

# Disrupting video game distribution

## *A diachronic affordance analysis of Steam's platformization strategy*

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### Abstract

This article analyses the disruptive potential of Valve's game distribution platform, Steam, focusing specifically on how Steam has evolved into a de facto online social network and how Valve uses constant feature changes as part of its corporate rhetoric. Despite its profound influence on the video game industry, scholarly inquiry into Steam has focused on analyses of user or value creation. However, Steam arguably derives its long-term disruptive potential from combining the gamification of digital distribution with the formation of ephemeral public spheres around the games that it distributes, thereby becoming a de facto online social network. To investigate this strategy, the article employs a historically comparative affordance analysis, drawing on a small data set of Steam blog posts and tech blog coverage from 2007 to 2018 to map patterns of affordance change.

**Keywords:** steam, platformization, software affordances, metagames, online social networks

### Introduction

This article analyses the disruptive potential of Valve's game distribution platform, Steam, focusing specifically on how Steam has evolved into a de facto online social network and how Valve uses constant feature changes as part of its corporate rhetoric to mediate between different stakeholders (e.g. gamers, third-party developers, publishers and regulators). Since its launch in 2003, which sparked intense controversy among gamers, Steam has profoundly shaped the game industry.<sup>1</sup> It was initially created as a tool to handle automatic updates and anti-piracy measures for popular Valve games, such as *Counter-Strike* and *Half-Life 2*.

In April 2018, the game developer and distributor Valve made headlines by announcing several important new features of its digital distribution client, Steam. However, the feature changes seemingly had little to do with playing games but

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instead addressed issues like privacy and data sharing, which are usually more relevant in the context of online social networks (OSNs). For instance, users could now make their current activity status private or only visible to friends.<sup>2</sup> Moreover, they were enabled to control how their profile information, for example achievements earned and play time per game, was seen by others. Finally, formerly public information about users' game libraries was set to hidden by default, effectively blocking external services like Steam spy, which accessed it via the application programming interface (API). The importance attributed to these changes by users and tech journalists alike indicates that Steam has become more than a place to buy games online. The comparison with online social networks (OSNs), like Facebook or Twitter, can serve as a reference point to gain a better understanding of Steam's disruptive potential, and this article aims to retrace this transformation into a de facto OSN as well investigating its disruptive implications, that is, how it challenges the established business models for game companies (both distributors and producers) but also for social media companies.

Despite its profound influence on the video game industry, Steam has received limited scholarly attention. For instance, Windleharth and colleagues (2016) conducted an analysis of the user-created tags used within the services, using a large corpus of data to understand systems of classification within the gamer community. Moreover, Jöckel and colleagues (2008) studied the changes in the value chain around Steam as the game industry transitioned from retail to digital distribution and emphasized the relevance of "prosumers [...] as new content providers" (Jöckel et al., 2008: 105), which Steam harnessed more efficiently than its competitors. However, neither the design nor the cultural relevance of Steam have been discussed yet, nor does the service play a major role in critical investigations of the political economy of games (Dyer-Witheford & De Peuter, 2009; Kücklich, 2005).

Therefore, it is useful to consider Steam within the context of other "disruptive technologies", a concept that is usually traced back to Bower and Christensen (1995), who used it to compare the manner in which large companies like IBM, Xerox and Sears lost large market shares by ignoring new, often less performant but more flexible technologies that initially failed to meet the expectations and immediate needs of their mainstream consumer base. Within the game industry, mobile games, which were also initially shunned by many developers and publishers due to their technical limitations but later embraced for their large user base and shorter development cycles, fit this description particularly well. Characteristically, Nintendo president Saturo Iwata declared in 2011 that Nintendo would never develop for other mobile devices than its own, but, only a few years later, his successor, Tatsumi Kimishima, oversaw the production of *Super Mario Run* for Android and iOS devices. Earlier research on disruptive technologies tended to focus on larger industries, like retail or automobiles, while very few studies have addressed the game industry. For instance, Smith (2007) used Bower and Christensen's original definition to discuss the disruptive potential of game technologies, for example

in game engine design as well as graphics rendering or artificial intelligence (AI) code, in other industries such as medical or military applications. More recently, organizational forms, like game jams, which are used to create small-scale games but exhibit both playful and performative aspects themselves, have received both social recognition, for example via the Global Gov Jam (Alencar & Gama, 2018) or the Climate Game Jam, and scholarly attention (e.g. Locke et al., 2015).

In line with Bower and Christensen's definition, Steam also implemented both features and restrictions, for example the constant client updates and social features, which the core demographic initially neither expected nor valorized. Nevertheless, to understand its disruptive potential, these features need to be interpreted as part of a long-term platformization approach, a strategy that is usually associated with much larger online social networks. Steam launched its own Linux-based operating system in 2013, started selling its own hardware in the form of Steam Machine PCs, Steam Controllers and Steam Link streaming boxes (all 2015) and released the OpenVR software development kit (SDK), enabling hardware makers to create VR applications, in the same year. Albeit not immediately recognizable and potentially never fully realized, Steam's platformization strategy is potentially as grand as Google's or Facebook's but is built on games and the pervasiveness of play in contemporary society (Mäyrä, 2017) rather than monetizing the connectedness of information (via Google's search algorithms) or people (via Facebook's social graph) online.

