agency view of the Montreal school, while on the opposite would be structuration perspective.

Unlike either of the previous views, structuration regards agency solely as an aspect of humanity. Giddens (1984) says, "Agency concerns events of which an individual is the perpetrator, in the sense that the individual could, at any phase in each sequence of conduct, have acted differently" (p. 9). The explanation for human only agency is based on the premise that only humans have the capacities required to adapt or alter structures, or systems, for their own ends. From the extreme of a dictator using a countries sense of distrust against itself. To a toddler appropriating the kitchen drawers to reach a cookie jar. As Iverson, McPhee, & Spaulding, (2017) illustrated, only humans have the understanding, intent, and ability required to act otherwise. Further, humans have agency no matter the situation. There is always the option to act otherwise, even if the outcome is bad, there is still an option (Giddens, 1984, p. 9).

For the purposes of this study the structuration view of agency is used for three reasons beyond the obvious connections to SAT through structuration. First, the structuration view is appropriate as *Steam* on its own is not of interest, but the human interaction with each other and the system. Second, structuration's view of agency has been used with complex organizations, such as in McPhee & Iverson, (2009) article *Agents of Constitution in Comunidad*. Thus, it should provide unique insights into the investigation. Third, the structuration view allows for a discussion about a system's ability to enable and constrain agency. The *Steam* forums have rules that constrain various actors. *Valve* has little constraint since it dictates who gets power and thus has the most power (How do I dispute, 2015). Developers have agency insofar as they remain within their own community pages where they can govern with the power to act on their environment within *Valve*'s constraints. Finally, average users become the most constrained by the formalized rules and thus have the least amount of agency within the system. Though, in the Structuration view, systems cannot totally limit agency, as agency allows actors to act outside the system. Consequently, agency needs to be carefully examined to understand how it is being utilized on the forum.

Though distinct, structuration through activity and mediation of social activity are both concerned with resources which enable and constrain agents' actions in a system and lead to the second research question:

- RQ 2) What resources, both internal and external, enable users to exercise their agency in combating perceived abuses by developers?

Intersections of activity systems. While not the progenitor of a research question, this section of SAT does have influence later in the discussion section and the scope of gathering data. In public policy, no singular system exists that can be examined in isolation to understand

activity. Instead, interlinked and connected activity systems must be examined in an “activity network” which overlap with each other and are loosely connected (Canary, 2010b, p. 36).

Examining how their collaborations are constrained and enabled by structural features provides a window into how knowledge is constructed, reproduced, or transformed within these interactions.

Overall, SAT’s focus on micro-macro interaction, it is useful for examining systems. This study utilizes structuring activity theory in examining a non-traditional system, the online community of *Steam*, to see what contradictions affect the system and what systems enable user agency.

Chapter 2: Methods

Hundreds of individual developers have published thousands of games on *Steam*, each with its own forum page overseen by the developer. As such, going through every page to locate possible incidents for study would either require a vast research team or an untenable quantity of time. Therefore, this study is limited to two incidents that meet two main criteria; recency and documentation.

Recency. Incidents were considered recent if they occurred within the last five years starting with the year the study began, thus placing the range between 2012-2017. This time frame coincides with changes to *Steam*'s forum rules, but to the earliest preserved set of rules from 2014. In addition, limiting incidents to a five-year timeframe meant a greater amount of information was preserved for examination, both in the form of forum threads and media documentation. The five-year timeframe encompasses many of these incidents and thus increases the possible selection of incidents.

Documentation. Tied into recency, documentation for each incident needed to be readily available so full, detailed picture of the incident would be viable for examination. Since developers have some control over the content of their individual forum pages there have been cases where user posts were deleted and most information was lost.

Therefore, extensive backups of conversations, called threads, in forms like screen pictures or copy/pastes to online word documents were required. In addition, selecting incidents with extensive media coverage helps place the total incident in context, along with giving more detail.

Based on recency and documentation two incidents were selected, which will be referred to based on the names of the games involved. These include the games: *The War Z* and *Earth: Year 2066*.

Incident Data Sources

The sources for the two incidents fall into two main types: overviews and discussions. Overviews are those sources which provide a timeline and description of the incidents, but lack multiple stakeholder viewpoints of the incidents. These sources mainly come from news outlets specialized in gaming related content, such as *Destructoid*, or *Eurogamer*. Overview sources are used to help place other sources in context and construct a framework for talking about the examination. Discussions are those pieces where users or developers talk about the incident. These can be from social media sites, the *Steam* forum, or screenshots of previously deleted threads from various websites like *Reddit*.

The War Z. *The War Z*, also known as *Infestation: Survivor Stories*, was an online multiplayer game focused on fighting zombies in a post-apocalyptic landscape. Developed by Hammerpoint Interactive and published by OP Productions, the game first entered its alpha version, i.e. an early game build meant for testing purposes, on October 15th 2012 (Grubb, 2012). Two months later on December 17th the game officially launched on *Steam* for a sale price of \$19.99 (Grubb, 2012).

Issues with the game and developer began almost immediately. During the game's alpha launch, producer Sergey Titove, referred to spawn campers, players who wait at starting locations to kill other players before they have a chance to start, and used the term "faggots" (Makuch, 2012). In addition, the game had its re-spawn time increased from one hour to four hours, in real time as opposed to in-game time, that is counted faster than real time, only a day after launch unless a user paid to re-spawn immediately, on top of the price they already paid for the game.

The largest controversies with the game occurred because of the game's advertising and forum moderation. Several users claimed features which appeared on the game's sales description page were shown by users to be exaggerations or outright lies. When users complained to the company via the *Steam* forum or the developer's independent forum, they were banned not only from posting, but from playing the game itself. This caused an uproar among users who complained not only to *Valve*, but to media outlets and on social media. Due to the fervor, only two days after launch the game was removed from *Steam* by *Valve* due to issues of false advertising and other questionable business practices (Schreier, 2012).

Eleven overall sources were analyzed for *The War Z* incident. Five of these sources came from the *Steam* forums either directly or through archives. Two came from coming from social media site *Reddit*, while the last four sources were overview-based and came from internet news sites specializing in gaming, technology, and pop culture. In total over 106 pages, of various spacing, was gathered and examined for this incident. The pages mostly consisted of long strings of comments and replies from users of the forums or comment sections.

Earth: Year 2066. *Earth: Year 2066* was an open world first-person shooter released as an early access game on April 17th, 2014 by a developer known as *Muxwell* (Smith, 2014). *Early Access* is a *Steam* development program which allows the release and sale of unfinished games to the public with the understanding the games are still being worked on and updated, the users thus expect a certain amount of roughness, such as missing textures or stock assets being used as placeholders. However, even with this understanding *Earth: Year 2066* garnered plenty of negative attention due to a combination of poor design, development, and *Muxwell's* treatment of the buying public.

The poor design of the game, even for an early access title, was quickly evident to those who purchased the game and quickly became a point of contention within the *Steam* forum; one amateur game developer even built a replica of the game in under a week using pre-built assets (Sterling, 2014). In addition, on the week of April 20th *Muxwell* wiped the forums clean, seemingly to remove criticism and evidence of his tampering with user posts, such as editing them to appear favorable to the game. The controversy further escalated on April 28th when video game review and pundit Jim Sterling released a YouTube video detailing the controversy and calling out *Muxwell* himself for questionable behavior (Sterling, 2014). While these incidents occurred, *Valve* remained silent compared to *The War Z* incident, until May 5th, 2014 when they removed the game from *Steam* and offered refunds, an uncommon practice at the time. They even publicly called the game broken and unfit for sale (Smith, 2014).

Eleven sources were also Gathered for *Earth: Year 2066*, six from the *Steam* forums based, (either directly or through archives, sources were collected for *Earth: year 2066*. One was discussion-based source that came from the social media site *Reddit*. The other three sources came from news sites and one from *YouTube*. In total over 80 pages of material was gathered and examined for this incident.

Coding

Using a similar process to Heather Canary's (2010a) Constructing Policy Knowledge: Contradictions, Communication, and Knowledge Frames. The data were coded in a multistep process of coding, axial coding, and thematizing.

Primary cycle coding. Analysis of the sources was first done through an open coding (primary cycle coding) process using the assistance of NVivo 11 to generate a list of emergent categories (Tracy, 2013). In addition, a constant comparative method was undertaken to ensure

the emerged categories were as representative as possible (Tracy, 2013). The units used for coding process were units of thought, which have variable lengths, from single sentences to pages. These units not only differentiate distinct ideas, but encapsulate the underlying meaning of posts.

For example, in the Darkest Dungeon forum page user *FDru* posted, “<http://Steamcommunity.com/app/262060/discussions/2/541906348040723418/>” that showed a supposedly deleted thread was only moved and is still accessible. If using a word or brief phrase as the units of analysis, the meaning behind the above post would have been lost.

Secondary-cycle coding. After the list of initial categories were generated from primary coding another round of secondary-cycle of coding was undertaken to identify patterns or grouping of patterns (Tracy, 2013). This refined the categories by relating codes to each other and allowed for some to be combined or separated as needed to highlight relationships and assist in the next phase of analysis. For example, during coding two categories had been created that coded for user vs user interactions: *User_UserNeg* and *Neg_Users*. Since these coded for the same action, they were collapsed into *User_UserNeg*.

After finishing the secondary-cycle coding, it was discovered that the Internet Archive’s Wayback Machine, which catalogues and preserves webpages into a searchable index, had preserved the first pages of some discussions on the *Steam* forum. While the total conversation was lost, these first pages offered a significant amount of useful data. Thus, the first and second round of coding was performed again and resulted in 28 unique codes.

Themes and analysis. The final coding processes took the refined categories generated from open and secondary-cycle coding and used hierarchical codes to thematize the codes for analysis (Tracy, 2013). These themes were then analyzed considering SAT, that is, they were

compared to the four key aspects of SAT to see how they fit within the framework. This usage of SAT as sensemaking mechanism is a processes similar to one utilized by Canary and Cantú's (2012).

Analysis

The initial primary coding produced over 30 unique codes, covering a variety of behaviors, both from users and developers. Axial coding was then conducted merging several codes and condensed them down to 28. As mentioned above the Internet Archive's Wayback Machine, had a preserved some pages of some *Steam* forum posts thought to be lost. Therefore, this new material necessitated further coding and resulted in 33 codes, with a few duplicates due to coder wording errors. Therefore, axial coding was performed again and resulted in a final count of 27 unique codes. These codes were then thematized into nine themes which encompassed the overall relationship dynamics of the discussions: developer against users, developers with users, overcoming time and space, recognition of *Valve* in hierarchy, system as broken or ineffective, system as working, users against the developer or game, users for the developer or game. For example, the theme of users for the developer or game was created from finding the codes of *User_DevPos* and *User_game* that consisted of users defending/being positive for the developers and game respectively.

Chapter 3: Research Question One Results

This chapter outlines the data gathered through qualitative research that examined both the contradictions between *Steam* hierarchy groups [*Valve*, Developers, Users] and those inherent within the *Steam* system itself. To properly prepare for this discussion a brief overview of the way *Steam* and *Valve* work together is detailed below, followed by an overview of how SAT defines and views contradictions.

Valve is the company that owns and runs *Steam*, which is a digital distribution platform and store for video games and software *Steam* is ostensibly designed for *Valve* and developers to make money, while users are provided the services of an easy to use store and limited DRM [digital rights management] protection. Each game on *Steam* has its own forum page and within the forum there is a hierarchy of *Valve*, Developers, and users (from most powerful to least). *Steam* is ostensibly designed to produce an outcome where *Valve* and developers can make money, while users are provided a valuable service. As part of this valuable service *Valve* attempts to create community between developers and users. However, user's agency (their ability to act otherwise) is severely limited when developers treat them poorly. Uneven distribution of power within the *Steam* hierarchy limits user agency due to a lack of internal resources for users to deal with problem developers. Understandably, users appear to want a way to exercise their agency by first engaging with internal *Steam* systems, then through the external acts of discussion, organizing, and awareness raising in places that are not controlled by either *Steam* or developers.

