

Original citation:

Levina, Natalia and Arriaga, Manuel (2014) Distinction and status production on usergenerated content platforms : using Bourdieu's Theory of Cultural Production to understand social dynamics in online fields. Information Systems Research, 25 (3). pp. 468-488. doi:10.1287/isre.2014.0535

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Publisher's statement:

http://dx.doi.org/10.1287/isre.2014.0535

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Distinction and Status Production on User-Generated Content Platforms: Using Bourdieu's Theory

of Cultural Production to Understand Social Dynamics in Online Fields

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Abstract

In this paper, we propose an analytical lens for studying social status production processes across a wide variety of User-Generated Content (UGC) platforms. Various streams of research, including those focused on social network analysis in social media, online communities, reputation systems, blogs, and multiplayer games, have discussed social status production online in ways that are diverse and incompatible. Drawing on Bourdieu's theory of fields of cultural production, we introduce the notion of an *online field* and associated sociological concepts to help explain how diverse types of producers and consumers of content jointly generate unique power relations online. We elaborate on what role external resources and status markers may play in shaping social dynamics in online fields. Using this unifying theory we are able to integrate previous research findings and propose an explanation of social processes behind both the similarity across UGC platforms, which all offer multiple ways of pursuing distinction through content production, as well as the differences across such platforms in terms of which distinctions matter. We elaborate what role platform design choices play in shaping which forms of distinction count and how they are pursued as well as implications these has for status gaining strategies. We conclude the paper by suggesting how our theory can be used in future qualitative and quantitate research studies.

Keywords: Electronic Commerce, Social Media, User-Generated Content, Status, Power, Bourdieu Practice Theory, Network Analysis

Please cite as:

Levina, N. and M. Arriaga, "Distinction and Status Production on User-Generated Content Platforms: Using Bourdieu's Theory of Cultural Production to Understand Social Dynamics in Online Fields," *Information Systems Research*, 25(3), 2014, pp. 468-488

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1. Introduction

Social media websites rich in user-generated content (UGC) dominate the most popular Internet destinations (Nielsen 2009). In 2009 alone, the amount of time spent on social networking and other UGC sites tripled, thus comprising nearly one-fifth of the time spent online (Perez 2009). Digital platforms such as Amazon, Facebook, Wikipedia, and YouTube¹ allow individuals to readily upload and share pictures and videos, journal entries, encyclopedia articles, product reviews, and personal profiles. The processes of content co-creation and consumption that take place on these platforms are being monetized by digital businesses, whose growth is anchored in creating the kind of social dynamics that promote contributions that appeal to their audiences while weeding out those that do not (Aral et al. 2013).

There are numerous reasons why individuals contribute to UGC platforms, including the desire to socialize, belong, learn, contribute to the social good, and/or build a reputation (Kraut et al. 2011). Users' diverse motivations notwithstanding, their varied contributions produce a joint social space that unites them in some common interest while also dividing them in how well they distinguish themselves relative to others in pursuing this interest. Any given UGC platform – a system that enables users to contribute, evaluate, and consume content online – generates a variety of ways in which social distinctions can be acquired, the most common being the number of views and downloads, the number of a user's followers, and positive ratings and comments on the content. On some sites, status markers are very prominent (e.g., a noticeable display of how many followers a user has), while on others they are subtler and less visible to a casual visitor (e.g., a hidden structure of editorial roles). Almost universally, however, a relatively small proportion of contributors is responsible for the lion's share of contributions (Crowston and Howison 2005, Moon and Sproull 2000, von Krogh et al. 2003, Wu et al. 2009, Kane 2011), and no UGC site is

¹ Appendix A briefly overviews the nature of various contemporary examples of platform we use throughout this paper

likely to survive without attracting users who are willing to distinguish themselves by investing their time in contributing content that others find interesting.

This means that status accumulation associated with content production and evaluation has critical implications for platform design decisions. Each platform makes countless design choices in promoting content and its producers. Should the platform display status markers associated with the content (number of likes), with the producer (number of followers), or both? How prominently should it display perceived worthiness of content? For example, YouTube prominently displays the number of times a video has been viewed, while Wikipedia subtly notes which articles are "featured." Amazon uses an elaborate system of badges, but Twitter sticks to a few – number of followers and re-tweets. Should a platform enable social network-based status markers? For example, Flickr has added "friendship" ties many years after it was launched. How much weight should be given to "offline" status? On Digg, user profiles are easily accessed by merely clicking on a username, whereas on 4chan.org, an image-sharing site, anonymous contributions are the norm and no user profiles exist. Moreover, platform designs also vary by how much weight lurkers (non-contributing users) have in content valuation. For example, on YouTube, lurkers have significant weight as the number of views is the most prominent status marker. Lastly, while on most platforms consumers are initially given the same evaluating authority (ability to vote, comment, and link), on other platforms, community managers and prominent users get more "voting" power than regular content consumers (Ren and Kraut 2013).

To get a sense of how important these design decisions are to the content co-creation processes of digital businesses, it is worthwhile considering how much major UGC platforms have transformed themselves over time. For example, Amazon started by simply allowing its customers to write reviews. Today it has developed an elaborate system of distinctions ranging from designating a celebrity by prefixing "the" to their names (as in "*the* Jeff Bezos") to rating multiple reviewer ranks (from "top 1000 reviewer" all the way to "Hall of Fame Reviewer"). In a different transformation, YouTube, which initially indicated how many times a particular video was downloaded (a simple content-based

distinction), has evolved into a system combining both content-based (e.g., video ratings and comments) and user-based (e.g., number of subscribers to a user's channel and user profile information) distinctions.

While examples of status markers and associated design variations are plentiful, our understanding of how they stimulate or impede content production is limited (Aral et al. 2013). For example, why are platforms not immediately copying each other's status-related design choices? Flickr, for example, is not implementing the same badge system as Amazon. More intriguingly, researchers have studied the importance of feedback mechanisms on tech support forums and concluded that formal feedback systems lead to more contributions (Moon and Sproull 2000). Yet, Wikipedia, after experimenting with such a system, decided to abandon it. Without a unifying theory of social dynamics responsible for differentiating users, their online and offline identities, and their contributions and the dynamic relations they enter in, we cannot explain why findings in one setting would or would not generalize to another.