## Platform(ization) strategies

The term platform strategy has often been used in academic contexts with reference to product development, for example describing a "large set of a product components that are physically connected as a stable sub-assembly and are common to different final models" (Muffatto, 1999: 145). While this interpretation applies to manufacturing, Muffatto used the automobile industry to demonstrate its usefulness, and the term was later re-accentuated as "platform thinking" (Cusumano, 2010) to be more specifically applicable to software. According to that logic, platforms need to "open their technology to complementors and create economic incentives [...] to join the same 'eco-system'" (Cusumano, 2010: 33), thereby leveraging network effects to satisfy user demands in ways that a single company never could. For instance, Bonchek and Choudary (2013) referenced the app stores (rather than technological sophistication) as the defining platform feature that helped iOS and Android outperform other smartphone platforms. The authors identified three aspects of platform thinking, namely connection (providing frictionless access to external developers), gravity (attracting end users) and flow (maximizing interactions on the platform), all of which are usefully applicable to Steam. These parameters are primarily economic; that is, they are intended to help companies grow organically and take hold as platforms. To acknowledge the cultural implications of these economic developments, the argument incor-

porates elements of platformization, as defined by Helmond (2015), therefore using the term “platformization strategy” instead. Accordingly, “platformization entails the extension of social media platforms into the rest of the web and their drive to make external web data ‘platform ready’” (Helmond, 2015: 1). Platforms often present themselves as “empty spaces for others to interact on, while in fact [embodying] a politics” (Srnicek, 2017: 46-47) by tangibly shaping the “rules of product and service development, as well as marketplace interactions” (Srnicek, 2017: 47). These accounts of platformization foreground the level of political economy; complementary to the “macro” perspectives that they provide, this article is more specifically interested in how feature changes can implement and reshape this potential of platforms in the case of Steam. For that purpose, the platformization strategy is broken down into two phases.

First, the Steam client has been “augmented” with meta-ludic elements to transform the mere consumption (i.e. browsing, comparing and purchasing) of games into a game proper. This includes actual online games accompanying the seasonal sales events, fostering playful competition and random rewards through features like the trading card system but also related concepts like rituals, which have been part of the consumer experience for a long time (e.g. Rook, 1985) but are being elevated to new heights through the systematic use of metagame elements, as elaborated below.

Second, Steam arguably acquired its strategic position by evolving from a digital game distribution service into a full-fledged online social network. In parallel with the increasing gamification of social media platforms (e.g. Antin & Churchill, 2011), the metagame layers, such as badges, and other socio-technical mechanisms (Niederer & van Dijck, 2010) essentially catalyse and streamline social interaction on the platform. According to its current nomenclature (7 June 2018), Steam even describes itself as a “social entertainment platform” (“About Steam”) rather than a digital distributor.

## Towards a diachronic perspective on software affordances

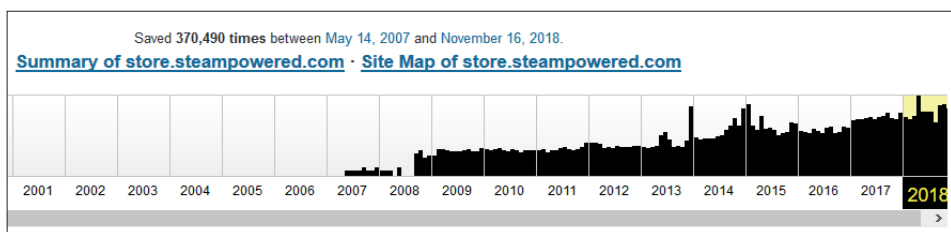
To investigate this strategy, the article employs a diachronic affordance analysis as its primary methodological framework. The term “affordances” originated in the ecological psychology of James Gibson and was later productively imported into design research (Norman, 1999) to conceptualize how the material properties of designed objects communicate norms and values by incentivizing and constraining certain forms of use. For the purpose of this argument, the term is used in line with Curinga’s (2014) definition of affordances as quasi-textual characteristics of software, a definition that draws on Hutchby’s (2001: 445) understanding of “technologies as texts” and serves to map patterns of affordance change, primarily in the Steam client itself.

The notion of “software as text” (Curinga, 2014: 4) proposes a critical view on software (and the role of the “user”) modelled after the complex relationship

between reader and text; in that regard, it pursues the middle ground between technological determinism and social constructivist dispositions towards technology. Curinga continued by arguing that, “borrowing from the field of social semiotics, we must understand the ‘register’ of technology before we can interpret it” (Curinga, 2014: 5). This register is shaped by software affordances, that is, formal design elements, which – if implemented and used habitually – can form idioms and acquire connotations over time. For instance, in 2012, Steam launched the “Greenlight” program, a crowdsourced curation system that allowed small developers to pitch projects directly on Steam; if enough users expressed interest in the game, Steam would then consider it for publication. At the time, platforms like Kickstarter (2009) had already established crowdfunding mechanisms, such as viewing queues and weighted voting tallying as then-new “forms of expression” in platform design. Thus, Greenlight was inevitably interpreted within the semantic boundaries and connotations that these design choices had accumulated up to that point. Users were still looking optimistically towards companies like Kickstarter, and Steam’s adoption of a similar “design rhetoric” initially signalled to many that it was prepared to give more agency to users. Bucher and Helmond (2018) provided a similar view on the evocative nature of software affordances by interpreting Twitter’s decision to change its “favourite” icon from a star to a heart. They argued that “Twitter buttons are endowed with different meanings, feelings, imaginings and expectations” (Bucher & Helmond, 2018: 2).

In the software studies literature, affordances are usually observed through active use, for example in the case of norms and values communicated through interface design (Stanfill, 2015), or, as demonstrated by Bucher and Helmond (2018), by evaluating user comments. However, complementary to these earlier studies, this article suggests considering the evolution of software affordances over time, including software versions that can no longer be experienced first hand.