The hierarchy problems experienced between users and developers within *Steam* can be traced, at least in some part, to various contradictions within the system itself. These contradictions lead to and contribute to user-developer conflicts and therefore are important to

examine when trying to understand how *Steam* functions for users.

When examining contradictions, SAT posits, “contradictions are generative mechanisms for the communicative construction of policy knowledge as individuals interact to resolve contradiction in the policy processes” (Canary, 2010b, p. 36). In addition, contradictions come in two general categories structural and system contradictions (Canary, 2010b). Structural contradictions are abstract conflicts that are part of any social system, such as the tension between majority and minority interests in a democracy, or as Giddens (1984, p.373) says, “Structural contradictions, according to structuration theory, involve opposition of structural principles, such that each depends upon the other and yet negates the other (Giddens, 1984, p. 373). System contradictions are those tensions that arise from the setup or implementation of a system’s structure and can occur between system elements or even between multiple systems (Canary, 2010b, p. 34). As such, examining contradictions in a system can highlight the roots of conflict and the knowledge or ways system actors have chosen to resolve contradictions. This research focuses on system-level contradictions, that have arisen from structural contradictions in the way *Valve* has attempted to implement their goals, while juggling the goals of the other two hierarchy groups.

Research Question 1

To examine contradiction, research question one poses: what sources of contradiction contribute, if at all, to user and developer (dev) conflicts? This question is comprised of two main foci: contradictions (structural and systemic), in *Steam* and the conflicts between groups of system actors that arise from those contradictions.

Data collected from *The War Z* and *Earth: Year 2066* incidents generated seven themes: users against the developer or game, users positive toward the developer or game, the system as

broken or ineffective, system as working, dev against user, dev positive toward user, recognition of *Valve* in hierarchy; which were then grouped according to three levels of actor within *Steam*: user, developer, *Valve*. For a visual breakdown and description of the sources and themes see *Table one*.

Table one: Sources of contradiction

Source	Themes from Data	Description
<i>Steam</i> (Platform)	Rules	Systemic and structural contradiction arising from a lack the rules conflicting with their purpose as created by <i>Valve</i> ; and from the rules having a conflict of implementation from interpretation being left to developers.
User	Users against the developer or game	Systemic contradiction arising from one set of users placing blame on others and inadvertently reinforcing or validating the negative aspects of <i>Steam</i> .
	Users positive toward the developer or game	
	The system as broken or ineffective	
	System as working	
Developer	Dev against user	Systemic contradiction arising from the way developers present themselves to users and the way they end up acting.
	Dev positive toward user	
<i>Valve</i> (Organization)	Recognition of <i>Valve</i> in hierarchy	Systemic contradiction arising from the way <i>Valve</i> positions themselves and how users position them within <i>Steam</i> .

Table 1

In addition, *Steam*'s forum rules were analyzed for contradictions as they form the basis for interactions on the forum. As such, these contradictions in these rules create conflicts at many

levels of the system and form the fifth source of contradiction for this analysis. . [Please note: all errors in grammar and spelling in quotations are from the original people posting and not from the author.]

Steam rules. Note, for this discussion *Steam*'s forum rules for the year 2014 are used in conjunction with study results to provide a clearer picture of the issues causing problems on *Steam*. The 2014 rules are selected because its page was the furthest back archived or copied. Thus, rules that would have been applicable for *The War Z* could not be found. However, *Steam*'s rules change relatively little over time and can still assist in the discussion by showing continuing issues.

Rules in SAT “refer to common, and therefore legitimate, ways things are done that facilitate activity within a system” (Canary, 2009, p. 176). In *Steam* rules enable productive interactions among users by constraining certain negative behaviors. Behaviors such as trolling, doxing¹, and fighting have been part of forums since the beginning of the internet and nearly all forums attempt to control them in some fashion. However, several of *Steam*'s rules present system contradictions when applied to all levels of the vertical (power) hierarchy (*Valve*, developers, and users) and therefore contributes to conflict generation. A selection of contradicting rules is examined below.

Derail a thread's topic. Derailing a topic could be activities such as bringing up other games or bringing up politics in a game discussion. Some users may do this by accident, thinking about a connection and extending beyond the threads topic. Also, users may derail on purpose to annoy other users for example. As such, this rule in practice seems reasonable as it maintains on-

¹ Combing through history to find bits of information that when brought together can reveal the identity of a poster.

topic discussion and constrains superfluous or inflammatory statements. However, there can be a structural contradiction between a discussion thread's stated topic and its overall goal. For example, if a thread is created about the best way run an old game on newer hardware, but users discuss and complain about the difficulties of installing the game on any hardware, those users are having a discussion within the thread's overall goal. However, a developer makes the determination and may view this as an embarrassment and view the discussion as derailed from the narrow original purpose of the thread. The developer would then feel justified and within their power to delete the off-topic comments.

Post spam or Re-post Closed, Modified, Deleted Content. Related to thread derailment, this rule is designed to prevent individuals from posting advertisements or links to questionable websites that could damage other's computers. The conflict arises from the fact that what constitutes spam or inappropriate deleted content is left to developer's whims. For example, if a user were to post a link to a free tool that fixes a game, the developer might consider the site as competition, an embarrassment, or in violation of its copyright and therefore feel justified in deleting the link. Thus, this rule can enable developers to censor information from users, even if that information is important.

Openly argue with a moderator. This rule is intended to prevent users from creating long, needless threads with developers where they fight against a decision that will not change. Essentially, this rule is to give moderators more power, by not allowing their decisions to be questioned. It is conceivable that a censored user constantly arguing with a moderator could disrupt a discussion and force the moderator to give them more attention than the rest of the community. However, this rule becomes a problem when the developers are the moderators and are modifying or banning users unfairly when they are raising legitimate concerns or have

opinions that the developers do not like.

Repetitively post in the incorrect forum. The purpose of this rule is to prevent users from going outside the appropriate forum and posting in another unrelated forum such as a user posting about a competing game. The tension lies in the developer's ability to ban users, because if a user has been banned posting to an incorrect forum could be the only way to get a certain topic discussed, such as developer's deceptive advertising practices.

Cheating, hacking, game exploits. The purpose of this rule is to prevent users from sharing cheat programs that can affect online multiplayer games such as *Team Fortress Two*. However, this rule can also be used against users when pointing out game exploits that damage the game's playability. This is problematic as it gives the moderators (developers) carte blanche to decide what constitutes a gaming exploit. A developer could easily ban discussion of exploits created from poor game quality that should be fixed.

Threats of violence or harassment, even as a joke. This rule is created to prevent online harassment and limit the impact of those who would attempt real world violence. As with the previous rules, harassment is not defined and given the leeway moderators of forum pages have, a developer/moderator could consider the constant demands for refunds or answers about poor quality to be a form of harassment, even if it is just users attempting to resolve issues.

Should you observe a fellow Community member breaking these rules please report the post by clicking the Report link. This rule is intended to encourage users to enforce the other rules laid out by Valve. However, what constitutes a community member is not directly defined, but given the coded language of the other rules it seems clear Valve is not counting developers within this realm. In fact, given the attempts by users during *The War Z* to use the system to report the game as fraudulent failed because the system was designed to only flag other users for

abuse, not developers. As explained by *TheDahn*, “Reporting the game for fraud is used for stolen credit card info, etc.”

The rules created by *Valve* for interactions on *Steam* are meant to constrain certain actions of the community to enable meaningful discussion. However, structural and systemic contradictions impede their usefulness.

On a structural level the rules are meant to enhance community discussion and offload *Valve*'s responsibility of moderating *Steam* by giving greater autonomy to developers. As such, there appears to be an assumption on the part of *Valve* that developers will act in good faith when interpreting the rules, otherwise there would be some form of guidance on interpretation of the rules. In addition, the rules appear to assume community is one-sided, that is, only the users need constraint as evidenced by how developers are not mentioned within the rules.

Contradiction and conflict arise because users are unaware of this assumption, so they try to apply the rules back to developers, who users feel are a part of the community, but they find no corrective mechanisms in place. The rules are also in conflict on a systemic level as described above. Their implementation, even when applied only to users, does not function as intended due to the interpretations by developers.

Overall the takeaway is that these rules are highly one-sided, slanted to regulate users, not developers or *Valve*. In addition, as these rules are unbalanced and open to interpretive abuses, they cannot properly assist in mediating actual conflicts that occur between users and developers. Thus, when conflicts arise users are forced out of the primary system (*Steam*) and must go to where the rules and customs allow them to accomplish their goal. Contradictions are not bound only to the underlying rules of *Steam*; the interactions of users also exhibit contradictions in the way they treat each other.

Users. This section originates from the *users against the developer or game* and *users positive toward the developer or game* themes derived from *The War Z* and *Earth: Year 2066* incidents. At first glance this set of themes is not oriented to users, but users and developers. However, all user conflicts observed in the data occurred because of a difference of opinion such as one user liking a game while another hates the game. This contradiction is of the system variety, as opposed to structurally, because it arises from users engaged in behaviors that undermine their overall goals. Specifically, the logical contradiction arises from the fact that users would benefit more from cooperation, but participate in denouncing other group members.

An example of this infighting can be seen in the comment made by one anonymous *Reddit* user:

This is also something I noticed with complaints regarding *7 Days to Die*, *Guise of the Wolf* and *Maia*. People jumped in without looking around to see what state the game was in, and ended up coming away pissed off because the game didnt have enough work done to make it entirely fun

This quotation shows how one user dismisses all criticism of the game by placing the blame on other users not being careful with their shopping habits and thus negating what may be legitimate criticism and suggestions that could improve the game to attack other users.

In addition, this type of dismissal can also be seen in a quotation by *SiggonKristov* who states, "After watching this trailer, I dont know why anyone would have considered buying this game in the first place. The graphics arent even good enough to compare to a free FPS or a game on Nintendo 64." and user *Hot_Wheels_guy* who says, "Seriously 1000% this. Who the hell looks at that trailer and screenshots and thinks "yep, this is definitely an unfinished game worth my \$20"?"

By blaming the users who purchased the game and dislike it, the blamer supports and tacitly legitimizes the current policy of having partially developed games. Within the user's own quote there is an admission that the games might be incomplete and/or not fun, which should be a concern for other users who expect complete and fun games on *Steam*. The knowledge generated by this conflict reproduces the current state of *Steam* through an interpersonal conflict, those that dislike the game think those who like it are unintelligent consumers. The policy of allowing developers to publish partial games is resisted by some users but other users reinforce and support the policy by placing blame on other users. While users who like the game perceive those who dislike the game as uninformed and being negative for no good reason. For example, in a *Steam* thread user ♠KRYPTIK♠ responds to another user's criticism with, "Haha, you are clearly not some ignorant youngster who is mindlessly following everyone criticising this game to seem "cool". You cannot even state a reason for not disliking it. Do us all 2 favors, grow up and shut up."

Of course, developer and user relational contradictions are not the only forms of contradiction found within *Steam*. The very perception of the *Steam* system in many ways is contradictory and leads to further conflicts between developers and users.

System perception. This source of contradiction comes from *the system as broken or ineffective* and *system as working* themes. In the data, a majority of users believed or perceived *Steam*, as a system, was broken in some aspect. Even those who understood the system as working never defended *Steam* as being totally correct. Instead, they framed the system as working the way it was supposed too, but having an underlying broken aspect. This is best exemplified in this conversation between two users:

Ooveous: If they havent cheated in the application process, *Steam* will NOT

remove the game. *Steam* is not the publisher of the game, nor it even tries to be. *Steam* is moving into the direction of being a marketplace for games (just like e.g. amazon for books). Would Amazon remove a really bad written book with only 1Star rankings from their marketplace? No they wouldnt. So *Steam* probably wont. As long as the game contains a .exe and as long as it doesnt contain a virus it probably wont get removed. Regardless of the quality. [permalink](#)

Jrchaeliel: Which is sad and unfortunate, I really hope that *Steam* changes its gears. Alas you are probably correct about the way the company is heading, But It sure would spark *Steams* reputation if they were able to clear out garbage like this or use a better screening system to allow the quality titles to shine through. Time will tell I suppose

Both users understand how the system operates, but *Jrchaeliel* believes the system should operate in a different way, there is a preferred way *Steam* should operate to accomplish one of its goals, namely assisting users when they purchase a game that is of poor quality. Similar examples were found seven times in the data. This becomes more of a contradiction when taking into account that *Valve* believes *Steam* is performing exactly as designed (Sterling, 2017). Therefore, *Steam* is functioning under a contradiction whereby it is working exactly as intended while impeding its own goal of user satisfaction. In addition, there is a tension in how *Ooveous* compares *Steam* to *Amazon*, namely that on *Amazon* reviews cannot be deleted by the seller. Sellers can comment on reviews, but these are viewable to all users. There is an openness and transparency on *Amazon* which is lacking on *Steam*, though given user reaction it seems they want a community that is more open.