Unfortunately, traditional social psychology-based theories of social status are not readily applicable to UGC platforms. They have been developed in relatively small, collocated groups where diverse individuals interact on specific tasks, often drawing on formal organizational authority or external status cues such as race and gender in the process (see Magee and Galinsky 2008). Online, however, the visibility and impact of social status cues such as gender or race are much reduced and formal organizational authority is either absent or diminished (Sproull and Kiesler 1986). Moreover, UGC platforms often have millions of users, with only handful of individuals directly *interacting* with each other. These millions of content consumers, nonetheless, collectively shape the status of content producers by downloading, rating, and commenting on their contributions.

Furthermore, social distinction online rarely exists on the "whole" platform. Instead, users tend to form relations of influence over particular shared interests. For example, on Flickr, someone passionate about street photography might upload her photos and have her contributions followed by others who share her enthusiasm (Zeng and Wei 2003). Similarly, a medical expert can distinguish herself by writing several important Wikipedia entries on medicine, but be completely invisible in other regions of this

platform (Ransbotham and Kane 2011). Therefore, prior to applying any theory of status production online, we need to identify the relevant group(s) within which status is being granted.

The goal of this paper is to introduce a theoretical framework that brings together different perspectives on how social status is attained online while taking into account the need to identify the relevant social space(s) in which individuals compete for distinction. First, we review prior literature on UGC as it pertains to social stratification (production of social status) on the Web and summarize organizational theories on social stratification. Then, to overcome the shortfalls of psychological theories that focus on status in small groups with defined membership, we draw on Pierre Bourdieu's sociological theory, developed to understand how agents compete for distinction in a society, with a focus on how this happens in settings where cultural goods such as art and media are produced (Bourdieu 1984, Bourdieu and Johnson 1993). Using Bourdieu's theory allows us to articulate a process model of how content producers compete for distinction within particular social spaces online, while also "importing" and "exporting" their online status to other online and offline settings (summarized in Figure 2). We conclude by articulating implications of our theory for social medial design and suggesting future research directions. As Aral, Dellarocas, and Godes (2013) have observed, "Understanding how social media design impacts interaction and social structure is critical because these social processes affect the very fabric of society" (p. 5). Our theoretical work contributes to this important research goal.

2. **Prior work on social status online**

Diverse literature streams have directly or peripherally discussed the twin issues of how users achieve distinction in online environments and how this distinction, in turn, influences their behavior. The most common perspective on this issue has drawn on social network analysis and has conceptualized distinction as a favorable position in a social network. The online communities literature has also discussed distinction, albeit in less direct ways, focusing on the role-based differentiation among content producers prominent in many online communities. The literature on online reputation has considered one particular type of online status, namely, reputation gained from online transactions. Last but not least,

there is a growing body of literature that specifically addresses status production in online settings such as the "blogosphere" and virtual multi-player games. Next, we discuss these perspectives in more detail.

2.1.1 Position and influence in online social networks

Studies of the diffusion of content within social networks have found that users' positions in social networks play an important role in content contribution and diffusion (Adar et al. 2004, Goel et al. 2011, Susarla et al. 2012, Zeng and Wei 2013). Certain influential users (e.g., those who have higher network centrality) may be responsible for a large amount of content consumption because when they pay attention to content, they attract the attention of their peer group (Susarla et al. 2012, Trusov et al. 2010, Garg et al. 2011). Moreover, local network relations (such as having a dyadic link to another user) may shape users' contribution behavior in significant ways (Zeng and Wei 2013).

At the same time, a user's network position in some UGC settings is a fairly poor predictor of that user's influence. For example, it was observed that indegree (number of users linking to the focal user's profile) on Twitter does not correlate well with retweets (forwarding of messages), suggesting that something other than network position may be driving influence (Cha et al. 2008). Indeed, content may propagate without influentials by having an impact on "receptive" consumers (Watts and Dodds 2007). Homophily, which refers to the similarity in users' backgrounds and preferences (McPherson et al. 2001), may be more important in explaining content propagation than network position (Aral et al. 2009).

While social network theorists clearly acknowledge that the network position is not the only explanation of social dynamics on UGC (see Kane et al. 2013 for a review), the alternative concepts that their studies use go beyond social network theory itself. Which dimensions constitute homophily in a given UGC context? Which kind of content makes an impression and on which users? A recent study focused on the relationship between social network ties, online status, and content contribution behavior on Flickr (Zang and Wei 2013). This study first used homophily theory to argue that, when users formed dyadic ties, they tended to upload more similar photos than they did before they formed such ties. It then used a combination of social identity and signaling theory to argue that, after formation of a tie, users tended to gradually differentiate their postings. Finally, it used Blau's theory of social stratification and

borrowed from a theory of culture to argue that relative popularity difference between users in a dyad moderated the relationship between the social ties and user contribution behaviors. The paper presented empirical evidence supporting these hypotheses. Yet, without a cohesive theory that develops a notion of online status and unpacks its relationship with social network position and other types of structural resources, it is hard to say whether we will find similar social dynamics in other settings. For example, on social networking sites where ties are formed based on offline relationships, it is possible that contributions of users who form a tie are different both before and after the tie is formed due to users' diverse worldviews (Goel et al. 2010).

Finally, many researchers of social networks focus on how users *acquire* central positions in their social networks (Backstrom et al. 2006, Kumar et al. 2006, Leskovec et al. 2008, Mislove et al. 2008, Kane et al. 2013), for example, building upon their prior advantageous network position (e.g., Burt 2000). At the same time, studies of social networks increasingly point out how external sources of status (e.g., user profile information, celebrity status) (e.g., Liu 2007, Lampe et al. 2007, Aral 2013, Vaast et al. 2013) and user contribution behaviors (Ransbotham et al. 2012) shape a user's position in a social network. Social network theories alone lack a theoretical basis necessary to account for how these diverse resources generate social position.

2.2 Social stratification in online communities

Web 2.0 UGC platforms are relatively new, but online communities, which can be considered a specific type of UGC-producing collective, have existed and been studied for a long time. Researchers in this area have long been fascinated by the question of why individuals contribute their time and effort online. Although reasons for this vary widely, developing a reputation as an expert within an online community (and beyond) has been identified as an important motivator (Butler 2001, Faraj et al. 2008, Faraj et al. 2011, Faraj and Johnson 2011; Moon and Sproull 2008, Wasko and Faraj 2005). Some of the strongest evidence of reputation's importance comes from a study of legal professionals contributing to a web forum (Wasko and Faraj 2005). In this study, researchers surveyed contributors to compare their motivation for regularly contributing high-quality content. They hypothesized such motivating factors as

a desire to help others, commitment to the community, self-rated expertise, and network centrality. The only significant relationship was the one associated with the desire to gain professional reputation (ibid). In other words, there was an expectation that status gained within the online community can be "exported" to the offline world of legal profession.