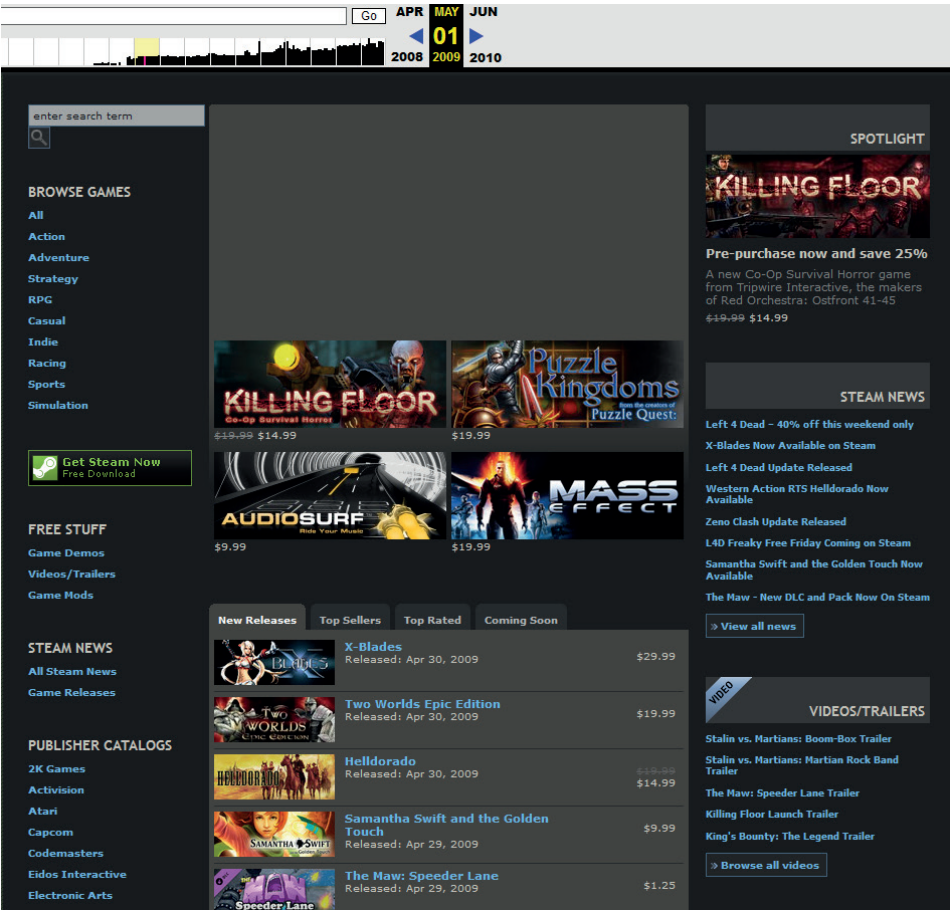
**Illustration 1. Graphical overview of snapshots of the Steam launch page archived by Wayback Machine**



*Comment:* The total number of snapshots is 370,490.

As the analysis focuses on the interface affordances of web applications, the Wayback Machine service, which archives snapshots of launch pages, can provide a glimpse of these past versions and constitute a valuable tool (see Illustration 1).

Illustration 2. The Steam launch page (2010)



Comment: Archived by Wayback Machine<sup>3</sup>.

For instance, this allows the investigation of the rhetoric used on the site, for example the characteristic slogan “Give the gift of game” to advertise the new gifting feature on the launch page from 1 May 2009 (see Illustration 2). Since the analysis at hand focuses more on the platform’s functionality, it relies instead primarily on contemporary online documentation of features added to or modified on the Steam platform. Thus, the corpus comprises affordance changes and additions documented between 2007 (the introduction of the Steam Community) and 2018, using contemporary tech blogs, the Steam Client release notes and the Steam Blog<sup>4</sup> as material.

The argument is intended as a “proof of concept” to demonstrate the importance of a diachronic perspective (rather than focusing on the respective current version of the software, like most affordance analyses), and it aims to retrace how the two major patterns of change indicated above contribute to Steam’s disruptive potential within and beyond the digital game industry. Therefore, it works with

Illustrations 3. Example of how data can be visualized





a small, manually compiled sample data set of 50 important affordance changes, which is accessible online<sup>5</sup> and can serve as a basis for more targeted follow-up research using that method. As indicated in Illustrations 3, the data can be visualized using tools like *TimeFlow*<sup>6</sup> (see Illustration 3), which allows for the grouping and visual exploration of the affordances, to identify parallel developments or significant periods of constant change that might warrant further investigation (see Illustration 3).

## Steam as a (meta) game

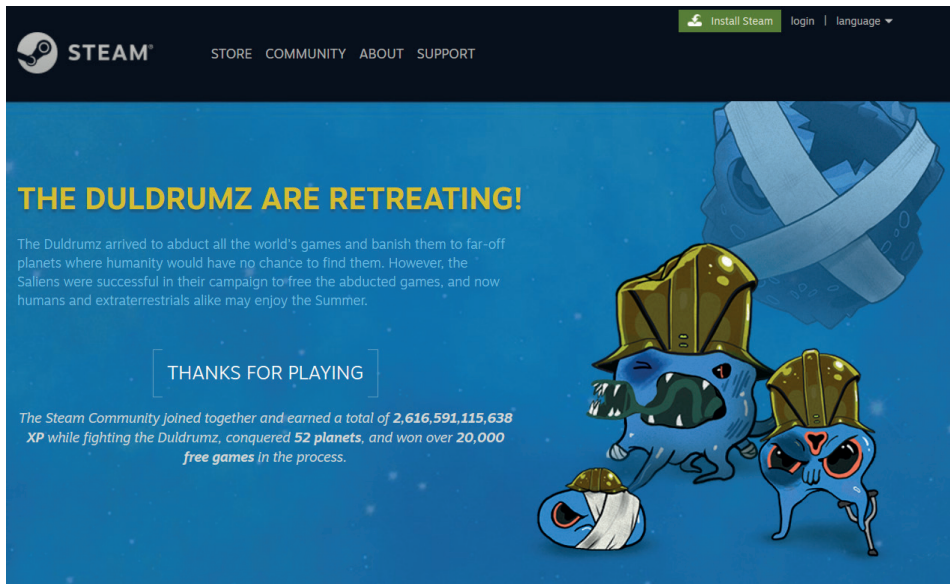
As indicated above, the disruptive impact of Steam can be traced back to two major developments: 1) the adoption of metagame elements that make the use of Steam playful in itself; and 2) the transformation into a de facto OSN. The term metagame can refer to several phenomena depending on its context of use; for example, Carter et al. used it with reference to forms of “higher strategy” (2012: 12) or “breaking the fourth wall” (2012:13). In this case, Steam is defined as a metagame because it has implemented numerous features for users as “players” to compete for social distinction. This can come from owning games to obtain badges and exhibit one’s collection on the user profile and playing games to earn and display unique achievements as well as explicit game elements like collectible cards. All these features are subgames within the metagame of Steam; they afford their own strategies and goals, but performing well in each of them contributes to the larger metagame of maximizing social capital on the platform itself. For instance, players may be incentivized to play a specific game to acquire trading cards that would enable them to craft a Steam Badge, which in turn allows them to level up their Steam account and receive corresponding non-tradable rewards, such as profile showcases or extra friend list slots. This definition is in line with Norton Long’s sociological “ecology of games” concept, which defined tasks in local communities as games and held that “success in each of the games can in varying degrees be cashed in for social acceptance” (Long, 1958: 261).