Overall this contradiction arises more from user perception and beliefs and therefore

embodies a system contradiction more than a structural contradiction. Some users recognize aspects of *Steam* function as intended and accept it as it is, while others want system level change to be closer to how they feel *Steam* should be. Each group is enacting the system of *Steam* by either attempting to change the meaning of *Steam*'s policies or to reproduce them and place blame for problems with users. This also demonstrates that some *Steam* users expect a greater amount scrutiny and ability from the system. When that expectation is not met it is no surprise that users go outside the system to find a way to augment or correct the contradiction. In addition, when combined with the next section on developers, these underlying issues create friction that pushes users outside of *Steam* to incorporate other systems into their activity network.

Developers. This source of contradiction comes from the themes that cover negative behavior by developers against users and positive behavior by developers toward users. What makes this set of themes contradictory comes from the core relationship between developers and users. Developers need and want an engaged community of users as they purchase their product while also likely encouraging others to purchase the developer's game. This can be seen in five incidents in the data where users tell other users about games made by developers better than *Muxwell* and Sergey Titov. As such, it is in the developer's best interest to cultivate a positive relationship with users. Even when users are voicing complaints minimizing their anger would be the logical course of action for long-term success. However, what was found most often in the data were developers disparaging and antagonizing their user base. A non-gaming example of this behavior would be a politician courting voters by promising to vote for lower taxes, then voting for higher taxes and calling those same voters stupid. The behavior is contradictory to the politician's long-term goal as their likelihood of being reelected would drop significantly. In a

similar same way, when *Steam* developers antagonize users it is assumed to go against their own best interest.

For example, the developer, *Muxwell*, created a sarcastic announcement after *Earth: Year 2066* received negative user reaction and a negative review from YouTube star Jim Sterling that read, “Announcement for everyone! We are going to add exclusive package Earth: Year 2066 Jim Sterling Edition for 100\$ for all Jim fans! God bless Jim!” This statement is clearly meant to lambast not only Jim Sterling for his comments, but for *Muxwell* to show displeasure with the elements of the user base that agree with Sterling. This attitude is seized upon by user, *Los*, who retorts, “Will it include a game, or will it be a fraud too?” This conflict between the developer and a user highlights the inherent contradiction. *Muxwell* needs his users, such as *Los*, but by creating this negative interaction *Muxwell* not only goes against his desire for more purchases, but breeds greater user dissent that will further negativity.

Similarly, this type of contradiction can also be seen in *The War Z* where according to Whatculture Sergey Titov, “After declaring that all critics were “spammers, trolls and provokers” the developer went on to completely wipe the entire forum and renamed the game’s community forum “The Troll² Tavern” (Curran, 2013). As with *Muxwell*, *Titov* is antagonizing the very base he needs to spread word of his game and support its release.

In addition, developers also create a contradiction by framing critical users in a negative light, while attempting to lay claim to a positive attitude toward their user base. This is exemplified in more quotes from Sergey Titov, whose official statement says, “We also want to extend our apologies to all players who misread information about game features.” and then says,

² Troll is a derogatory term used to describe a person who purposefully says controversial or insulting things in order to anger a particular group, in this case the developers of *War Z*.

“At the end of the day our goal is to serve our players as best as we can, and we love when you guys steer us into the right way of doing it!” (Schreier, 2012). By insinuating the problem is on the user end through their “misreading” *Titov* dismisses those user’s complaints, but then tries to say the developer is trying to please players. This is a clear contradiction that ended up producing more issues as the comments were picked up by news media outlets and spread throughout the internet. Another example of this behavior, again by *Titov*, is shown when addressing unhappy customers:

We also are pretty aggressive banning people who use cheats and hacks in a game. Those guys normally have paid \$10-20 to purchase hacks that offered them 'no hack detection guarantee' – naturally they're being extremely pissed off when we've detected their hacking activities and banned their accounts. Those guys are very active in spreading false information and lies about game.

Again, *Titov* frames those who complain as hackers and cheaters, attempting to invalidate those user’s complaints. This contradiction between supposedly listening to users but not really acknowledging them creates friction between users and developers.

SAT positions contradiction as a source of conflict and conflict as a generative mechanism for knowledge. So, it must be asked what knowledge is being generated by the contradictions and conflicts? These examples expose the conflict between developer’s actions and their statements. This contradictory attitude damages the developer’s relationship with the user base and therefore may hinder the expected, positive relationship where developers are attempting to enact and maintain customer service. So, in the end, the contradiction is that developers were reporting to be positive to users, but related to users in a negative way, such as silencing, insulting and dismissing them. However, developers are not alone in this form of contradiction

and conflict, as the next subsection *Valve's* role demonstrates.

Valve. This source comes from the theme of *recognition of Valve in hierarchy* and functions comparable to *system perception against system reality* as they are both concerned with perception. However, where the previous source was focused on users and the system, this source is focused on a contradiction between how users perceive *Valve's* role and how *Valve* perceives their own role in the system. *Valve* enacts their role as a more hands-off manager of *Steam*. Instead *Valve* relies on various checks and balances in the system to resolve issues on its own, such as games considered shovelware³ or low quality not appearing on the front store page, a premium marketing space, through the use of algorithms (Sterling, 2017). However, users often want *Valve* to be an active manager, as seen seven times in the data. For example, user *steven447* advocates for *Valve* to be more active by saying:

I think a good idea would be some kind of Apple like policy where games are physically tested, before they are even allowed on green light. I admit this is a bit extreme, but it serves as some kind of shield against "games" like this that are just glorified tech demos.

When reviewing the data for user's thoughts on *Valve*, a majority expressed their desire for greater intervention. In contrast to the one instance of *Valve* directly addressing their role to consumers. This one instance is perhaps the best way to demonstrate *Valve's* view of itself and analyze this contradiction:

However, *Steam* does require honesty from developers in the marketing of their games. We have removed *Earth: Year 2066* from Early Access on *Steam*.

Customers who purchased the game will be able to get a refund on the store page

³ Games of low quality released for low dollar amounts, often mimicking more popular games.

until Monday, May 19th.

This statement comes from a *Valve* representative commenting on removing *Earth: Year 2066* and positions *Earth: Year 2066* as a system issue or at minimum an example of a rare system exploitation, because the developer was not honest and therefore became a problem on *Steam*. The use of “require positions developer honesty as a policy for *Steam* that is enforced through this refund.” The statement implies honest as a viable expectation for users, but the hands-off approach of *Valve* does not enforce honesty in all cases. In this way, *Valve* tries to both preserve or justify its hands-off nature, as the default position. Also, the very fact that *Valve* could remove the game and talks about themselves as “we,” instead of a more neutral wording, shows that *Valve*'s privileged position and that they can enact their agency fully. So, there is a conflict between *Valve* trying to remain hands-off and make *Steam* an open marketplace, but their statements show their capacity for action. One user demonstrates their frustration with the lack of oversight and enforcement:

Even with Greenlight⁴, this shows how great the quality control really is. Why was this allowed on the *Steam* platform in the first place? How is *Valve* even going to handle the masses of crap when Greenlight is phased out?

So, this user believes that *Valve* will act and be directly involved in conflicts, when in reality they rarely act even though they hold the most power. This contradiction leads to a conflict that pushes users find ways to rouse *Valve* into action by making noise within forums or going outside the *Steam* community forums. *Valve* creates a policy contradiction by requiring honest form developers but not actually monitoring their honesty. Rather, developers are given a wide

⁴ Greenlight was a process whereby users voted on games to be brought onto *Steam*. Often independent titles as major publishers would automatically have their games posted to *Steam*.

range of power to edit forums and enables dishonesty by developers. Additionally, the contradictions within users further the issues with *Steam*. When taken together as a whole all these contradictions show why and how *Steam* has difficulty working as intended.

Overall summary. As described in the SAT literature all social systems exhibit some form of contradiction (Canary, 2010a), occurring through both formalized aspects of the system's structure and through interpretations by system actors. In *Steam* contradictions were found arising from: *Developer against user contradiction, User against user contradiction, System perception against system reality, Valve's supposed role vs Valve's actual role, Steam rules and contradictions* and through these sources of contradiction conflicts between users and developers.

What is interesting in this study was not the finding of contradictions, but the nature of the contradictions. Canary (2010a) describes contradictions as, "generative mechanisms for the communicative construction of policy knowledge as individuals interact to resolve contradictions in the policy process" (p.36). That is, a policy conflict leads to interpretation which leads to knowledge. (for a simplified visual example see table two below).

Conflict caused by contradiction → Interpretation → Knowledge generation
--

Table 2

In this study, some contradictions were found to occur after interpretation. That is, the act of interpretation rules (policy) caused conflict to arise. Where some systems have system conflicts on the base philosophical level and on the structural (implemented) level, *Steam* displayed some conflicts that only arose through an interpretation by members of the hierarchy. An example of this within *Steam* can be seen in user's interpreting *Steam's* rule to report rule-breaking by community members to include developers means a contradiction was created by

their attempt to regulate the developers when *Valve* had not intended. This is not a system contradiction, because it is not contradictory to *Valve* or developers. There is no underlying tension except when interpreted by users in such a way to create a contradiction. (for a simplified visual example see table Three below).

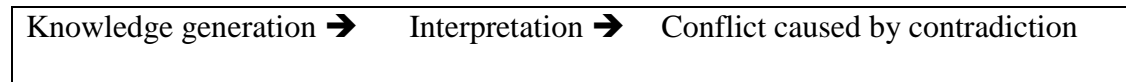


Table 3

This finding is not a counter to SAT. Instead it merely highlights how fluid its aspects can be, as they are interrelated and greater emphasis should be placed on that fluidity. Overall findings from RQ1 exemplify how prevalent contradictions are within *Steam* and how using SAT as a sensemaking mechanism can help highlight contradictions. In addition, contradictions also arise in RQ2 and shows how these contradictions limit users perusing their goals.

Overall *Steam* generates contradictions on all levels. As SAT indicates, contradiction allows an understanding of knowledge generation from co-operative interpretive acts. *Earth 2066* and *The War Z* demonstrate how these contradiction leads to a meaningful understanding of how policy is communicably enacted. Additionally, because *Steam* is an online forum, the contradictions lead to users finding ways around them, outside of the constraints of the system. Finally, SAT can be better understood as a fluid process because its constituent elements are interrelated and may occur in different sequences than laid out in theory. Overall, exploring contradictions in *Steams* leads to a greater understanding of not only how policy is interpreted on *Steam*, but how SAT can be more dynamic than presented in previous literature.

Chapter 4: Research Question Two: Enacting Agency

This chapter outlines the findings related user agency (capacity to act otherwise) within *Steam's* system. Users have a way they want the forums to operate as evidenced by the incidents previously described, such as transparency and counterbalances to developer abuses. Since *Steam* not only does not have functions that allow users to enact or change the system, but also allows developers to delete and modify content as well as ban users at their discretion, they must go outside *Steam* and find tools or other systems that will allow them to enact their agency. SAT provides a means to examine the multiple activity systems users have co-opted to help enact their agency through an exploration of intersecting activity systems and through the specific actions users take. *Steam* limits user agency by not providing means for them to act without interference from developers who control the forum pages or from direct intervention on user's behalf by *Valve*. As a result, users have used the external acts of discussion, organizing, and awareness-raising.