While the most often discussed way of achieving distinction in online communities is by frequently contributing helpful content, research has documented that great variation exists in the nature of contribution behaviors, with users differentiating themselves into diverse roles based on the kind of contributions they make (von Krogh et al. 2003, Butler et al. 2007, Preece and Shneiderman 2009, Smith and Kollock 2009, Kraut et al. 2011, Welser et al. 2007). Indeed, for some UGC settings, volume of contributions was found not to lead to a higher status of the content (e.g., Kane 2011). Besides or instead of frequent contribution of content, members may acquire distinction by developing infrastructure, providing encouragement to others, enforcing community norms, and/or promoting the community to external stakeholders (Butler et al. 2007, Kane 2011). Within open source software projects, there are individuals whose main responsibility is to program, while others answer newbies' questions, write documentation, route bug reports, make feature requests, and so on (von Krogh et al, 2003, Setia et al. 2012). The nature of participants' contributions may also vary based on their motivation and relationship to the community (Bateman at al. 2011a). By creating and taking on various roles, participants sustain a community in conditions of fluid membership (Faraj et al. 2011).

When trying to understand the differences in prominence among online community members, it has also been noted that the distinction achieved by users within the online community (e.g., tenure) seems to be more important than participants' offline identities, which are often heavily discounted (Faraj et al. 2011). For example, in coproducing medical articles on Wikipedia, frequent, long-term participation may count for more than an MD degree (Kane et al. 2009). Yet in other settings, offline status markers may play a significant role and users should think carefully about what to disclose (Bianchi 2012, Bateman 2011b). At the same time, long tenure does not always lead to top ratings for one's contributions, as a community may also appreciate the benefits of "new blood." For example, a recent study of featured

Wikipedia articles found that articles co-authored by both experienced and new users were most likely to be promoted to the top and stay on top (Ransbotham and Kane 2011). Thus, community structures must have means for enticing new members to join and feel empowered in the face of current elites.

The most relevant research stream within the online communities literature, in terms of understanding social status, has focused on leadership in online communities. Some communities may have formally designated leaders such as mailing list owners (Butler at al. 2007, Ren and Kraut 2013). However, the majority of online community leadership seems to be emergent and stem from specific behaviors adopted by users who differentiate into leadership roles (Johnson 2006). For example, in open source software communities, the path to leadership is rooted in long-term tenure, central network position, and frequent contributions (O'Mahony and Ferraro 2007). Yet which specific combination of background and behaviors results in leadership positions is highly dependent on the norms and history of each community (ibid). Moreover, there are different kinds of leaders in these communities: some members try to progress up the vertical hierarchy, while others focus on coordinating lateral activities (Dahlender and O'Mahony 2011); and some members may distinguish themselves by being centrally positioned within community networks, while others are on the boundary of multiple communities (Dahlender and Frederiksen 2012).

Overall, however, research into online communities has paid relatively little theoretical attention to the issue of social stratification, usually discussing online and offline recognition as a form of motivation (e.g., Gu et al. 2008, Wasko and Faraj 2005) and not as the key driver of social dynamics. It typically considers distinction in ways that focus on pro-social outcomes such as sustaining collaboration quality, communal well-being, and innovation (e.g., Sproull and Arriaga 2007, Faraj et al. 2011, Dahlender and Frederiksen 2012). This literature does not focus on situations in which community well-being is less of a concern than an individual's popularity, which is common to modern UGC platforms.

Online community researchers have acknowledged the multi-faceted nature of distinction online, but also called for further research to provide a more complex, dynamic view of online status as not only a motivator but also a consequence of social actions (Wasko and Faraj 2005, p. 53).

2.3 Online reputation based on user reviews

The focus on how users attain high status has been central to research on online reputation systems (Resnick et al. 2000). For many years, online auction websites have provided users with a mechanism to express their satisfaction with the past behavior of other participants on the site, i.e., a means for building online reputation. Reputation mechanisms can affect prices and the probability of a transaction occurring (Dellarocas 2003a, 2010, Dellarocas et al. 2007, Duan et al. 2008, Resnick et al. 2006, Resnick and Zeckhauser 2002) as well as improve market efficiency (Bolton et al. 2004, Chevalier and Mayzlin 2006).

In the early days of reputation systems, online reputation was a one-dimensional concept strictly based on a user's past transactions. Researchers are now arguing that treating online reputation as a one-dimensional construct — as a single resource that users have more or less of — is inappropriate. Ghose and colleagues (2009, 2011) have demonstrated how modern techniques of automated text analysis allow researchers to "mine" the text of user reviews and isolate multiple dimensions along which online sellers differentiate themselves (e.g., quality of customer service, speed of shipping, careful packaging, etc.).

While we know quite a bit about performance-based reputation as a marker of distinction, these studies stand in relative isolation from the work on social network–based position or other forms of online status (e.g., user profiles). Our work seeks to extend research on reputation to account for the multidimensional nature of social stratification online, with reputation that is based on prior "good behavior" constituting one, *but not the only*, type of distinction.

2.4 Status among bloggers and gamers

Perhaps the issue of online status has received the greatest attention from researchers who study online blogs (Herring et al. 2004, Krishnamurthy 2002, Nardi et al. 2004, Vaast et al. 2013), and understandably so since blogs were for a long while the primary vehicle for an individual's online identity. Blogs have been compared to "soapboxes" on which individuals talk, with some standing on soapboxes of greater height and commanding greater attention than others (boyd 2005).

The interest in studying status among bloggers can also be attributed to another set of factors. Blogging was the first technology to enter the digital mainstream that made "following" (or subscribing to) the stream of contributions by a specific writer simple, explicit, and easily observable. Furthermore, a central element of blogging culture is extensive linking to posts that one deems interesting and/or debatable (Blood 2002, 2004, Cavanaugh 2002). This activity creates a densely connected web where the centrality, or prominence, of specific individuals – members of the so-called "A-list" – quickly becomes apparent within any given community (Adar et al. 2004, Agarwal et al. 2008, Herring et al. 2005, Marlow 2004, Vaast et al. 2013).² A distinguishing trait of these influential bloggers compared to other bloggers is that they reveal significantly more information about themselves (Trammell and Keshelashvili 2005, Vaast et al. 2013). There are also other distinctive aspects of high status bloggers both in their contribution behaviors and in their crafting of a social network (Davidson and Vaast 2009, Vaast et al. 2013). These individuals frequently succeed in converting their high online status into valuable external resources, such as attention from the mainstream media and corporations (ibid).