The game *Saliens* (Valve Corporation, 2018), created for the 2018 Summer Sale, demonstrates the ambiguity of metagame elements as part of a platform strategy (see Illustration 4).

It required players to form groups and compete for intergalactic dominance within the scope of its narrative. These groups existed only for the duration of the game, but their formation indicates that gaming activity is actively intertwined with social interaction, becoming the basis for developing a temporary sentiment of belonging. The official website even explicitly stated that the “Steam Community joined together and earned a total of 2,616,591,115,638 XP [...] conquered 52 planets, and won over 20,000 free games in the process”, thereby merging the game’s narrative context with the use of Steam (i.e. winning free games). The gameplay mechanics of *Saliens* were rather simple to make the game easily accessible; while some players and journalists criticized this as a design flaw, it effectively



**Illustration 4. The website for the Salien game after the conclusion of the corresponding summer sale**



*Comment:* cf. the Steamcommunity website<sup>7</sup>.

shifted the focus towards the metagame element, that is, the group interaction, and allowed the game to act as a communication channel between Valve and its users. More specifically, it allowed Valve to position itself simultaneously as a game developer, a platform owner and an online retailer (which needs to advocate the interests of game developers publishing on the site), deliberately keeping the balance between these three corporate personas malleable. This inevitably produced confrontations, for example between platform users and owners, over issues of user agency and corporate control, as Burgess et al. (2008) demonstrated, taking YouTube as an example. Metagame elements like those of *Saliens* enable these confrontations and power discrepancies to be carried out symbolically within the game. For example, small groups of *Saliens* players used cheats and scripts to be able to compete with large groups, like the Valve-created “Steam Universe”, which has over 1.5 million members. Thus, players could overcome their perceived lack of agency vis-à-vis Steam as a platform within the game, which for Steam has the benefit that these conflicts are at least partially being played out in a “safe space” without compromising the modus operandi of the platform itself.

An important metagame element is the built-in currency Steam Wallet Funds, which was introduced in September 2010 and acts as a unit of transaction. It enables Steam users to purchase in-game goods, even on third-party sites, forming the basis for a parallel virtual economy similar to those found in actual games, like massive multiplayer role-playing games (MMORPGs) or free-to-play (F2P) titles. The currency enables “flow”, as posited by Bonchek and Choudary (2013), meaning that it facilitates interaction on the platform; however, it also acts as

a symbolic metric that represents a persistent “points” counter across various subgames, both playing games but also selling in-game commodities. While marketplaces and their unique dynamics are not games per se, they foster behaviour that can be categorized as game-like. Winkler (2006) provided useful pointers in this direction by juxtaposing Malinowski’s early anthropological studies of trade relations on the Trobriand Islands with digital economy phenomena. He described trade as an essentially social, “network-building” (Winkler, 2006: 47) activity. However, he also emphasized its primarily antagonistic principle; while trading, like playing, can foster connectedness, it also represents a symbolically mediated clash of interests, following the principle of agon, as defined by Caillois and Halperin (1955). Following Caillois’s terminology, trading mechanics, as well as most rules in digital games, are inherently rule based or “ludic”. For instance, the Steam Community Market provides tools like buy orders, sell listings and filtering options that afford different “playing strategies” to optimize players’ profit margins. However, games are never purely ludic but characterized by constant tension between rule-based play (e.g. improving one’s performance according to the rules imposed by the game) and more free-form improvisational play (e.g. including the pursuit of self-imposed goals); depending on the game context and player, this balance can shift rapidly throughout a single play session (Jensen, 2013). Analogously, Winkler pointed out that economic interaction, both in the Solomon Sea and in digital marketplaces, also allows for “role play”, that is, performing different personas defined by the trade relations. The Steam Community Market also affords this more improvisational play, as players can define their own goals beyond maximizing profits, for example obtaining all the items from a given game to obtain their “veteran” status, being a fan of the game or simply their playing style as a completionist (aiming to complete 100% of a game’s challenges). The trajectory of recent feature changes suggests a gradual transformation from paidic to ludic play on Steam. For instance, the *Steam Greenlight* program, launched in August 2012 and shut down in June 2017, functionally mimicked a “channel”, similar to the use of the interface metaphor (van den Boomen, 2008) in OSNs like YouTube or Instagram, serving up an endless stream of game projects on which users could vote. Initially, players never knew which kind of game they would see next, which was more reminiscent of constant channel switching than a coherent program. Over time, Greenlight became increasingly personalized, for example through an update in January 2013 that implemented the ability to skip items in the vote queue, improved the collection-building features and incorporated more detailed statistics for developers. Accordingly, the play quality in using the service gradually shifted from serendipitous discovery to a more mechanistic “sorting” of pitched game into “boxes”.