To examine the ways agency is affected by *Steam* this research question posits: how do users utilize agency within and outside the *Valve* system (*Steam*) to enact their goals? The primary concern of RQ2 is how users enact agency to act otherwise when constrained by the larger system of *Valve*.

Nine themes emerged from the data of which the *overcoming time and space* (distanciation) theme emphasized a wide variety of behaviors related to transmitting information across distances and differing times that help in answering this research question. Findings are organized into four major actions users employ to enact agency (see Table 4). Each action category is enacted on specific activity systems such as *Steam*, *Reddit* and news media. Each action set has a purpose in relation to the goals of the user (user purpose). Users also employ

various types of support actions: internal tool usage (ITU), organizing, discussions, and awareness raising. Internal tool usage is interconnected to organizing as the instance of using internal resources was done in an attempt to coordinate effort. These two actions are separated because the attempt at organizing occurred outside of *Steam* and as such these two actions highlight different attempts at enacting agency. When users perform organizing, discussions, and awareness raising they do so within the activity system known as *Reddit* (social media); while conducting discussions and awareness used news media alongside *Reddit*.

Relationship between actions, activity systems, user purpose, and support

Action	Activity System	User Purpose	Support
ITU	<i>Steam</i>	<ul style="list-style-type: none"> • Alter the system 	<ul style="list-style-type: none"> • Internal tools
Organizing	<i>Reddit</i> (social media)	<ul style="list-style-type: none"> • Collective Action 	<ul style="list-style-type: none"> • URLs
Discussion (users)	<i>Reddit</i> (social media)	<ul style="list-style-type: none"> • Commiseration • Enact Change • Share Updates 	<ul style="list-style-type: none"> • URLs • Image Sharing • Stories
	News media		
Awareness raising (potential-user)	<i>Reddit</i> (social media)	<ul style="list-style-type: none"> • Raise Support 	<ul style="list-style-type: none"> • URLs • Image Sharing • Stories
	News media		

Table 4

Users perform discussion to share updates, commiserate over common complaints, and generally discuss the incident. Discussion and awareness raising are interrelated, but differ in audience and purpose. For analysis I split the audiences into users (discussion) and potential-user (awareness raising). Users are those who already have an invested in the game/system, while potential-users are those who are not yet invested, but have the capacity to affect the system. For example, if someone posts a comment to a game's forum they have an investment in that game's community, often through purchasing the game. In contrast, someone casually reading video game news coverage is an actor because they are neutral to the incident, but have the capacity to

affect the system through a range of possible actions including purchasing, not purchasing or contacting *Valve* directly. Awareness raising's purpose is to allow users to inform potential-users of incidents and hopefully spur them to support the users.

When using the above activity systems and performing the actions, users rely on three means of support for their arguments: URLs (Uniform Resource Locators or links), image sharing, and stories. However, users only used URLs when attempting organizing on *Reddit*. URLs are employed to present evidence from *Steam* or other activity systems external to the one, often *Reddit*, currently being employed by users. Image sharing is related to URLs, as images are shared via URLs and aid in overcoming time and distance, but are separated because of how the resources are used. URLs are used to connect other users to vital information, such as the location to submit complaints on *Steam*. Of the fifteen instances of image sharing in the data, all are captures of interactions between developers and users that display attitudes and information the developers would rather not be made public. By image sharing users can transmit these conversations to other users and preserve their legitimacy. In addition, without these screen captures it becomes a they-said-they-said between the users and developers. Finally, stories are used to illustrate points and share user's personal experiences. This complex set of interrelated items are displayed in table three, specifically which resources are used with which action.

To understand the enactment of agency, the findings are organized by the action undertaken by users. *[Note: As with chapter 3 all instances of grammatical and spelling errors within the quotes of this chapter are the results of the users and not the author of this paper.]*

ITU. The actual amount of times users tried to use *Steam*'s internal tools cannot be known as there is no way to trace the specific numbers. However, in terms of effectiveness in achieving user goals, data shows discussion, organizing, and awareness raising had actual success while

ITU's impact is negligible. The reason behind this boils down to the fact that *Steam* lacks mechanisms that enable users to enact agency, specifically in performing actions against developers they feel are abusive. However, this does not mean users did not *think* mechanisms existed as demonstrated in a post by user *jrchaleil*,

There are built in mechanisms for reporting a game, however these are slow moving. Which is why *Earth: Year 2066* took nearly a month and several different external resource utilizations before *Valve* moved to act. Even when *Valve* does act, it is clear they themselves are lacking in specific tools and resources to properly mediate the situation.

The quotation illustrates that users tried to use *Steam's* internal reporting, but perceived it as ineffective. Later, users would learn that the reporting system was not intended to catch games of questionable quality or even developer's doing questionable actions. Instead, the report system was intended to catch more explicit illegal user behavior like credit card fraud. As such, no internal tools exist to assist a user's goal of system change. This is similar to contradictory rules situation in chapter 3, in that user perception of what the tool is for and what *Valve* designed it for are in conflict, further illustrate how *Steam* has been designed to constrain user's actions more than developers. It also shows that *Valve* has assumed developers will act in good faith, both in their product and their interactions with users. Otherwise, there would be some checks on their power within the system that could assist users.

Another example of the assumption of developer good faith can be seen in a post created by a *Valve* employee known as *al*, who was in charge of talking to user's after *Valve* began investigating *The War Z* developer's behavior. In the post *al* states, "If you have specific

examples of what you feel was unfair or incorrect moderation on this forum, please post them in this thread (or on my profile) and we'll have a look.” Although *Valve* is offering to act (investigate) when informed, *Valve* is also tacitly admitting a lack of sufficient resources to investigate developer abuses. Though this may appear to be creating a new mechanism to empower users, in reality it lacks a clear policy or framework to guide users. Saying “we’ll have a look” places *Valve* into the relationship in a vague way, whether this is a change in policy or a way for users to vent only within this incident. However, this statement occurred in 2012 and the *Earth: 2066* incident happened in 2014. Meaning in hindsight outside observers can see this became only a venting exercise and still left users to either accept developer abuse inside *Steam* with no way of fighting back or go outside *Steam* and use external actions to combat the developers. Specifically, users can externally combat developers by engaging in acts of discussion, awareness raising, and organizing.

Organizing. A second action by users was one attempt at organizing collective action and took place on *Reddit*. This act of organizing focuses only on users and not potential-users, because users are the only one with access to the parts of *Steam* the organizer believed would accomplish their goal. Thus, organizing is differentiated from awareness raising by its audience; is differentiated from the act of discussion by having a clear end goal beyond sharing information; and has a clear step-by-step process users can perform to assist in their goal. The goal of this organizational effort was to mass report the *Earth: Year 2066* to raise *Valve*’s awareness of its questionable nature, as can be seen on users’ social media interactions.

What was seen in terms of organizing occurred only a single time on social media, because organization on official channels would probably result in further developer interference. The

single example of an organizing attempt came from user *jrchaleil* when discussing Earth Year 2066 in a *Reddit* post suggests ways to report the game:

HOW TO REPORT THIS GAME

1. Open the store page for this game (Earth - Year 2066)
2. On the right hand side youll see a small Flag just underneath (Add to your wishlist)
3. Click on the Flag
4. You will be given a list of options, select (FRAUD)
5. Say why you think this is a scam in the box at the bottom and SUBMIT!

This attempt at organizing proved futile, as it was later discovered the report system was not designed to alert *Valve* to questionable marketing as was the case in *Earth: Year 2066*, but more to alert them of mass fraud such as large-scale credit card theft. As such, these reports yielded no noticeable action, though if they had any impact on informing *Valve* cannot be known. However, given other incidents known by the author but not discussed in this paper, it would be unlikely the reports affected *Valve* as in incidents like *Earth: Year 2066*. The company appears to intervene only when enough awareness is raised to impact its business.

The act of organizing through the resource of social media demonstrates a user's attempt to use their agency to connect with other frustrated users in order to collectively communicate perceived fraud to *Valve*. This form of collective action was not available for long once the developer learned of the comment, as they deleted the post. In addition, why organizing was not attempted more is unknown. A possibility, and the scenario I think is most likely, is that after this most users recognized the futility of trying to use internal resources to combat developer abuse and devoted their efforts toward outside outlets to force *Valve* to intervene. I believe this is

demonstrated by the majority of agency enactment occurring within the acts of discussion and awareness raising.

The third action of discussion was the most common action observed and enables users to bridge physical distance to come together and share information with other users. As mentioned before, the distinction between a user and a potential-user is an important one. Potential-users may not be part of the formal system, in this case *Steam*, and often cannot perform actions in the system like users, but are potential users if they buy the game.

Given the friction between users and developers, it is not surprising the topic of discussion centered on the developers. However, what is surprising in the data for the *overcoming time and space* theme is that only a single instance of *Valve* being spoken of directly occurred. Why there was so little discussion about *Valve* is unclear. Perhaps user anger directed them more toward developers or sharing information about *Valve* was not seen as necessary since they all used *Valve*.

The majority of user discussion focused on developers, whether it was the developer's history, a specific offensive thing they said, or users just wondering why the developers behaved so badly as exemplified by *Reddit* user *jrchaleil*'s explanation of how the developer of *Earth: Year 2066* altered his comment on the *Steam* forum,

I DID NOT buy this game, I just put in my two cents about it on the forum, The dev⁵ then edited my post and rewrote it to something like "this game looks amazing and everyone should pick up a copy.

Here user *jrchaleil* is sharing the information on how their words were altered by the developer to appear more positive about *Earth: Year 2066*. Sharing this information is important for users

⁵ Developer

to show the developer is untrustworthy, the content of the official forum cannot be trusted, and may generate sympathy from other users. This is a rare instance of a user who engages in more discussion despite not purchasing the game, but as a member of the larger *Steam* community. So, their motivation is not purely anger over a dissatisfied purchase, but a violation of their agency within the system by attributing false comments to them.

Another example of user discussion focusing on a developer comes from *Reddit* user *DeltaSparky* who attacks the developer of *War Z*:

The Dev for the game has never made anything but absolute trash his entire life, he is probably the worlds worst game developer to ever exist. They keep changing their name to fool stupid people. EVERY SINGLE GAME HE HAS MADE is on the list for the worst games to exist.

Big rigs: Over the Road Racing [user link to Wikipedia. Quote below from user and present in post.]

"Big Rigs: Over the Road Racing was critically panned. The game's criticism is largely directed at its "blatantly unfinished" state: lack of collision detection⁶ and frequent violation of the laws of physics, frequent and major software bugs, poor visuals, and severe lack of functionality. As a result, the game is now widely regarded as one of the worst video games of all time."

In this statement *DeltaSparky* provides the developer of *War Z*'s previous work to show fellow users how he is untrustworthy, in terms of work product, as Big Rigs is notorious in video game circles for being so broken there is no way to win. This information sharing is not only an

⁶ Collision detection prevents objects from passing through each other in game. Therefore, a game lacking collision detection does not have "solid" objects.

example of discussion overcoming space, but is also an example of overcoming time to better inform fellow users as *Big Rigs* was released in 2003 (Big Rigs, 2003), while *War Z* was released nine years later (Grubb, 2012). Another way to think of discussion is an action performed by users for information sharing purposes to affect decisions and actions of other users and potential-users. More specifically users employ image sharing, news media, and social media as unique means to overcome the system's constraint.

Image sharing. In the data, image sharing consisted solely users presenting (through linking) screengrabs or pictures of a computer's screen, using the inbuilt "prt sc" [print screen] function and then disseminating those pictures to other users to share information and support their arguments. As stated previously, image sharing is interconnected with URLs as it is through URLs that images are shared as none of the sites, either *Reddit* or news media, had the capacity to display images within discussion threads. However, image sharing was exclusively used to support user points/arguments and relied on an additional activity system when used. Therefore, it has been separated from URLs and is viewed as a unique phenomenon in this study. In addition, the two instances of users sharing videos has been incorporated into image sharing as they serve the same function of supporting user arguments.