Last but not least, there has been extensive research on status in MUDs (originally Multi-user Dungeons) and MMPORGs (Massively Multiplayer Online Role-Playing Games). Unlike other online phenomena, MUDs are meant to focus user attention on accumulating status in various forms (see Bartle 2004 for a review). They are usually designed as games wherein users can gain experience points, climb levels, and accumulate wealth. Most prominent research on MUDs notes that users differentiate themselves into multiple roles such as socializers, explorers, killers, and achievers (Bartle 1996), which is of particular interest to us because it advances the notion that designers of platforms can promote certain behaviors that sustain participation by making some status markers more prominent than others. Moreover, MUDs and other virtual games are interesting examples of how offline resources (money) can be used to gain online status by buying certain weapons, secrets, etc. However, there is little connection between status studies on MUDs and on other prominent UGC platforms. Furthermore, offline identity in MUDS, as opposed to blogs, tends to be minimized and even hidden (Turkle 1997).

² The blogosphere has received extensive network analytic treatment from within the computer science community. Moreover, given the availability of time-resolved data (which is typically not easily available for other forms of UGC platforms), the focus of this literature has been on the temporal evolution and patterns of blogging networks (Kumar et al. 2005; Adamic and Glance 2004; Chi et al. 2007; Adar and Adamic 2005).

To summarize, diverse literatures have contributed to our understanding of how users distinguish themselves online; however, no one literature has attempted to account for the multifaceted and dynamic nature of the acquisition of online distinction and its relationships to offline settings. At the same time, there is mounting evidence of the importance of status both as a motivator of contributions as well as a positional resource used to get contributions noticed. Moreover, it is evident that the processes through which users become distinguished are highly situated in specific social contexts and that both design choices made by platform designers as well as enacted norms, expectations, and behaviors of users shape what kind of distinction is promoted and how.

3. Organizational theories of social status

We will now briefly review how status is generally understood within the broader management literature and then turn to two research streams with a long tradition of studying status in offline groups. We will argue that these traditions, while insightful in some ways, are generally limited for understanding UGC.

In their comprehensive review, Magee and Galinsky (2008) define status as the extent to which an individual is respected or admired by others. This is in line with Weber's early use of the term as the "social estimation of honor" others attach to the individual (Gerth and Mills 1958, p. 186). Status is necessarily relational and unequally distributed. Ridgeway and Correll (2006) write that status is a form of inequality based on differences in social esteem and respect that, in turn, yield influence (p. 431).

Also central to theories of status is the notion that "admiration" and "respect" only have meaning within a particular social context (Magee and Galinsky 2008). These concepts presuppose a shared social space inhabited by both the agents who are granted status and those who grant that status. Indeed, a person who has earned the status in one community may have very low status in another.

Finally, while we have used the term status so far to discuss the emergence of social differentiation online, a related concept of "power" is critically linked to status. Specifically, Magee and Galinsky propose to define power "as asymmetric control over valued resources in social relations" (2008, p. 361). Thus, power and status are similar in that both serve to create a social hierarchy, and both are relational and context-specific, but they are distinct in the sense that power pertains to control over resources,

whereas status exists only in the eyes of others (ibid, p. 363, 364). Power begets status in that control over certain resources (e.g., money) leads to respect and admiration of others; and status begets power in that the admiration of others facilitates access to valuable resources. Both power and status have self-reinforcing natures in that those who get to the top tend to stay there (ibid, p. 363).

We started our discussion by observing that modern-day UGC platforms afford multiple ways of granting status to content contributors by enabling venues in which admiration for both content and its contributor can be expressed. Thus far, we have not discussed differences in power and status, often using the word "distinction" in reference to the presence of a social hierarchy. Now, based on these more precise definitions, one can see that those indicators of distinction that are visible to others are markers of status, whereas differential control over resources, such as social network position, cognitive and professional abilities, and formal positional authority associated with assigning jobs or accepting contributions, are forms of power. In some cases, power positions can be made visible to others and immediately become status markers, as in displaying the number of a user's followers. If displayed on a platform, this indicator turns a power position (control over who will notice your postings) into a status marker.

We use the clarified definitions of power and status and draw on our earlier review of diverse empirical literatures to summarize (in Table 1) the requirements for a theory of social stratification on UGC sites. We will now discuss how two prominent theories deal with the requirements we outlined.

— Insert Table 1 around here —

As mentioned, the most widely used theory of social stratification in online research has been social network theory. It is indeed very well established that social network position can serve as a critical source of power in and across organizations and in online environments (Blau 1964, Podolny and Philips 1996, Stewart 2005, Stuart et al. 1999, Chen et al. 2012). In its essence, power in a social network is synonymous with how well connected an actor is. The work in this area has established multiple notions of what constitutes a better power position. For example, beyond diverse operationalizations of network centrality, this theory has also suggested that agents bridging structural holes (loosely connected or

disconnected network clusters) can control informational (and other valuable) resources flowing through the network (Burt 2000). Social networks-based power is critically important in explaining content contribution and evaluation behaviors on UGC, but it is only one type of power found on UGC; there is a great deal of evidence suggesting that it is not the only kind of power.

Some of the prominent theories of status in organizations have been theories of status pertaining to task-oriented groups (McGee and Galinsky, 2008). These theories have not been used much (if at all) in studies of UGC, perhaps because they have serious limitations when applied to these new settings. First, they tend to focus on external status cues (e.g., being a white male in a task group is likely to lead to higher status than being a Latino female) (e.g., Berger 1977). These cues are often filtered out in online settings (Sproull and Kiesler 1986). Moreover, these theories are based on the premise that groups are characterized by a shared goal (Skvoretz and Fararo 1996), which is not necessarily the case with UGC, where many contributors are motivated by private benefits (e.g., Wash and Rader 2007). Third, groups on UGC platforms tend to have fluid membership, further contradicting the assumptions of these theories.