Finally, it should be noted that – as in many games with high stakes – Steam is not only “played” according to the rules; several transgressive metagaming strategies, which clearly depart from the ideal type of the “implied player” (Aarseth, 2014: 182) as envisioned by Valve, have emerged. For example, prior to May

2017, gifts purchased were stored in users' profile inventory until they decided to gift them. This affordance – while concretizing the inventory as an interface metaphor – led to a grey market emerging for popular games that were sold at different price points across countries. Some users would buy and stockpile gift-able copies of games and sell them online to users from countries in which they were considerably more expensive. This form of “gaming the system” is also part of playing Steam as a metagame, and the fact that the gifting mechanics were changed shortly afterwards demonstrates how changing the rules of the game alters its corresponding rhetoric.

Having established the basic characteristics of Steam as a metagame, the following two shorter paragraphs will elaborate on two game-related aspects that specifically shape Steam's disruptive potential within the digital economy, specifically a) how it allows its users/players to improve their skills and b) how it transforms the purchase of digital content into a media ritual.

## Developing skills

Games require players to demonstrate certain skills, but they also need to provide them with the necessary tools to develop these skills (e.g. Chen, 2007). The affordances of Steam have similarly been expanded over time to help users develop important skills and to foster a sense of “mastery”, which – if successful – can strengthen their identification with the platform as a “balanced” (and thus worthwhile) game. One of these skills is “price literacy” (Chloubá et al., 2011: 302), that is, in this context, the intuitive understanding of how game prices fluctuate over time and how to determine an appropriate price point at which to buy them. Initially, the design of Steam did not actively promote price literacy, but external services, like *IsThereAnyDeal*<sup>8</sup>, filled that niche. The interface elements of these services discursively established a finely tuned system of norms and categories (Stanfill, 2015) for users/players to conceptualize the “value” of digital games as a commodity. For instance, *IsThereAnyDeal* filters results according to specific levels of discounts (50% and 75%) or categories like “historically low” and “new historically low”; moreover, it allows price cuts to be combined with rating requirements or specific online stores. Players can combine these to form tactics and test hypotheses, thereby increasing their level of price literacy through iteration.

The notable absence of these features on Steam produced a counter-rhetoric, suggesting that games should be judged according to genre interests (e.g. through tag-based filtering) rather than discounts and opposing the perceived devaluation of games as commodities and cultural artefacts that filtering by discount signalled. Nevertheless, in February 2018, Steam implemented new wishlist features that allowed players to filter their wishlist entries not only by price but also by discount. This change implicitly communicated that the platform was aware of the increasing price literacy of its users.

Apart from actual games, Steam employs several game-specific tropes in its user interface, such as the “inventory”, in which players collect metagame items or coupons received through playing their games or trading cards. Reacting to the popularity of *Minecraft* and the “crafting” subgenre that it founded, Steam later enabled users to “craft” badges, obtaining “marketable items like emoticons, profile backgrounds, and coupons” as well as experience points in the process. If they are avid gamers, users can understand and relate to these gaming characteristics on Steam due to the “cognitive capital” (Dyer-Witthof & De Peuter, 2009: 35) derived from their own video game experience. To help new users bridge the gap in game literacy, Steam introduced “tutorial” mechanics derived from digital games. For instance, on launching their first game on Steam, players immediately unlock an achievement. Thus, they learn both about the achievement system itself and that achievements are triggered by actions on the platform. This technique is coupled with the motivational affordance of random rewards (returning to the work of B. F. Skinner), which has been commonplace in game design for decades but was recently boosted by the economic promise of F2P games. The achievement unlocks at a positively connoted moment, and clicking on the “Achievement Unlocked” bubble redirects the user to the “Community Pillar” badge, displaying the remaining achievement requirements. The badge system also supported this persuasive design strategy from a different angle since, on its implementation, several badges for events that had already happened, like the Steam Summer Sale 2011 or “The Great Steam Treasure Hunt”, were no longer obtainable. This affordance, which draws on loss aversion and breaks with conventional game design rationales (Hamari, 2011), encouraged competitive users to use Steam more proactively to avoid missing out on potential future rewards.

Thus, as games are ideally designed to be “easy to learn but hard to master”, many of Steam’s software affordances helped establish it as a platform by allowing users to familiarize themselves gradually with its metagame elements and become increasingly actively engaged over time.

## Between play and ritual: the Steam Summer Sale

Before shifting to Steam’s transformation into an OSN, it is useful to consider the aforementioned Steam Summer Sale in more detail, as it illustrates the second characteristic game aspect of Steam, that is, the framing of game purchasing as a playful ritual. Early conceptualizations of play and games have already emphasized the playful qualities of rituals and the ritualistic quality of play. For instance, Johan Huizinga posited that, just as a child plays “in sacred earnest” (Huizinga, 1949: 18), actors in other professions, like sportspersons, actors or practitioners of law, perform tasks that are both ritualistic and playful in nature. One important shared aspect is the notion of make-believe and symbolical action; for instance, “being essentially a play-form, the duel is symbolical; it is the shedding of blood and not the killing that matters”. Steam primarily affords