The use of images among users is important for purposes of legitimacy and preservation. Legitimacy of a conversation or comment is highly important on an online platform as there is no way of immediately knowing another user's trustworthiness or if their perception of events aligned with reality. Image sharing overcomes this difficulty as it is immediately obvious to anyone looking at the image who-said-what and make and assess the citation for themselves. In addition, many pictures of conversations preserve the context of discussions which further assists in assuring user's quotations or summaries of a situation has not been altered or manipulated. For

example, when discussing what happens when asking for a refund, user *MurderMode* captured a picture of how they were banned and posted to a discussion on *Reddit*, “All you have to do is apply for a refund, get tired of waiting after a few days, hit the forums with a question and a retort and BAM - <http://i.imgur.com/yqiY8.jpg>” [see image one for the actual picture of the conversation. Note: the image is as large as possible, if too small use the url:

<http://i.imgur.com/yqiY8.jp.>]

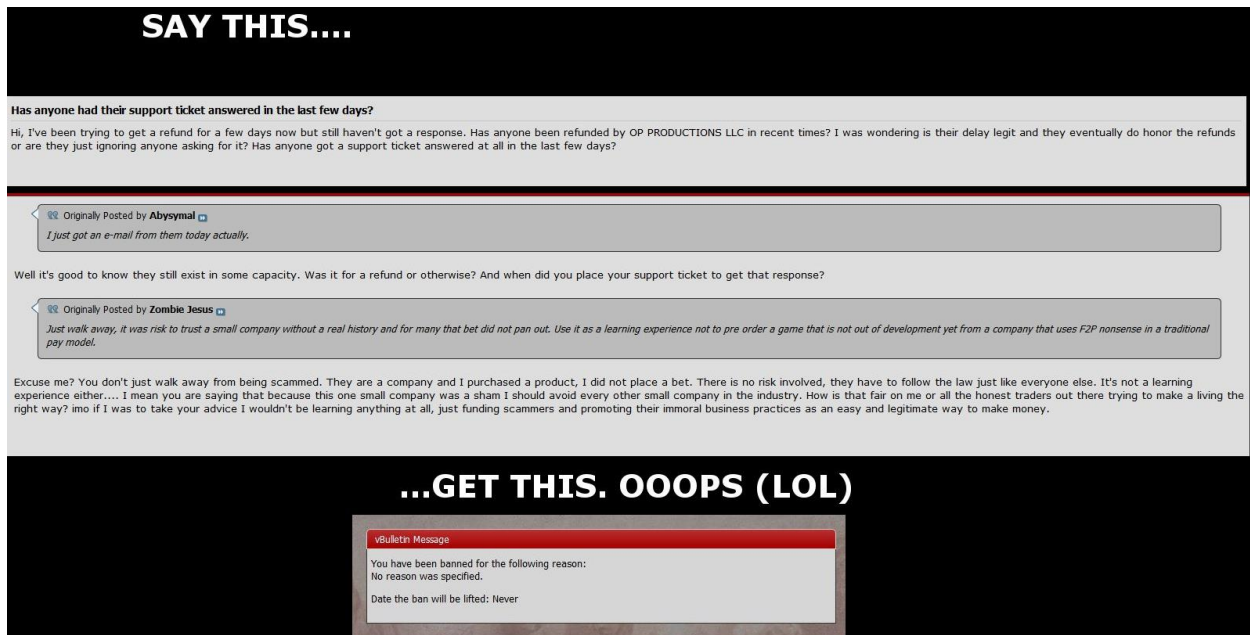


Image 1 [note: image altered to improve readability]

Prior to this discussion *MurderMode* asked for a refund on War Z, since they felt it did not live up to the hype. After a long silence, they then posted on the forum to find out if the company was active and responding to inquiries. *MurderMode* is told they are responding, but they should drop the request as they gambled their money on an unproven developer. *MurderMode* then points out it was a transaction and that just dropping the request enables poor developer behavior. They are then banned, presumably for asking for a refund and speaking negatively, though respectfully, about the developer's behavior. As evidenced by the images forming,

particularly large white text, *MurderMode* did alter the conversation a bit, however the changes were for readability and sharing, not for manipulation of message. This can be seen in the way the overall context of the conversation has been preserved. Thus, the images help show other users that *The War Z* developer cannot be trusted.

Images also serve as a means of preservation. Due to the nature of *Steam* and other activity systems, conversations and comments can easily be lost over time. Items can be deleted by moderators/developers, users may delete the original comment they made, conversations may take place in a location not normally accessible to all users. As such, preservation is an important function of image capture and sharing. Preservation also helps counteract the developers' ability to alter or remove conversations from the public eye by using systems not available to all users. For example, user *ValdemarSt* posted on *Reddit*, "I talked to *Muxwell*. He didnt do very well defending his game and himself. <http://imgur.com/CjiOkqm>"

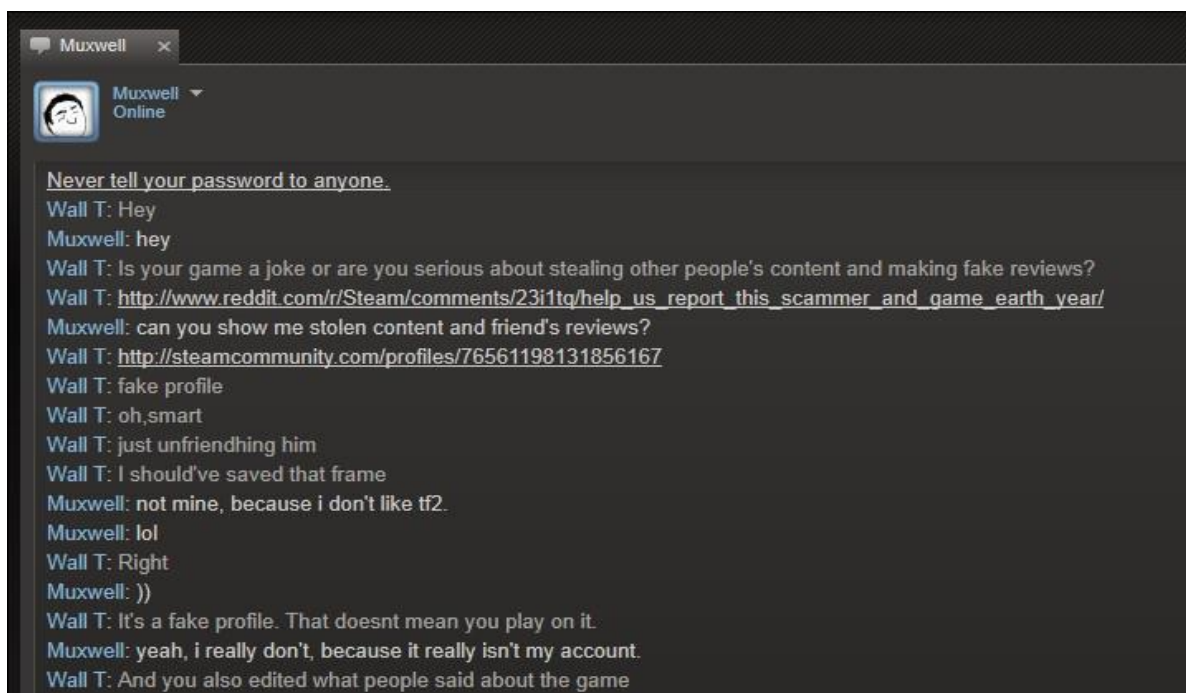


Image 2 [note: image altered to improve readability, <http://imgur.com/CjiOkqm>.]

In this conversation *ValdemarSt*⁷ confronts *Muxwell* about stealing content (in game art assets) and the writing of fake reviews or having reviews done by friends. *Muxwell* then demands proof of the accusations, so *ValdemarSt* links him to a profile other users have identified as fake (how they did this is unknown though not the central point). *ValdemarSt* then notices *Muxwell* has “unfriended” the fake profile and laments not having preserved their association. This conversation would not normally be available to anyone other than *ValdemarSt* and *Muxwell* as *Steam*’s messaging client can only be viewed by those who had the conversation. Without the preservative power of image sharing *ValdemarSt* would have no way to show other users *Muxwell*’s bad behavior.

Overall, these examples demonstrate how image sharing affords users the ability to further their discussions and agency by providing a way to share information otherwise lost and to hold developers more accountable for their actions. In addition, image sharing also shows how users get around *Steam*’s design, which constrains their ability to have open conversations, and how the system does not allow for equal access to information. Circumventing the constraints imposed by *Steam* and sharing information on developers further occurs in news media comment sections.

News media comment sections. Comments sections on news media sites are unique spaces where a diverse set of readers can engage in discussions around a central topic of importance. Functionally, news media comment sections and social media sites like *Reddit* are very similar. Both allow for ongoing dialogues with largely anonymous users. What separates the two spaces is their purpose. *Reddit* seeks to bring like-minded people together in order to intentionally form

⁷ *ValdemarSt* uses a different user name in the conversation picture as it occurred on *Steam*, but was posted to *Reddit*. Users often have different names on different services

communities, while news comment sections are designed to foster general discussion and keep readers on the news site longer (producing more advertising potential). In addition, the general audiences vary between the activity systems. *Reddit* deals more with users (those already invested in the community and system) as evidenced in the organizing section, while news comment sections have a greater mixture of users and potential-users (those not invested in the ongoing incident). News media's diverse audience leads to an issue when connecting it to the larger discussion of *Steam*. Specifically, there is no way to know how much overlap exists between *Reddit*, *Steam*, and News comment sections. As such, this study treated each user in the news comment sections as unique.

Though news media's audience and purpose are different from social media, that does not prevent news media's comment sections from being commandeered or co-opted to be like social media. For example, *Steam* user *LEEROY_UK* used image linking within *Eurogamer's* comment section to discuss the banning of users:

UNBELIEVABLE....This is the what happens when you ask for a refund from the 3rd party they have assigned to deal with the refunds apparently, they threaten you with being put on a blacklist... <http://i.imgur.com/t6F9c.jpg> Source from *Steam WarZ* forum

The image being shared by *LEEROY_UK* shows how an unknown user was told that since the game purchased (*WarZ*) was in beta state [an unfinished version of the game before a finished build] and if they received a refund they would then be placed on a "blacklist" despite the user's belief that the game was broken. This blacklisting would lock the user from certain game features if they later repurchased *WarZ* when it was in a more stable state. *LEEROY_UK's* comment and shared picture informs and warns other users against involvement with the game,

including the dangers of asking for a refund. Such a comment would most likely be deleted or altered on *Steam*, but as a third-party website *Eurogamer* is not under the control of *Steam* or the developers.

In addition, news comment sections are utilized by users to disseminate important up-to-the-minute information on the incident to other users. User *Kolorabi* who, in the same *Eurogamer* article comment section as above, provides an informative update through text and linking to a *Steam* thread:

Valve are now investigating "concerns about censorship or other posters being banned unfairly".

<http://Steamcommunity.com/app/226700/discussions/0/828925849078277433/> I

have never ever seen *Valve* do this, so for once they must be taking things pretty seriously

This comment provides a link the earlier discussed post by *Valve* employee, *al*, who talked about investigating user complaints. The important take away is that through sharing this information *Kolorabi* may have led other users to voice their concern to an official. Without this update, many might not have been able to contribute and have their voices heard, which is part of the reason for them going outside of *Steam*.

In summary, news media comment sections assist users in enacting agency otherwise lost by *Steam*'s constraints. Specifically, news comment sections provide a space for open and transparent discussion on incidents that would normally be restricted, such as possible illegal behavior by developers. The use of other activity systems to overcome *Steam*'s constraints can be further seen in the next section: *Reddit*.