While there are many other theories of power used in organizational literature (see McGee and Galinsky 2008), they tend to suffer from a similar set of limitations. For example, those that account for multiple types of power such as the classic "bases of power theory" of French and Raven (1959) or resource dependence theory of Pfeffer and Salancik (1978) tend to focus on formal hierarchies of authority and organizational structures (sources of coercive and legitimate power), and have limited relevance to UGC environments where almost all sources of power are emergent. In this sense, UGC environments are closer to markets than to hierarchies in the way power is wielded in these settings. Indeed, on UGC platforms, platform designers, who have formal authority, can *shape* user behavior by designing status markers as well as content evaluation and promotion mechanisms, but they cannot control actions, norms, or tastes, which are key in producing social stratification online.

We turn our attention to Bourdieu because his practice theory of how agents strive for distinction not only focuses on power (as defined above) but also addresses the relationship between power and status, describing how power relations are produced, reproduced, and transformed dynamically through agents'

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actions. It proposes a lens for identifying relevant social contexts in which power is situated, as well as a relationship among such contexts that allows for the conversion of one type of power into another. Finally, it shows how multiple types of distinctions can co-exist and accounts for how relative power positions of agents shape their motivations and actions and vice versa.³ Table 1 indicates how Bourdieu's theory addresses the requirements we outlined earlier that others theories do not address fully.

4. Applying Bourdieu to UGC

Bourdieu's practice theory was developed to explain social stratification and dynamics in offline societies by focusing on how agents (people, groups, or institutions) produce, reproduce, and transform social structures through practice (i.e., what they do in everyday life). Through practice, agents produce particular social spaces with specific boundaries demarcated by shared interests and power relations; these social spaces are termed fields of practice. More formally, a field of practice is a social space held together (and defined) by (i) power relations among the agents who belong to it, and (ii) an "interest" which is shared among those agents (Bourdieu and Wacquant 1992, p. 117).

A field is a separate social universe having its own laws of functioning independent of those of politics and the economy. The existence of the writers, as fact and as value, is inseparable from the existence of the literary field as an autonomous universe endowed with specific principles of evaluation of practices and works. (Bourdieu and Johnson 1993, pp. 162-163)

Two actors are said to share an interest when they have a common "socially constituted concern for, and desire to play, given social games" (Bourdieu and Wacquant 1992, p. 25), i.e., when they deem the stakes offered by a certain social game (e.g., literary prizes) to be worth pursuing (ibid, p. 116). At the same time, agents are more or less successful in capturing these stakes, thereby producing asymmetrical relations of power.

The notion of the field of practice was designed to explain social stratification and provides more sociological depth than the concept of social network, which primarily deals with one type of power — social network capital. Indeed, the idea of the field works well for large groups with fluid membership

³ In IS research, Bourdieu's theory has been usefully applied in studies of power relations in IS development and use (Levina and Vaast 2005, 2008, Schultze and Boland 2000a, 2000b) and in explaining social inequality produced through ICT diffusion (Kvasny and Keil 2006, Rowe et al. 2004, Hsieh et al. 2011).

and non-specific goals such as industries, occupational fields, and even societies as a whole. This is evident in the growing body of organizational literature that draws on the concept of institutional field, which was developed on the basis of Bourdieu's theory (DiMaggio and Powell 1983). New institutional theory (Garud et al. 2007) and the work on institutional logics (Friedland and Alford 1991) have further drawn from Bourdieu's work to account for *emergent*, *field-specific* distinctions, rather than concentrating solely on external power structures. We are therefore adopting this lens to understand social stratification processes on UGC platforms.

A fundamental characteristic of Bourdieu's notion of the field is that it is built on *relations* (of power) among agents that define the structure of the field (Bourdieu and Wacquant 1992, p. 99). Bourdieu often uses soccer as an analogy for such a field: relations are defined by the positions of players in the game, which are both the result of their prior actions and the enablers of their future actions. These positions, however, reflect agents' differential attainment of stakes in the game (e.g., being close to the goal), which, in turn, are enabled and constrained by resources (*capital*), such as their skills, that agents control inside and outside the game. Such relations are fully or partially invisible to agents (Bourdieu 1986a).

Moreover, individuals, groups, or organizations can be agents in a given field and one individual may have different agencies ("roles") depending on the situation (just as soccer players have different positions). In fields of cultural production, such as the one we encounter on UGC platforms, a user may be both a contributor of content as well as its consumer. In this sense, small interest groups found on large UGC platforms (e.g., a group of friends on Facebook) are akin to Bourdieu's "fields of restricted cultural production," where cultural goods are produced for small circles or "tiny 'mutual admiration societies" and focus on the "public of equals who are also competitors" (Bourdieu and Johnson, p. 116).

We can see that *relational* aspects of fields make Bourdieu's concepts fully compatible with network-based perspectives,⁴ as well as with the notions of power and status we introduced earlier. Three

⁴ This is evidenced by the proximity of Bourdieu's ideas to some of the most influential work employing social networks in recent years (cf. Portes 1998, Burt 2000). Bourdieu's concept of social capital (networks-based distinction) is underdeveloped compared to more advanced network theory, but still allows for two perspectives to be integrated (Bottero and Crossley 2011).

additional observations provide support for this choice of theoretical lens for a cohesive theory of status production on UGC platforms. First, Bourdieu's theory is particularly well-suited for exploratory theory development that strives to account for the actual practice of UGC platform users. While the theory has some deductive theoretical concepts, it demands that researchers modify and develop these concepts on the basis of the specific phenomenon accounting for the emergent "logic of practice" (Bourdieu and Wacquant 1992; Sandberg and Tsoukas 2011). Complexity of the social world demands that both qualitative methods be used for a richer account (Bourdieu 1996).

Second, the nature of Bourdieu's sociology is encompassing of the economist's view of social processes in the sense that the field is likened to a game with specific stakes, and agents draw on diverse types of capital to play the game (Bourdieu and Wacquant 1992). While the logic of a particular game is typically not the rationalist logic postulated in economic theory (although it can be in specific fields such as the stock market), it is still a logic that can be described (Sandberg and Tsoukas 2011). For example, it may not be rational for Flickr users to copy their nearest neighbors with higher status, but they still do it following some logic of practical sense (Zeng and Wei 2013).