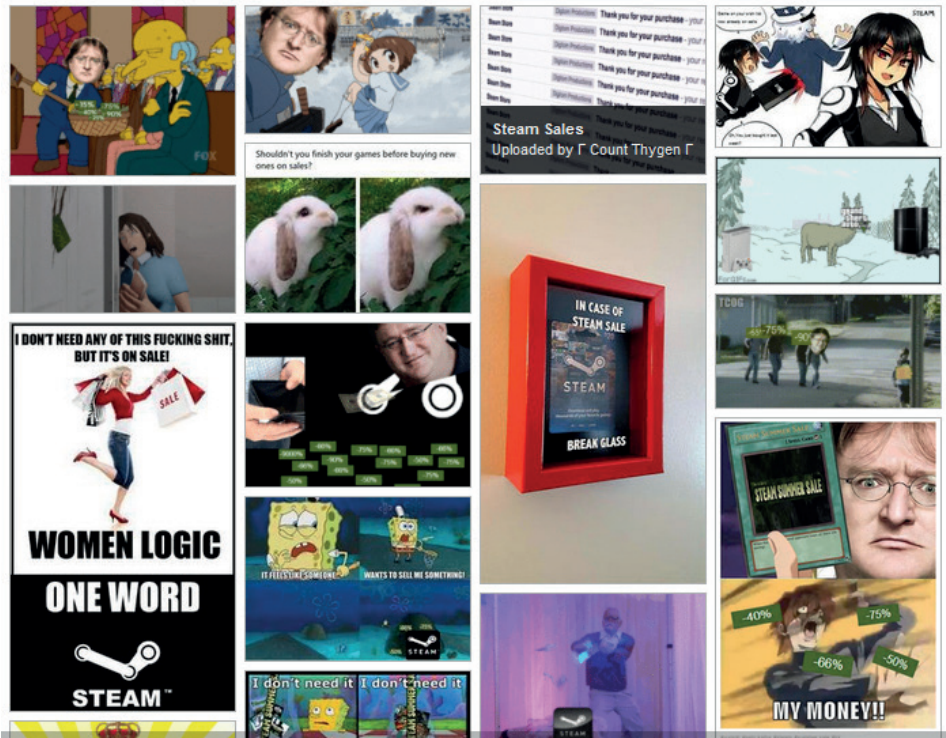
ritualistic play through its sales events, which occur at regular intervals and are thematically tied to the summer vacations and holidays such as Christmas. Users often outspokenly anticipate them online, speculating on the potential discounts as well as new community activities. In that sense, particularly the iconic Steam Summer Sale appears to be comparable to semi-fictional television programmes, such as *Big Brother*, which become not only media events (as defined by Elihu Katz) but also “media rituals” (Couldry, 2003). The psychological underpinnings of the Summer Sale are similar to those that apply in other (media) rituals and, in fact, in many games. For instance, community votes on upcoming discounts add to the notion of presence and liveness, since they require time-limited interaction and, at the same time, signify that the user is part of an ephemeral community of other users who are simultaneously engaged in the same activity (i.e. checking and providing feedback on upcoming deals). Madigan (2013) referred to artificial scarcity as the key principle that makes these time-limited deals appear more desirable; moreover, the scarcity of the event itself adds significations to the games bought as “tokens” of the ephemeral ritual itself.

Over time, rituals provide a basis for foundational stories (“myths”) within the player community as participants narrativize the ritualistic practice and experience; these stories are symbolically exaggerated and incorporated into the participants’ collective identity formation. Similarly, Steam users produce bottom-up historiographies of the Steam Summer Sale as part of their active engagement with the “ritual” itself. These stories characteristically take different shapes, ranging from “annals” (Reddit, 2015), that is, list-based accounts that adhere to formal templates to present their information, to highly idiosyncratic and redundant personal tales on sites like Reddit.<sup>9</sup> Many stories follow a logic of gradual escalation (as the discounts become more numerous and radical), followed by a period of dénouement as game blogs and users discuss and recapitulate the event, comparing it with previous instantiations. More recent events, like the *Steam Summer Adventure 2014*, which randomly divided users into teams and challenged them to compete with each other in a race for points and trading cards, even reference popular game show formats, like the team challenges in *Survivor*, and create “cliffhanger”-like moments that encourage users to speculate on which team will gain an advantage next. On the one hand, these stories constitute a form of “appropriating” the Summer Sale by inscribing oneself into the event. On the other hand, the creation of Summer Sale memes (see Illustration 5) demonstrates a different tactic, that is, repurposing the symbolic potential of the ritual to compose one’s own messages and/or to curate one’s self-presentation online.

This exchange can be interpreted as phatic communication, that is, online interaction intended primarily to reaffirm the sense of connectedness among the participants rather than putting forth new or even contentious arguments (Miller, 2008). It is defined by essential ambiguity, the simultaneous celebration of consumerism coupled with a distinct self-reflexive disposition and an acute awareness of how this impulse is created and fostered by Valve. Embracing this



Illustration 5. A selection of memes about the Steam Summer Sales from KnowYourMeme



ambiguity (rather than attempting to resolve it) makes these interactions inherently playful, as play is similarly defined by its ambiguity, for example through a “precarious balance between seriousness and pretence” (Huizinga, 1949: 191) or by “combin[ing] strict rules with genuine freedom” (Huizinga, 1949: 22).

This chapter established how Steam is designed as a metagame and how its metagame affordances, which are expanded and refined over time, are intended to catalyse user engagement, thereby creating precedents that also challenge the modus operandi of digital distribution companies in other industries. Before exploring the second phase of Steam’s platformization strategy, namely the development into a de facto OSN, it is useful to reiterate that the findings presented in both this and the following chapter do not investigate actual user behaviour or perceptions but rather demonstrate how the software design incentivizes particular behaviour, similar to the way in which – in line with Curinga’s notion of affordances – textual strategies do not “create meaning” but make some interpretations more plausible than others.