Reddit (social media). As with news comment sections, *Reddit* and other social media platforms offer users a location outside the control of *Steam* or developers where open discussion can take place. In the data analyzed *Reddit* was the only social media site examined, being the third largest (defined by a number of active users) in the United States (SimilarWeb LTD., 2017). *Reddit* is also designed to create community and foster long-term discussion on topics, making it ideal for this type of research. As a platform, *Reddit* is reminiscent of old internet bulletin boards, except individual topic boards have been replaced with *sub-Reddits*. *Sub-Reddits* have a particular focus, such as cars, and each has its own unique sets of rules in addition to *Reddit*'s overall rules of community conduct. The only ones able to alter a post is the user who made the post. As on *Steam*, *Reddit* moderators have the power to delete a user's post, but unlike *Steam*, cannot alter the wording of a post. In addition, any user can create a new *sub-Reddit* based on their interests, so if users found one *sub* too restrictive they could splinter off with the only restriction being how many users they could get to participate in the new *sub*. What differentiates the new comment sections and *Reddit*/social media is that news media's primary focus is sharing information with its readers, whereas social media's primary focus is on discussion and interaction. Therefore when looking at the data users utilized social media for its intended purpose, while they used news media more tangentially in relation to its goal.

The use of *Reddit* for discussion through image sharing, linking, URLs and even telling stories can be seen in the comment by user *Timothy80*:

0Im one of the people who keep reposting the links on the forums for people to see. (snakey125)

Ive been doing some digging to find out who this developer is. One of the things that showed up was an indiegogo page for a "Project Earth".

<https://www.indiegogo.com/projects/project-earth--2#home>

<https://www.youtube.com/watch?v=2f509qPPqvo> Its funny because hes dead set on not letting this link getting into his forums. If you compare it, It shows a different quality of work entirely and leaves me to believe this was also stolen. I just cant confirm it.

Here *Timothy80* shares information on how *Muxwell*, developer of *Earth: Year 2066*, had apparently tried previously to raise funds for a similar game on Indiegogo, a site to crowdfund projects, and then never made the game. The story aspect is implied more than explicitly stated, but it is clear from *Timothy80*'s post that they are having an ongoing struggle against *Muxwell*. This type of information would have been restricted on *Steam*, as evident by the quote, however on *Reddit* it can freely be read users.

Similarly, dissemination of developer's previous history can be shared amongst users to illustrate why buying or trusting them might not be the best idea. For example, an unknown *Reddit* user wrote of *War Z*'s developer:

OP forgot to mention ol' Sergev is the lead dev for Big Rigs: Over the Road Racing. Aka one of the worst games in recorded history. The engine from WarInc, and everything else about WarZ was terrible from the get go. Nothing short of a different developement team, different engine, and different parent company would have saved it.

Again, this information may have been useful on news media sites, but is given more weight here due to the discussion taking place. Namely, this comment is adding to more information provided by the OP (original creator of the discussion thread) and has more weight due to the context.

On *Steam* both example comments would most likely be deleted or flagged by the developers if posted within the game's forum, where it would also be the most useful. However, on *Reddit* where the comment was placed, there are no restrictions on content and a moderator or the user who wrote the post can delete the post. Also, as discussed previously, *Reddit* was the only place any user attempted organizing on a large scale.

Overall, discussion is an important action for users to enact their agency to act otherwise against the constraints of *Steam* through by incorporating of *Reddit* and news media comment sections. Both of these activity stems offer locations removed from the authority of both *Steam* and developers. In addition, user discussion in these activity systems are aided by the support of URLs, image sharing, and stories. URLs help users cross system boundaries and incorporate *Reddit* and news media into an activity network with *Steam*. This boundary crossing assists in accomplishing user's end goals by allowing the systems outside of *Steam* to have influence on what occurs on *Steam*. This is evidenced by the fact that the larger discussion of the incidents caused *Valve* to intervene. Image sharing is important in that it helps to not only preserve otherwise lost information, like conversations, but also to lend credibility to user claims. Stories, both directly and implied, help users demonstrate issues users have had to give "real world" context for the claims they are making, such as the difficulty in acquiring a refund. The act of discussion assists users directly through the above resources that enable them to have the kind of conversations they want. Awareness raising similarly does so, but with a different audience: potential-users. Potential-users are those who are not already invested in the game or system like users.

Awareness raising. Awareness raising is a special kind of discussion. Whereas standard user discussions are positioned as commiseration or info sharing amongst already invested or

aware users. Awareness raising deals with attempts by users to raise the ire and support of potential-users who could be unaware and helpful to the user's cause or members of the press who could further spread their information. Awareness raising aids in user agency enactment by helping users in their attempts to get attention from *Steam*. The reason they need this attention is that, as discussed in the internal resources section, *Steam* is set up to limit their agency for countering developer abuses and requires direct intervention by *Valve*. Therefore, the best way for users to get the changes they want is to get *Valve* to notice them, which they do by increasing awareness of the incidents and inaction on *Valve's* part would negatively impact their sales and system. The term *unconvinced use* refers to potential-users invested in the system by as buying other games on *Steam* but remain unconvinced of an actual problem with the developers. The reason *unconvinced users* have not been mentioned until now is that they do not have a great impact until now. In the discussion section the primary focus was on users, while now it is on those who are not invested in that game and those who might not care. As with the act of discussion, URLs, image sharing, and stories are employed by users to raise awareness.

Image sharing. When raising awareness, users often employ linking to videos that illustrate their points, as opposed to only pictures of images. The reasons for this are not completely clear, but the most likely answer is that the video format assembles all the available information in a quickly digestible format. This helps convince potential-users of the user's positions and can even convince users who might not have agreed there was an issue going on. Such as, user *jrchaleil* posting on *Reddit*, "if you dont believe its a scam then watch this <https://www.youtube.com/watch?v=KHhbdhPU7U>." The video is made by Youtuber Jim Sterling and depicts his attempts to play *Earth: Year 2066* along with him discussing the controversy surrounding the game. This helps to show how broken the game is and how it does

not align with its description. Sterling also reinforces the opinion that *Earth: Year 2066* is a form of scam. This illustrates how the use of image sharing, in this case video, helps convince *unconvinced user* of the issues and give a full background to potential-users who may not have heard of the incident or game before. Likewise, another user, *Trigg3rHippie*, posted a video outlining the issues with *Earth: Year 2066* by a different video game commentator saying, “TotalBiscuit just did a video on it. Watch it here He's having a bit of a rant but rightfully so. The game is shite and I really hope it'll be recalled” As with the Jim Sterling video, *TotalBiscuit* shows gameplay footage and lays out the current issues along with evidence.

The form of image sharing used in the act of awareness raising is noticeably different than an act of discussion because it attempts is to convince and inform potential-users and *unconvinced users* of the overall issue as opposed to simply sharing information among those already in the know. Likewise, usage of *Reddit* in awareness raising mirrors its use in discussion.

Reddit (social media). What differentiates awareness raising on *Reddit*/social media and news comment sections is that those on *Reddit* are most likely a part of the *Steam* system, while those on news comment sections are not; though they have the potential to influence *Valve* to make changes to *Steam*. In the data awareness raising was not performed often on *Reddit*, most likely because users there already have awareness, but do not care and may not be persuaded. Still, some have attempted to inform the uninformed and possibly sway noncommitted users. An example of this awareness-raising can be seen in the *Reddit* thread: HELP US REPORT THIS SCAMMER AND 716 GAME - EARTH -YEAR 2066 by *Jrchaleil* (who was also the one instance of attempted organizing in the same thread), who lays out an argument for the game being a scam by linking to images of developer abuse, specifically the alteration of user posts, and a video by Jim Sterling that explains the games faults. In addition, *Jrchaleil* also uses a story

about how he was banned from the forum for giving his opinion on the game. At the end of his argument *Jrchaleil* then posts URLs to *Steam*'s reporting system, along with updates from news sources. The purpose of this thread is twofold. First, as mentioned before, it is an attempt at organizing a mass report on the game. However it is also to raise awareness among *Reddit* users. Similarly, in a thread called: A look into "The WarZ / Infestation Survivor Stories" debacle and the company and game's future. An anonymous (deleted account) user covers the full history of the *WarZ* incident with URLs to supporting material in the hope of raising greater awareness among users because, "There has been happening a lot more than most people think over the last few years." Overall, the use of *Reddit* for awareness raising in the data was very limited and only occurring three times total (one for *Earth: Year 2066* and two for *War Z*), where awareness raising was most prevalent was on news media comment sections.

News media. When it comes to using news media for awareness raising, both indirect and direct methods were employed by users. The indirect method involved the use of news site's comment sections to supply additional information to the readers and authors of the piece. User *LEEROY_UK* utilized *Imgur* to display several pieces of information and examples of questionable behavior, which added a lot of context and information to the overall article:

And there more reply's from Xsolla to a *Steam* user called 'wannabepro' which all seem to be utterly against any trading laws i have ever come across.

<http://i.imgur.com/yUKqw.png> <http://i.imgur.com/vrENY.jpg>

<http://i.imgur.com/EdNYF.png> <http://imgur.com/T3V7gSry> there not really in context but you get the idea.

EDIT:- here is the original post in its entirety

<http://Steamcommunity.com/app/226700/discussions/0/828925216547748992/>

This post gives several pieces of evidence to potential-users and *unconvinced user* of questionable developer behavior by showing posts and messages which discuss how no refund is allowed, even though as *Leeroy_UK* points out this is most likely illegal. This is indirect, in that the evidence was posted in the comment section of the news article where it might not have been seen by many.

The direct method of awareness raising involves users explicitly contacting the news source to supply information favorable to them, such as on the site *Kotaku* that stated in an article, “Not too long ago, Hammerpoint banned roughly three thousand players, without providing any proof whatsoever, and blatantly lying about their anti-cheat system being flawless," one *Kotaku* reader told me in an e-mail yesterday” (Schreier, 2012). What is interesting about this finding is that direct contact between users and the news media occurred only a few of times in the data, while indirect communication happened much more often.

Overall, like discussion, the act of awareness raising through image sharing and news media resources enabled users to use their agency in such a way as to subvert the *Steam* system’s constraints by providing an outlet through which information could be shared outside of *Steam* without oversight. These actions and resources are particularly important when compared to the internal resources available to users on *Steam*. As awareness-raising had fewer resources available to users organizing has few still and occurred at far lower a rate.

Summary. Within *Steam*, user’s agency is constrained when it comes to combating abuses by developers. Due to the power distribution and a lack of internal resources that would empower users. Therefore, users seek ways to enact agency to influence the system and right perceived wrongs through internal tools, organizing, discussion, and awareness raising. These acts are enabled through the use of some or all of the resources of image sharing, news media,

and social media which are readily available to users and do not place the same constraints on them as *Steam*. In SAT RQ2 can be understood in terms of the mediation of social activity and the intersections of activity systems.

Structuration through activity. In SAT structuration through activity means a system's structures are both shaped by the activities of users and shapes the activities themselves in cyclical feedback loop (Canary, 2010b). This type of cyclical action can be seen in research question two, where users participate in the actions of using *Steam's* internal tools, organizing, discussion, and awareness arising. The act of discussion among users on *Reddit* and news media comment sections is a direct result of the constraint *Steam* has placed on users, it creates an inability to share information without interference from developers or *Valve*. This constraint manifests itself in three parts: rules, poor internal resources, and developer power. First, the rules put in place by *Valve* are too user-focused and do not have enough focus on developers. As discussed in research question one, the primary reason for the issues with rules lies in their contradictory nature. The rules impose a constraint on user's agency and are tied into the second part of *Steam's* constraint. Second, the internal resources provided by *Steam* for reporting are not designed for users to counter developer abuses. Instead the system is designated to report behavior important to *Valve*, such as credit card fraud. When it comes to the forums, *Valve* appears to assume developers are acting in good faith. Third, and perhaps most importantly, *Steam* constrains users by giving developers far more power. Users cannot ban developers or police their posts within the forum, but developers are able to do this to users. In similar systems, such as Amazon, though buyers cannot ban sellers those sellers cannot unilaterally modify buyer reviews. There is a balance to the system which allows buyers to affect the system without being impeded by sells. As example of unbalanced developer power can be seen in discussion section

example by user *jrchaleil*, where developer *Muxwell* changed their post to appear more positive. Further, this cycle contributes to the need for users to engage in the act of awareness raising. Since they cannot resolve their issues without *Valve*, they are forced to attempt to reach the awareness threshold by contacting specialty news sources directly to give them information and to write stories that would assist in catching *Valve's* eye.