Third, Bourdieu's work came to prominence in his series of studies on taste and cultural production that demonstrated how cultural objects such as art, writing, and films are produced, evaluated, and consumed (Bourdieu 1984, Bourdieu and Johnson 1993). Today, many UGC platforms constitute prime grounds for the production of cultural goods and the enactment of tastes, including those in writing, photography, entertainment, etc. (Liu 2007, Zeng and Wei 2013). This similarity in context offers additional advantages in applying Bourdieu's scholarship to our phenomenon of interest.

4.1 Understanding social stratification processes in fields of practice

In Bourdieu's theory, the relative positions of the agents within a specific field are determined by their stocks of different "forms of capital" (Bourdieu and Wacquant 1992, pp. 97-99). Bourdieu defines *capital* as an accumulated resource (either embodied in a person or "objectified" in an object), "which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents," allows for influence (Bourdieu 1986a, p. 241). The fundamental idea is that capital is a valuable resource that: (i) can be

unequally accumulated by different agents; and (ii) is simultaneously the stake as well as the weapon in the social struggle occurring within a field.

Bourdieu identifies three major forms of capital (economic, cultural, and social) and one special form of capital (symbolic). Economic capital refers to one's control over physical and financial resources. Cultural capital refers to cultural skills (e.g., being an accomplished photographer), cultural goods (e.g., possessing valuable photos), and educational (institutional) degrees (e.g., having a degree from a renowned design school) (Bourdieu, 1986a). Social capital refers to an agent's ability to draw resources from "connections," that is, from membership in various social networks (Bourdieu and Wacquant 1992, p. 119). Finally, there is symbolic capital, "which refers to the degree of accumulated prestige, consecration, or honor" (Bourdieu and Johnson 1993, p. 7).

Following the above definition, we can see that symbolic capital refers to the same notion as status in traditional organizational theory (Magee and Galinsky 2008). Similar to other theories of power and status, Bourdieu emphasizes that status begets power (i.e., status can be used to increase one's stock of the three primary forms of capital) and, vice versa, power begets status (e.g., money, skill, degrees, and cultural objects can be used to gain (greater) admiration). Symbolic capital is particularly potent in fields of cultural production where economic capital is heavily discounted (Bourdieu and Johnson 1993).

The social dynamics in fields are centered on the generation of distinction(s) among agents, who "constantly work to differentiate themselves from their closest rivals" (Bourdieu and Wacquant 1992, p. 100).⁵ In conformance with the "law of the quest for distinction" (Bourdieu 1985), agents (intentionally or inadvertently) distinguish themselves in the field through differential accumulation of capital that matters to that field. Thus, fields are "space[s] of conflict and competition," in which "hierarchy is continually contested" (ibid, p. 17, 52). Moreover, economic and cultural capital are typically in opposition: in a field, one group of agents typically has more cultural capital or "means of cultural production" (e.g., artists,

⁵ Bourdieu notes that the expression "constantly work to" should not be given "intentionalist" readings: "There is a production of difference which is in no way the product of a search for difference" (Bourdieu and Wacquant, 1992, p. 100). The actors' stances in these games are typically no more than "unconscious or semi-conscious strategies" (Bourdieu 1969, p. 118).

writers, intellectuals) while a different group will have a greater stock of economic capital or "means of reproduction" (such as bankers or, in cultural production fields, publishers) (Bourdieu 1996). Agents are distributed in the field according to the overall volume of capital they possess and according to the structure of their capital (Bourdieu 1990, p. 126). Depending on the logic of the field, these different species of capital can be converted into each other and imported and exported from and to other fields.

In summary, a field is the social space where distinction, in the form of diverse stocks of capital, is produced and differentially attained by agents through their actions. Notably, a particular capital that is active in one field (e.g., excellence in photography) may have no influence in other fields (e.g., writing journalistic articles). In this sense, Bourdieu's view of status is broadly reminiscent of the concept of "status contests" (Maclay and Knipe 1972, Owens and Sutton 2001). Agents in a given field collectively determine through their actions which status claims matter. For example, in Bianchi et al.'s (2012) study of open-source software development, an arbitrary status marker such as living in Silicon Valley mattered more than a task-related status marker such as contributor's education level.

We have thus far focused on how agents, through their collective actions, shape emergent field structures (which capital matters and how). However, any practice theory (Feldman and Orlikowski 2011), Bourdieu's included, also looks at how structure shapes agency. Bourdieu uses the notion of *habitus* (referring to socially learned schemata of perception and inclinations to action) to discuss the link between agents' prior history in the field (e.g., their social background and upbringing) and their actions. Thus, an agent who has achieved (or was born into) a certain cultural distinction would have both a motivation and an ability to behave in a way that maintains and furthers this distinction. She will invest more in maintaining her prestigious position than an agent who has historically been in a less prestigious position. This structure, however, is not without change. Through changes in their attitudes and actions, agents can "go against" the prevailing logic of practice, thereby transforming the field. This could happen, for example, when new agents enter a field or existing agents seek new sources of distinctions (e.g., distinction based on professional skills is replaced by one based social network position) (Bourdieu 1990, p. 132-134; for an illustration also see Levina and Orlikowski 2009).

Bourdieu has dedicated a large amount of his work to studying fields of cultural production such as art, literature, and science/academia (Bourdieu and Johnson 1983; Bourdieu 1990). He argued that fields of cultural production, while functioning similarly to other fields, also have their own unique logic, allowing agents in these fields to break away from their social backgrounds (e.g., money, political views, etc.). He outlined specific tensions characteristic of fields of cultural production (Bourdieu and Johnson 1983)⁶: 1) the tensions between external sources of influence (e.g., money, social background, academic authority) and internal ones (based on their contributions to the cultural production field); 2) the tensions between (rich) popular artists and (poor) avant-garde artists; 3) the tension between newcomers who produce new avant-garde ideas and old avant-garde artists who have already attained some following among peers; and 4) the tensions around the boundary of the field and what it takes for laymen to join it (e.g., a tension between non-professional news bloggers and professional journalists).

While Bourdieu (1990) insisted on avoiding reductionist formulations of complex social theories, we will summarize some of his basic ideas in the form of tenets concerning reproduction of power relations in a field (Table 2) and tensions in a cultural production field (Table 3). Some tenets in the first set can be derived from other theories of power and status, but Bourdieu's theory offers unique advantages in providing a cohesive account of the complexity of social dynamics associated with the quest for distinction, while also accounting for unique tensions in a cultural production field. Moreover, Bourdieu addresses the question of how power relations arise, namely, through the situated, everyday actions of agents in a field that mediate external forces and combine external capital in a unique way to produce a *field-specific* new form of capital. Thus far, we have explained the left-hand columns of Tables 2 and 3; we now apply Bourdieu's concepts to UGC and develop the right-hand columns of the tables.