### Steam as an online social network

The use of game design tropes in Steam’s design, as discussed in the previous chapter, not only contributes to gamifying the consumption of video games but also

has tangible social implications, as it enables gamers to recognize these tropes as a body of knowledge and common experiences that they share with all the other users of the platform. Consequently, as gaming and play have become integral aspects of most contemporary OSNs – particularly those aimed at a younger demographic, like Foursquare (Foxman, 2014) or Snapchat – most of the met-game layers of Steam are, from a long-term perspective, aimed at transforming the online store into a quasi-OSN.

A recent bundle of affordance changes aimed at combating so-called “fake games” serves as a useful example to illustrate the parallels between Steam and traditional OSNs regarding the opportunities and limits of free self-expression. The “fake games” nomenclature, which Valve itself uses to describe games that are made cheaply for players who simply buy them for the inflationary amount of achievements that they unlock, is clearly reminiscent of the fake news debates on other OSNs, and it indeed demonstrates several structural parallels. “Fake” games are not easily identifiable at first glance and, as with the threshold between fake and “real” news, they are difficult to define consensually. Therefore, the changes that Valve implemented similarly threaten to limit the expressive freedom of “real” games proactively and simultaneously imply how the company frames the problem. Like many OSNs, Steam primarily relies on technological solutions, including a so-called “confidence metric” that had already been implemented for trading cards a year earlier (Steam Blog, 2017). The metric comprises “a variety of pieces of data, all aimed at separating legitimate games and players from fake games and bots” and, both in its design and in its accompanying rhetoric, reflects the belief that a large enough data set can “solve” socially motivated issues like fake games. In the case of Greenlight, that strategy was – according to Valve – not successful because it was only “used by a tiny subsection of Steam’s total playerbase, producing far less data overall”. Thus, similar to that of many OSNs, Valve’s strategy inherently requires a continually growing corpus of user data; unsurprisingly, the debates about these changes therefore also closely resemble those around Facebook’s stance towards fake news, with users in both cases arguing that, due to the pervasiveness of the services in question, the companies behind them are unjustly abdicating their social responsibility.

Steam has provided players with numerous tools for online identity performance, for example by curating their profile page as an “exhibition”, as argued by Hogan (2010). Collecting Steam Trading Cards is but one way to earn new profile customization options that afford new types of exhibition spaces. For instance, user *evo1x* prominently features the item showcase at the top of the profile, accompanied by a text field called “About Trade”, a section displaying items currently offered for sale and basic metadata on recent trading activity. Thus, combining several profile curator features, the exhibition that *evo1x* curates as part of the online identity performance is that of an e-shop and a brand.



Illustration 6. The public Steam profile page of user evo1x



Illustration 7. Requirements to obtain the Pillar of Community badge



*Comment:* Cf. The corresponding forum discussion on the website Boardgame geek<sup>10</sup>.

This identity is maintained through textual self-presentation. For instance, evo1x states flatly that it does not accept friend requests from users with an empty or private inventory, thus clearly framing social interaction (the “friend” status)

purely in terms of trade relationships (see Illustration 6). Over the past ten years, Steam has implemented many more defining features of OSNs, and, since the introduction of badges in July 2012, the “Pillar of Community” badge has been a key affordance to nudge new players to use them (see Illustration 7).

To obtain the badge, players can participate in Steam discussions, rate Steam Workshop items, feature a badge on their profile or post a screenshot. In the process, they inevitably try out a variety of online personas, as discussant, photographer, moderator or content creator. As only a subset of these tasks needs to be completed to start levelling up the badges, the feature retains the necessary flexibility to avoid self-presentation on Steam appearing too rigid and uniform.

As demonstrated in the previous chapter, Valve encourages its users to identify as players, that is, as a supposedly homogeneous group of “Steam users”, by tapping into shared gaming knowledge and language use, referred to by Mia Consalvo as “gaming capital” (Consalvo, 2007: 184). This focus on homogeneity is strengthened by social features, like the personalized recommendations, which – as Steam revealed in May 2017 with a new feature that displayed the most important contextual data of individual recommendations – is strongly dependent on social contacts on Steam, specifically games owned or wanted by friends as well as suggested by curators whom the user follows. These primarily social “variables” used by the recommendation algorithm illustrate Wendy Hui Kyong Chun’s claim that the “reductionist identity politics” (Chun, 2018: 131) built into the affordances of network analysis as well as commercial networking platforms (like Steam) reinforce homogeneity by framing it as an ontological category of connectedness. The modified recommendations as well as changes to the Steam Curators system introduced shortly afterwards in October 2017, for example giving curators access to list-making functionality and more data on their followers’ behaviour, indeed foster homogeneity and define “preferred” uses of the platform in a way that is beneficial to its business model. “Hidden” and often illicit forms of user behaviour on OSNs, such as gun sales and other dubious practices on Instagram (Slate, 2013), also exist on Steam, as evidenced by the “hidden world of Steam trading”<sup>11</sup>. However, the affordance changes, which Valve usually does not comment on extensively, indicate the desire to streamline user behaviour while avoiding the inevitable backlash from appearing to be too strict in terms of platform governance. Thus, as Tarleton Gillespie argued, the platform metaphor black boxes, among others the heterogeneity of users (Gillespie, 2017), and many of Steam’s affordance changes need to be interpreted in that context.