The mechanisms that would normally be available for collective action, such as posts for coordination, are not technically available to users on *Steam*, but because they are under the control of *Valve* and developers, they only remain at the whim of the developer. If a user were to create a post detailing action to take against a developer, such as mass reporting for fraud, the likely outcome would be the developer removing the post and *Valve* never hearing about the issue. Thus, user organizing attempts needed to take place outside of *Steam's* system.

These constraints when taken in totality mean users cannot engage in activities that fully implement agency to change the system and are therefore forced outside *Steam* to other systems such as *Reddit*. This causes further problems as major issues are not addressed because *Valve* will not intervene in incidents until a certain threshold of awareness is reached that leads to negative impacts on *Valve's* goals. What this threshold is exactly is beyond the scope of this paper, but the overall effect can be seen in the incidents provided. *Earth: Year 2066* and *War Z* both had long, festering issues which were not resolved until they had news articles written about them and had become widely known. It is not a stretch to assume there are other such issues with smaller games that have not reached the threshold for *Valve* to take notice. As such, I postulate this causes *Valve* to believe problems are minimal and *Steam* does not need significant restructuring. As a result, more issues force users outside of *Steam* as illustrated by image three.

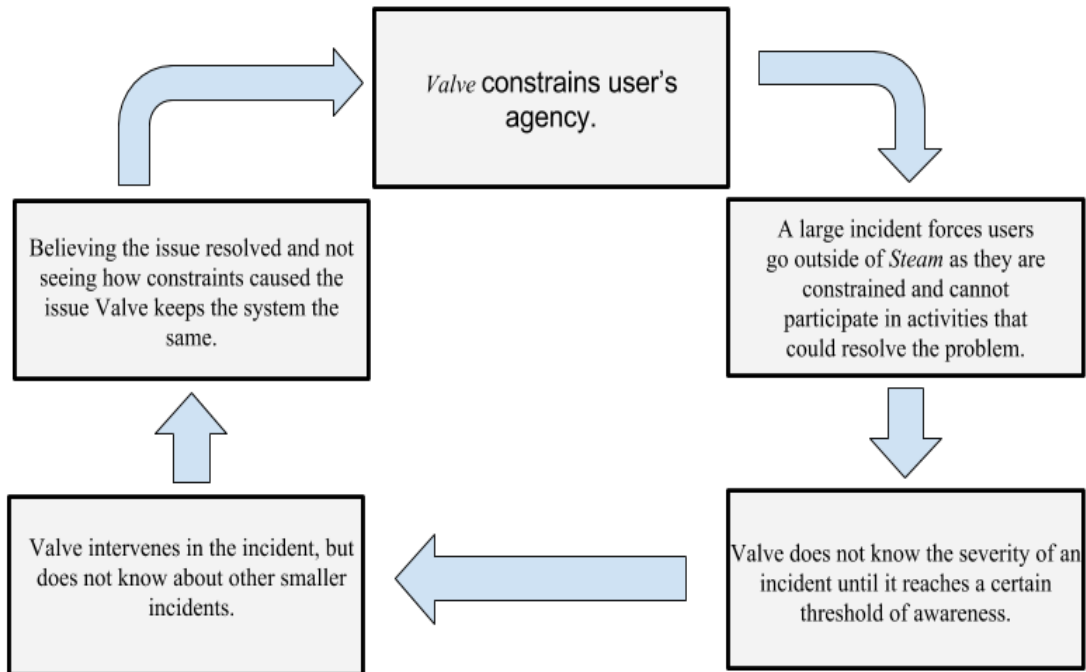


Image 3

The connection in RQ2 to SAT does not stop with structuration through activity, the results from this question also tie in well with the intersection of activity systems. which describes how multiple differing activity systems come together to form activity networks of interconnected systems (Canary, 2010b, p. 28).

Intersections of activity systems. The intersection of activity systems describes how multiple differing activity systems come together to form activity networks of interconnected systems (Canary, 2010b, p. 28). The creation of activity networks and the intersections of activity systems can clearly be seen throughout RQ2 in the interactions between *Steam*, *Reddit*, *Eurogamer* and *Imgur*. Each is a separate system created and driven by different purposes: *Reddit* is for social interaction; *Eurogamer* for news dissemination; and *Imgur* for storing pictures. These separate systems connect through user actions and impact one another in their activity network. For example, a thread on *Reddit* complaining about a developer can be picked up by *Eurogamer* who uses pictures of conversations stored on *Imgur* as evidence in their article.

This article is then seen by *Valve* and causes them to act, in this way the separate activity systems are brought into an activity network that affect each other.

In SAT (Canary, 2010b) the intersection of activity systems appears to be directed in terms of system goals and needs. Specifically, intersections are formed and activity network arise through organic or intentional processes which contribute to a system's goal. For example, a hospital needing to hire more nurses outsourcing to a hiring company creates an activity network as the two systems interact. One system's goals require the interaction of another system.

However, the findings within RQ2 demonstrate an interesting difference between the description of activity networks and interactions in SAT and how they come about *Steam*. Specifically, the systems shown in RQ2 intersect with *Steam* not because they are needed to fulfill a system goal, but because users needed them to counteract the constraints in the system. I believe this behavior is unique enough that it deserves special distinction, which I call *user expanded systems* (UES). UES's are differentiated from standard intersecting systems of SAT in that the goal orientation is not at a system level, but instead at a user level. For example, *Reddit* serves no purpose with *Steam* on its own and in some ways the two systems are competitors as *Steam* has social media elements in the form of profiles and forum pages. Regardless, the *Steam* system does not need *Reddit* to fulfill its primary goal to make money. However, users need *Reddit* for their goal, whether that be discussion, awareness raising, or organizing. Therefore, the only reason *Reddit* and *Steam* become an activity system is because of user goals, not system goals.

The focus of SAT has been on system level integrations, which makes sense as the theory was designed for traditional policy; a more rigid system with clearer boundaries. For example, a hospital patient system could not bring in a third-party payment processor like *Paypal* without

approval by the hospital system. There is a clear boundary between the two and *Paypal* is not part of the intersection system either organically or by the intent of the system. However, internet systems have more porous and vague boundaries. Users have far more ability to integrate systems which may not have ever come together in the first place, as seen with *Steam* and *Imgur* or *Reddit*. Therefore, UES provides an expansion on SAT that allows for greater specificity in talking about intersecting systems online and assists in making SAT more viable for use across differing kinds of systems than its original intent.

Chapter 5: Conclusion

From the data gathered during the study and the results for research questions one and two many incites and implications can be gleamed, both of a practical and theoretical nature. The practical implications touch on aspects of *Steam*, *Valve*, developers, and users; while the theoretical impacts touch on relational contradiction and annexed mediation systems.

Practical Implications

As shown in chapters three and four *Steam* and the various relationships between hierarchy levels have both structural and systemic issues. Using the insights gained in this study, it is possible to see potential practices that could be implemented to alleviate or mitigate the underlying issues affecting *Steam*, *Valve*, developers, and users. In addition, the information obtained can be used for other systems and organizations to understand what not to do and considerations when designing or operating a system.

Steam. As a system, *Steam* functions well in certain aspects of its design, such as being a storefront for purchasing games from many developers. However, due to structural and systemic conflicts, when conflicts arise users are faced with the undesirable prospect of either accepting the situation as is or find ways to augment their power to better enact agency to change the system. The underlying specific uses are that the rules of *Steam*'s forum are both contradictory in nature (chapter three) and are implemented in a way that only controls users without having a counterbalance to developer abuses.

A low-level change *Steam* could benefit from would be the introduction of checks and balances on developers, especially their power to interpret what constitutes a rule violation. For example, having clearly laid out examples of what constitutes spam and having a way users could lodge a complaint with *Valve* or some other managing group to resolve disputes. This

would help to limit developers while providing a way for users to exercise some agency when they feel they have been abused and therefore have more impact on the system. *Valve* needs to consider users as legitimate stakeholders and be more responsive to their needs (Deetz, 1995) in the organization's *Steam* system by developing policies that both empower and restrict potential misdeeds on all levels, especially when the users are encouraged to participate on each game's page as a community.

For similar organizations, the implication should be that when designing or managing such a complex system there should be an effort to think of actions not only from top-down perspective, but a bottom-up perspective as well and repositioning the role of users (Deetz, 1992). By enacting policies from a bottom-up or user up perspective, system managers/designers would be able to pinpoint imbalances within the system and create mechanisms that would help prevent the need for users to seek outer system assistance and therefore keep the system regulated from within.

Valve. The analysis in chapter three showed that *Valve* has a problem or contradiction between the role it wants for itself (hands-off) and the way *Steam* has been designed which requires *Valve's* direct intervention when incidents occur between users and developers. As stated above and shown in other chapters, when developers abuse the system there are no corrective mechanisms and therefore requires users to get *Valve's* attention and through that have *Valve* directly intervene on their behalf. Therefore, if *Valve* continues to pursue a more hands-off approach to *Steam*, they should consider systemic changes, such as mentioned in the *Steam* section above.

From this, managers of other systems can take away the need to consider their role in the system ahead of time and how that will impact system performance. Specifically, if they want a

hands-off system then they need to implement structures that will enable the system to run without their intervention. Further, organizations should consider these incidents of user action as moments of dissent by exercising voice (Garner & Garner, 2010) rather than simply leaving the system. Users clearly have an interest in maintaining a vital community and discussion around games. Additionally, users can serve as a check on developers so that the organizations like *Valve* do not have to police every game. Rather, users are a useful part of the system of monitoring and maintaining quality. Finally, organizations should consider the user reactions as important opportunities to learn about the contradictions in the system (Canary, 2010a).

Organizations can reflect on the contradictions in how a policy is enacted and work to change the policies, not just how the policy is written and the original intent. SAT offers a means for organizations to consider policy as a communicative, active process rather than a static decision.

Developers. Developers are perhaps the trickiest when suggesting positive changes, since those changes can enable ethically questionable behaviors, such as lying to users. However, in the interests of fully exploring the practical implication for developers, the incidents described developers who serve as a cautionary example to other developers. They reacted to criticism and complaints by censoring or modifying user posts leading users to seek other systems to raise awareness and draw the attention of *Valve*, resulting in their games being removed. The outcomes for developers are similar to organizational crises (Seeger, Sellnow, & Ulmer, 2003). So, their initial bad actions did not hurt them as much as antagonizing the user base. Rather than focusing on blaming, being proactive to fix games or at a minimum not attempt to cover up the problems is an obvious solution. By leaving the complaints viewable users would feel like they had space to voice complaints and would keep users contained to the community and not outside the community raising the awareness of *Valve*. In addition, as shown in chapter three there is a

conflict between users with some blaming other users for their purchases. By not bringing attention to themselves, developers can rely on this contradiction to keep the negative users in check, because without additional issues created by developers this contradiction can keep users from reaching the threshold necessary to raise *Valve's* awareness.

For the equivalent of developers in other systems some practical advice would be to think carefully about the unintended consequences of actions toward users and consider being proactive in crisis response or simply doing nothing as opposed to engaging in antagonistic behavior.

Users. Due to the fact that many of the implications found in this study require some level of power, such as the ability to change rules, the practical applications of this study for users is limited. Users attempted to work within the system of *Steam*, but discovered they needed to bring other systems to act to counter developer abuses. Users could work to get the attention of *Valve* more directly before going to outside sources, but the outcome is less certain. The stakeholder model (Deetz, 1995) directs users to work to change the system however they can gain power to enact their agency. They should advocate for voice and protective policies directly to *Valve* rather than treating each case as an isolated instance. By pointing to the need for such change, users can hope to build power into the *Steam* system rather than having to go outside to Reddit or media. However, without significant system changes the best course of action will be to continue with incorporating other systems to make *Valve* aware.

For other system users facing similar situations, the lesson is that when a system lacks the tools for meaningful change or implementation of agency, they may need to find other systems or ways of dealing with issues that arise. Seeking out the attention of those with the power to implement change may be a better strategy than merely commiserating with each other.