Insert Table 2 and Table 3 here —

⁶ This is our summary of key tensions based on our close reading of Bourdieu's original texts. We are simplifying the complexity of Bourdieu's ideas given the space limitations.

4.2 Online field

Drawing on Bourdieu's work, we define *online field (of practice)* as a social space engaging agents in producing, evaluating, and consuming content online that is held together by a shared interest and a set of power relations among agents sharing this interest. On any platform (just as in any offline social context), one is bound to find multiple nested and overlapping fields. For example, on YouTube, one finds a huge field of people broadly interested in sharing and viewing videos online, some of whom distinguish themselves through posting top-viewed uploads. But within that broad, platform-wide field, one also finds a large variety of other more focused subfields, e.g., a field centered on comedy videos, another dealing with music videos, etc., in addition to even more specialized subfields. At the same time, not all UGC platforms necessarily constitute a field in their entirety (e.g., while the notion of top downloaded videos on YouTube produces a field-wide distinction, there may be no such distinction on, say, Facebook, where users primarily exist in small "mutual admiration societies").

Many online fields exist only in a single platform, but larger fields of practice (e.g., occupational fields) may have online and offline subfields with overlapping membership and influence. For example, in Wasko and Faraj's (2005) study, lawyers in an online advice forum were primarily motivated to contribute in order to promote themselves in their professional field offline. Similarly, Davidson and Vaast (2009) illustrate how a technology blogger may participate not only in the blogosphere but also in an offline field of technology journalism. At the same time, online distinction can transcend the boundaries of individual platforms (e.g., users can now share their Twitter posts on Facebook). We will not directly address how an action within a particular online field affects a user's standing in multiple fields, but focus only on how capital (accumulated by an agent) can be imported and exported.

4.3 Social dynamics in an online field

4.3.1 Key agent groups and their positions in online fields

Drawing on Bourdieu's analysis of fields of cultural production, we see that online fields fundamentally have two key groups of agents – producers and consumers of content – with the key capital specific to each field being the recognition achieved within the field. Recognition is achieved through evaluation that

occurs simultaneously with consumption of the content. In offline cultural fields, this attention is converted into money when consumers purchase cultural goods (Bourdieu and Johnson 1993). In the "attention economy" of the online world (Goldhaber 1997), attention is converted into money through advertising revenue and other means.

In his work, Bourdieu (Bourdieu and Johnson 1983) focused specifically on the analysis of diverse content producers, such as highly regarded artists, poor struggling artists, bourgeois artists, and popular artists, and did not talk about consumers in great detail except for differentiating among diverse art/literature critics. In online fields, in contrast, consumers play much more active and diverse roles in awarding status to producers, prompting us to develop new theoretical categories for diverse consumers.

First, lurkers, individuals who "hang around" online without ever contributing (Nonnecke et al. 2004), may be granted agency through technological features of the platform; most notably, YouTube gives agency to lurkers by displaying the number of views. On those sites on which the number of views is not displayed, platform designers still track views in order to convert them into revenue. Thus, by merely viewing a piece of content, individuals are casting a vote for its value, often with great consequences for content producers (e.g., advertising revenue). Also, many sites enable a more active form of expressing appreciation such as becoming a follower of a content stream. As argued by Romero et al. (2011), this is still passive consumption.

Of course, consumers can be much more differentiated than that. As noted earlier, in cultural fields, other producers are quite typically also judges and consumers of cultural artifacts. For example, retweeting on Twitter is both a contribution to the platform (a tweet) and an act of evaluation (signaling that somebody else's contribution is worthy of attention). While some of the consumers who rate a lot of content are also key producers of original content, in many cases they are not and their contributions lie primarily in rating and commenting. They can be termed "mass raters."

Beyond these mass raters, some users often also act as "expert evaluators" (defined as consumers who have accumulated significant cultural capital). Depending on the nature of the field, their evaluations may have much more influence than others. In popular culture, almost by definition, passive consumers and mass raters carry more weight than expert evaluators, but in "high art," such as the field of "serious literature," producers are largely producing for other producers (Bourdieu and Johnson 1993, p. 15). These expert evaluators draw on their capital as producers (e.g., writers of well-respected reviews), giving their evaluations further influence. Expert evaluators are likely to form a tight-knit group within a field (Vaast et al. 2013; Aral and Walker 2012).

Consumers may also have formal authority to evaluate content, which Bourdieu called "institutionalized consecration," granted to them by a platform designer or other users; site moderators and community managers have more power in judging contributions than others (Ren and Kraut 2013). Platform designers themselves have a great degree of agency because they get to decide which algorithms are used to promote and demote content (Ghosh and Hummel 2011).

Together, these groups of consumers (passive consumers, mass raters, expert evaluators, authorized evaluators, and platform designers) are similar to groups found in other fields of cultural production (Bourdieu and Johnson 1993). Each field has its own structure in terms of how much each agent type matters in the production of distinction in the field, may have different field-specific groups, and may skip some generic groups we suggested here (e.g., authorized evaluators). Moreover, some fields might give the most weight (attention capital) to expert evaluators (e.g., Wikipedia allocating significant power to expert editors), while others give more weight to passive consumers (e.g., YouTube), and still others give more weight to authorized evaluators (e.g., crowdsourcing platforms working with a sponsor). Armed with this language, we can interpret Watts and Dodds' (2007) observation about networks where influence is achieved without influentials, noting that in this case lurkers and mass raters have relatively more attention capital while elite evaluators have less.

Inevitably, it is the differentiation among producers into diverse roles and extent of recognition is generating much of social dynamics in online fields. Growing evidence suggests that producers differentiate themselves in online fields by taking on diverse roles (von Krogh et al. 2003, Butler et al. 2007, Welser et al. 2007, Kane et al. 2009, Hargittai and Hsieh 2010) such as those of "volume" contributors, avant-garde thinkers, professional critics, etc. For example, on a music-sharing platform, an

indie music group may want to gain recognition among connoisseurs of a specific type of music instead of trying to reach a mass audience through professional critics (Baym and Burnett 2009). Of course, there is then further differentiation within each subgroup as producers compete with their "nearest neighbors" for further distinction (Zeng and Wei 2013, Vaast et al. 2013). We also note that, while expert evaluators are endowed with significant cultural capital, they are not necessarily the same group as popular or avante-garde producers. For example, in the blogosphere, the most influential bloggers are not necessarily the most active ones (Agarwal et al. 2008; Romero et al. 2011). Bourdieu's framework allows us to distinguish how these roles are differentially rewarded in diverse field structures. Each online field would have its own logic in terms of rewarding diverse types of contributions.