OSNs as “sociotechnical systems” (Niederer & van Dijck, 2010) require social stratification to counter the loss of internal social cohesion as their user bases inevitably grow. Similar to the way in which, for example, Facebook users can create private groups, Steam enables the creation of niche, “private” Steam community groups, in which users can converge and discuss, share ideas or content, buy, sell or trade and so forth. Users perform different social roles in these groups than on Steam as a whole. As Mariekie Burger argued, online participation increasingly

moves into these more intimate communities, in which it is inextricably linked to identity performance (Burger, 2015). Accordingly, the Habermasian notion of the public sphere is not flexible enough to accommodate these groups, which should be interpreted on the level of micro publics, comparable in scope to the “new social movements” (Burger, 2015: 269) of the 1990s or more recent forms of “subactivism” (Burger, 2015: 271). Arguably, the most important but still underdeveloped site of this type of grassroots online social interaction on Steam is the Workshops program, which allows users to create, download and discuss new game content. It was created in October 2011 as part of the game *Team Fortress 2* but, only months later, was developed further into an actual platform feature, offering its hosting of user-generated content as a service to external game developers. As Werning (2018) argued, using religion-themed modifications for the *Civilization* game franchise as an example, the platform effectively transforms game modding, that is, the alteration or addition of features (usually using tools provided by the game itself), into a form of online communication. Turning games into micro public spheres is vital to keeping Steam relevant as an OSN, because discussions in the Steam Workshops are not limited to games but also connected to pertinent real-world issues, often filtered through the “lens” of the respective game for which the content is created as well as the collective users’ overall gaming experience. However, Steam’s affordance changes to the Workshops program have partly compromised this notion of games as “public spheres”, framing user-generated content as commodities rather than utterances in an ongoing conversation. For instance, Valve had already implemented collections (i.e. “storefronts”) for users to display their content in 2012. While the Workshops still primarily operated as attention economies (as defined by Herbert Simon) rather than actual marketplaces at the time, an April 2015 update finally implemented additional monetization features, again framing the Workshops as a secondary economy rather than as a space to diversify conversations happening on the platform.

## Conclusion

This article aimed to trace the disruptive potential of Steam back to its platformization strategy. First and foremost, Steam gradually developed into a social media platform as well as an economic ecosystem, a term that Rachel Rosmarin used with reference to *MySpace* to describe the way in which platforms provide an environment (i.e. their large-scale user base) within which entities that offer complementary functionalities can compete and coexist symbiotically (Rosmarin, 2006). These entities can include ambitious users disseminating their own content via the Steam Workshops environment but also larger “players” like the movie distributor Lionsgate, which began streaming more than 100 blockbuster movies via Steam in 2016. The metagame elements, particularly the acquisition of skills as a collective process and the framing of sales events as playful rituals,

have accompanied and supported this transformation, starting with the addition of Steam achievements to *Half Life 2* in 2010 and the launch of badges in 2012 and trading cards in 2013.

Due to the scope of this article, several important affordance changes had to be omitted, most notably those aimed at external developers rather than users, like the Steam SDK API (also known as “Steamworks API”), which makes platform features such as Steam Overlay, Steam Achievements or Steam Scoreboard available to external applications. Within the diachronic affordance analysis framework, which conceptualizes software like Steam as text, these applications can be conceptualized as “paratextual extensions” of the *Steam* platform, which, for instance, enhance paidic play on Steam, as suggested above. For example, *Steam-Completionist* has used game library data to visualize the amount of games in a user’s Steam backlog that have not yet been played or (fully) completed, thereby providing them with opportunities to define new personal goals. The *Steam Calculator* similarly displays the total amount of hours played or the total value of a user’s game catalogue, thereby enabling a feedback loop that drives many players to compare these numbers within their social circles on Steam. Another avenue for follow-up research into the disruptive impact of Steam will be to investigate how its platformization strategy promotes “media industry literacy” beyond price comparison as elaborated above. For instance, to curb “review bombing”, that is, coordinated negative reviews of controversial games that are comparable to other forms of “online firestorms” (Pfeffer et al., 2014) on traditional OSNs, Steam implemented review graphs in September 2017. The algorithm automatically highlights suspicious spikes in positive or (mostly) negative review activity, but, more importantly, it gives users a tool to develop new facets of media industry literacy. By, for example, differentiating recent from long-term review activity and allowing users to filter reviews by a selected time span, the feature enables users to play with the review data and, in the process, to develop a comparative understanding of how reviewing affects the political economy of digital games. Fostering new literacies is just one example of how the disruptive potential of Steam might extend beyond the digital game industry, directly challenging for example the status of review aggregators, like Metacritic, that operate across media industries. Studying Steam is relevant as, at a time when many digital businesses, like Amazon (with its Lumberyard game engine) or Snapchat (specifically with its Snappable feature), continue to move towards games, Valve is moving in the opposite direction.

## Notes

1. Cf. e.g. contemporary sources on Valve’s flagship title *Half Life 2* requiring a Steam account to authenticate the game, such as <https://slashdot.org/story/04/11/22/1824245/review-half-life-2>
2. This change has been documented on tech blogs like Polygon (<https://www.polygon.com/2018/4/11/17225188/steam-appear-invisible-setting>). For all other features and feature changes of the Steam client analyzed in this article, URLs to contemporary websites that substantiate the claims have been collected in the sample data set available online at <http://goo.gl/vn7grv>

3. <https://web.archive.org/web/20090501055157/http://store.steampowered.com/>
4. These sources are available online at [http://store.steampowered.com/news/?feed=steam\\_client](http://store.steampowered.com/news/?feed=steam_client) and [http://store.steampowered.com/news/?headlines=1&feed=steam\\_blog](http://store.steampowered.com/news/?headlines=1&feed=steam_blog), respectively
5. <http://goo.gl/vn7grv>
6. Cf. <https://github.com/FlowingMedia/TimeFlow/wiki>
7. <https://steamcommunity.com/saliengame/>
8. <https://isthereanydeal.com/>
9. Cf. e.g. threads like [https://www.reddit.com/r/ShouldIbuythisgame/comments/8sshzl/my\\_guide\\_for\\_surviving\\_the\\_steam\\_summer\\_sale/](https://www.reddit.com/r/ShouldIbuythisgame/comments/8sshzl/my_guide_for_surviving_the_steam_summer_sale/)
10. <https://boardgamegeek.com/thread/998510/pillar-community>
11. <https://www.polygon.com/features/2014/5/22/5590070/steam-valve-item-trading>

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