Therefore, they should find ways to contact those in charge. Users should also look to collectively build external systems like Reddit threads to maintain and act so they have more power until changes are made to the problematic system.

Besides the practical implications described, this study also has implications and contribution to structuration activity theory.

Theory Contributions

Throughout this analysis, SAT has provided a valuable resource in examining systems of policy enactment outside of its original domain, i.e. educational and medical policy. This research project extends SAT to online systems where distanced behavior happens on additional levels to Canary's earlier work (2009; 2010a). The findings support SAT's assumptions and components, but extends them in unique ways. This project points to ways SAT can be expanded or refined through the concepts of relational contradiction and annexed mediation systems.

Relational contradiction. While SAT posits contradictions in terms of structural and systemic, this study found relational contradictions as a unique instance of contradiction. Where a structural contradiction connotes a conflict on an underlying philosophical level and system contradiction connotes an implementation contradiction, relational contradiction is based more on the perceived relationships between various system actors. For example, the relationship *Valve* has with *Steam* as a hands-off manager versus the way users perceive *Valve's* role. Therefore, this contradiction arises from interpretation and actor relations more than the other forms of contradiction. This is not so much a new piece of SAT, but an expansion of contradiction types within a system.

Annexed Mediation Systems. In SAT's original conception of activity networks there is an assumption that other activity systems become interlinked on purpose or are in some way connected to the primary system under evaluation. For example, *Visa's* credit card system is integrated with *Steam* for the purposes of payment, which was purposefully integrated by *Valve*. In this study, I observed a slightly different form of system integration where users bring in independent activity systems to fulfill a need. For example, using *Reddit* to spread information and attempts at organizing users when *Steam* lacks the needed mechanisms or abilities.

Therefore, these systems are brought into the primary system by users in order to mediate or compensate for deficiencies in the original system, as annexed mediation systems. The systems are annexed because the systems have a function or purpose independent of the primary system and are used for mediating between the users and the primary system. Annexed mediated systems work from an SAT perspective because the activity systems (Engstrom) are expanded by the users not simply enacting the policy, but reacting to the policy implications. This provides connection not only to SAT, but to the stakeholder view of organizations (Deetz, 1992; 1995).

Overall, SAT is a useful theory for providing insight into the online organizing system of *Steam* and the interactive process of enacting policies. SAT provides a useful tool for understanding the contradictions in *Steam* as well as an explanation for not only the behavior of users, but how the enactment of *Valve's* policies on the *Steam* platform result in excessive power for developers, leading to the need for users to go outside the system to enact their agency.

Limitations and Future Directions

As with all qualitative studies, the examinations performed in this study cannot be totally generalized to all online systems, nor can it provide an exact roadmap for avoiding similar confrontations in other systems at all times. Instead, this study illuminates the specifics of these

incidents and provides a possible framework for investigating in similar cases. Similarly, this study involves incidents that occurred online and among a relatively restricted group. While this research produced practical insights that may translate to other systems, online interactions are complex and these recommendations may not work in all cases. Beyond the limitations present in this articles, several impacts and potential avenues for research can be seen.

First, using SAT to examine systems in a non-traditional environment, like the internet, may facilitate refining SAT. Further investigations using SAT may prove fruitful.

Second, *Steam* has a plethora of untapped research opportunities. Two specific examples are groups that fight against the perceived censorship of pornographic games on *Steam* and groups dedicated to raise awareness about games with poor translations or conversions. In addition, there are many recently announced changes which would make an excellent follow to this study, such as *Valve* altering the way independent developers can get their game on *Steam* and *Valve's* pursuit of being less directly involved in *Steam* to create a more democratic platform. These policy changes can be enacted in a variety of ways and SAT provides a proven means for evaluating those changes.

Overall, this study has found that the issues plaguing *Steam* stem from multiple contradictions and that to combat abuses users will seek outside systems to enact their agency. This study has also shown the usefulness and utility of SAT in examining online systems, with much research possible in the future.

References

- Barab, S., Schatz, S., & Scheckler, R. (2004). Using Activity Theory to Conceptualize Online Community and Using Online Community to Conceptualize Activity Theory. *Mind, Culture, and Activity*, 11(1), 25-47. doi:10.1207/s15327884mca1101_3
- Big Rigs: Over the Road Racing. (2003). Retrieved May 19, 2017, from <http://www.metacritic.com/game/pc/big-rigs-over-the-road-racing>
- Brummans, B. H. (2015). Forum Introduction: Organizational Communication and the Question of Agency. *Management Communication Quarterly*, 29(3), 458-462. doi:10.1177/0893318915584823
- Canary, H. E. (2010a). Constructing Policy Knowledge: Contradictions, Communication, and Knowledge Frames. *Communication Monographs*, 77(2), 181-206. doi:10.1080/03637751003758185
- Canary, H. E. (2010b). Structuring Activity Theory: An Integrative Approach to Policy Knowledge. *Communication Theory*, 20(1), 21-49. doi:10.1111/j.1468-2885.2009.01354.x
- Canary, H. E., & Cantú, E. (2012). Making Decisions about Children's Disabilities: Mediation and Structuration in Cross-System Meetings. *Western Journal of Communication*, 76(3), 270-297. doi:10.1080/10570314.2011.651252
- Canary, H. E., & McPhee, R. D. (2009). The Mediation of Policy Knowledge: An Interpretive Analysis of Intersecting Activity Systems. *Management Communication Quarterly*, 23(2), 147-187. doi:10.1177/0893318909341409
- Canary, H. E., Riforgiate, S. E., & Montoya, Y. J. (2013). The Policy Communication Index: A Theoretically Based Measure of Organizational Policy Communication Practices.

- Management Communication Quarterly*, 27(4), 471-502.
doi:10.1177/0893318913494116
- Cooren, F. (2015). Studying Agency From a Ventriloquial Perspective. *Management Communication Quarterly*, 29(3), 475-480. doi:10.1177/0893318915584825
- Curran, S. (2013). 10 Most Disastrous Video Game Launches Of All Time.
Retrieved May 02, 2017, from
<http://whatculture.com/gaming/10-disastrous-video-game-launches-time?page=5>
- Deetz, S. (1992). Democracy in an age of corporate colonization: Developments in communication and the politics of everyday life. SUNY press.
- Deetz, S. (1995). Transforming communication, transforming business: Building responsive and responsible workplaces. Hampton Press.
- Engestrom, Y. (1999). Communication, discourse and activity. *Communication Review*, 3(1), 165.
- Garner, J. T., & Garner, L. T. (2011). Volunteering an opinion: Organizational voice and volunteer retention in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 40(5), 813-828.
- Giddens, A. (1984). The constitution of society: Outline of the theory of structuration. Berkeley: University of California Press.
- Grubb, J. (2012). *Valve pulls The War Z from Steam over fan backlash, offers refunds*. Retrieved May 02, 2017, from <http://venturebeat.com/2012/12/19/Steam-pulls-the-war-z-from-its-store-over-fan-backlash>
- How do I dispute a forum ban? (2015). Retrieved October 19, 2016, from https://support.Steampowered.com/kb_article.php?ref=7917-TYJV-9172

- Koschmann, M. A., & Macdonald, J. (2015). Organizational Rituals, Communication, and the Question of Agency. *Management Communication Quarterly*, 29(2), 229-256.
doi:10.1177/0893318915572386
- Kuhn, T. (2011). *Matters of communication: Political, cultural, and technological challenges to communication theorizing*. New York: Hampton Press.
- Lampe, C., Wash, R., Velasquez, A., & Ozkaya, E. (2010). Motivations to participate in online communities. *Proceedings of the 28th International Conference on Human Factors in Computing Systems - CHI '10*.
doi:10.1145/1753326.1753616
- Makuch, Eddie (2012). "The War Z producer calls campers f**gots". GameSpot. Retrieved December 24, 2012, from <https://www.gamespot.com/articles/the-war-z-producer-calls-campers-fgots/1100-639879/>
- McPhee, R. D., & Iverson, J. (2009). Agents of Constitution in Comunidad. In *Building Theories of Organization: The Constitutive Role of Communication* (pp. 49-87). New York, NY: Routledge.
- Miller, K. (1998). Nurses at the Edge of Chaos: The Application of "New Science" Concepts to Organizational Systems. *Management Communication Quarterly*, 12(1), 112-127. doi:10.1177/0893318998121004
- News - Valve Launches Steam Greenlight. (2012). Retrieved December 27, 2016, from <http://store.steampowered.com/news/8761/>
- Player complaints drive zombie game off Steam. (2012). Retrieved April 11, 2017, from <http://www.bbc.com/news/technology-20796455>
- Poole, M. S. (2014). Chapter 2 System Theory. In *The Sage handbook of organizational*

communication: Advances in theory, research, and methods. (pp. 49-74). Thousand Oaks, CA: SAGE Publications.

Ren, Y., Kraut, R., & Kiesler, S. (2007). Applying Common Identity and Bond Theory to Design of Online Communities. *Organization Studies*, 28(3), 377-408.
doi:10.1177/017084060707

Rules and Guidelines For *Steam*: Discussions, Reviews, and and User Generated Content. (2015). Retrieved October 19, 2016, from
https://support.Steampowered.com/kb_article.php?ref=4045-USHJ-3810&l=english6007

Salem, P. (2002). ASSESSMENT, CHANGE, AND COMPLEXITY.
Management Communication Quarterly, 15(3), 442-450. Retrieved June 15, 2016

Saed, B. S. (2015). *Steam* has over 125 million active users, 8.9M concurrent peak. Retrieved September 25, 2016, from <https://www.vg247.com/2015/02/24/Steam-has-over-125-million-active-users-8-9m-concurrent-peak/>

Schoeneborn, D., Blaschke, S., Cooren, F., McPhee, R. D., Seidl, D., & Taylor, J. R. (2014). The three schools of COO thinking: Interactive dialogue and systematic comparison.
Management Communication Quarterly, 28(2), 285-316.

Schreier, J. (2012). The War Z Mess: Every Crazy Detail We Know So Far [UPDATE]. Retrieved May 02, 2017, from
<http://Kotaku.com/5969784/the-war-z-mess-every-crazy-detail-we-know-so-far>

Seeger, M. W., Sellnow, T. L., & Ulmer, R. R. (2003). Communication and organizational crisis. Greenwood Publishing Group.

Smith, C. (2014). Earth: Year 2066 Removed From *Steam* For Dishonest Marketing. Retrieved May 02, 2017, from

<http://www.escapistmagazine.com/news/view/134258%C2%ADEarth%C2%ADYear%C2%AD2066%C2%ADRemoved%C2%ADFrom%C2%ADSteam%C2%ADFor%C2%ADishonest%C2%ADMarketing>

Sockett, G., & Toffoli, D. (2012). Beyond learner autonomy: A dynamic systems view of the informal learning of English in virtual online communities. *Procedia - Social and Behavioral Sciences*, 34, 212-215. doi:10.1016/j.sbspro.2012.02.042

Tracy, S. J. (2013). *Qualitative research methods: collecting evidence, crafting analysis, communicating impact*. Chichester, West Sussex, UK: Wiley-Blackwell.

Tedjamulia, S., Dean, D., Olsen, D., & Albrecht, C. (2005). Motivating Content Contributions to Online Communities: Toward a More Comprehensive Theory. *Proceedings of the 38th Annual Hawaii International Conference on System Sciences*. doi:10.1109/hicss.2005.444

Valve Software|Contact. (2016). Retrieved October 19, 2016, from <http://www.Valvesoftware.com/>

Weick, K. E. (1988). Enacted Sensemaking In Crisis Situations [1]. *J Management Studies Journal of Management Studies*, 25(4), 305-317. doi:10.1111/j.1467-6486.1988.tb00039.x

Yin-Poole, W. (2014). Valve hauls "scam" Earth: Year 2066 from *Steam* Early Access. Retrieved April 11, 2017, from <http://www.eurogamer.net/articles/2014-05-06-Valve-hauls-scam-earth-year-2066-from-steam-early-access>