On the producer side, there is also a large number of low-involvement participants (Hargittai and Hsieh 2010) who make occasional contributions (e.g., posting children's performance videos on YouTube). These users have agency in the field without attempting to climb the social ladder. We already discussed their role as consumers when their contributions have an evaluative character (such as ratings and retweets). Yet, even when their contributions are devoid of evaluation, they still matter, being akin to students in the field of academia or amateur traders on the stock market. Their participation is important because, through their microcontributions, the field is shaped (Sproull and Arriaga 2007) as well as because it is only in comparison to these "minor" producers that "major" ones can distinguish themselves.

To summarize, we have outlined a structure of an online field in which, through the practices of contribution and evaluation of content, agents generate a unique set of power relations. The key struggle in the field is among producers who each vie for recognition of their content (or meta content). Figure 1 illustrates how agent types may be positioned in an "example" online field. These positions would be different in each field based on its specific logic (e.g., in fields akin to high art, expert evaluators will have more attention capital than mass contributors and the opposite may be true in fields akin to popular culture). Next, we will discuss how external capital influences the positions of agents in online fields.

- Insert Figure 1 around here -

4.3.2 External capital imported and exported from other online and offline fields

While the existence of the field is defined through the production of a unique distinction not reducible to those outside the field, external sources of capital still play a key role in what happens inside the field. This is true for both producers and consumers. *Producers* draw on their external cultural capital in making valuable contributions by bringing in their technical, artistic, and other professional skills as well as cultural artifacts that they own (e.g., photos, videos, articles). They also may draw on economic capital if money is required to make a recognized contribution. The importance of economic capital varies based on the logic of the field. For example, for hotel review sites, the economic capital of individual users matters less on TripAdvisor, where reviewers are not required to have stayed in hotels they reviewed, and more on Orbitz, where they are (Mayzlin et al. 2012). On Amazon.com, reviewers are not required to have purchased, but having a verified purchase brings more attention to the review (Forman et al. 2008). In online games and virtual worlds, users utilize their economic capital to buy online ammunition and other valuable artifacts. In most UGC platforms, however, the producers' economic capital tends to be heavily discounted; in fact, some platforms pride themselves on reducing the power of economic capital. Yelp.com, a site enabling reviews of local businesses, claims that its success lies in nurturing eloquent dedicated reviewers (cultural capital) and limiting the voices of paid reviewers (Hansell 2008).

The external economic and cultural capital stocks of *consumers* are as important. Consumers use their external cultural capital (skills and knowledge) to evaluate content. It is their economic capital, however, that tends to be more important in online fields. If lurkers had no money, we would probably see the end of online advertising! More interesting perhaps is the role of economic capital in differentiating consumers. Authorized evaluators and platform designers tend to have much more control over economic capital than do others. For example, on crowdsourcing sites, external experts often have control over prize money; the degree of that control depends on the field. Some crowdsourcing sites tend to give weight to popular votes (e.g., Dell's Ideastorm), while others rely on client experts' views only (e.g., Innocentive).

Social and symbolic capital from external online and offline platforms may also play a crucial role in social dynamics in online fields. Well-connected and influential individuals tend to have many followers

and their content is noticed more frequently when they use their real names in online fields (Aral 2013). We have discussed how diverse platforms enable the promotion of offline identities to a greater (Facebook) or lesser (Flickr) extent; the clearest example of this is the Twitter platform wherein someone with high external status (e.g., a celebrity) may get followers without ever contributing content. External capital also matters in consumption behavior as content noticed by important external stakeholders tends to get more attention (Vaast et al. 2013). External influence can also come from other online fields: many platforms and groups allow and even encourage cross-linking (Butler and Wang 2011).

Naturally, capital can also be exported from online fields to other online and offline fields. There are numerous accounts of how capital gained on social media can impact employee productivity (Wu 2013), employee engagement (Miller and Tucker 2013), and firm equity (Luo et al. 2013). On any given day, media reports are full of references to popular Twitter tweets and viral videos from YouTube.

The impact of external capital on social stratification processes in the online field is jointly shaped by the technical features of the platform and how they are *used* in practice by agents on the platform. The norms in some fields may discourage revealing real identities or drawing on connections to other fields. For example, on the image-sharing platform 4chen.org, anonymous contributions are encouraged ("anonymous is God") and no profile feature exists. These norms evolve as platform features change and new use practices are negotiated around them. Importantly, external capital can only impact positions in the online field through agents actions in that field (contributions and evaluations) and not directly. A celebrity who does not contribute a single tweet is not a "Twiter celebrity."

4.3.3 Process dynamics of social stratification

While we have focused so far on how agents' accumulation of different types of external capital shapes their position in the field and vice versa, *the richness of Bourdieu's theory is in explaining the dynamics that play out within the online field*. We depict these dynamics in Figure 2, showing how capital is produced and reproduced in online fields. The relationships that are summarized in Figure 2 further elaborate key tenets from Table 2 as well as highlight tensions elaborated in Table 3. While the figure is

still rather complex, the complexity is necessary to express how dynamically interconnected (or "inseparable," in Bourdieu's terms) the social processes are in a field of practice.

— Insert Figure 2 around here —

Beyond drawing on and contributing to capital from other fields to achieve recognition, producers start accumulating recognition within the online field by contributing content that consumers deem valuable. With the accumulation of recognition, producers gain both the ability and the inclination to contribute more (as they will start "playing the game"). In this way, agents' prior positions shape their disposition to action. If top contributors stop contributing, for example, others will take their place in the field. The stability of a field is generally aided by the fact that those who have already gained recognition tend to attract more attention (the backward arrow from producer's capital in the online field "influencing" consumer evaluation) because platforms tend to use producers' prior recognition to influence how prominently their content is displayed. Thus, status in an online field helps producers beget further recognition and other forms of capital.

Finally, producers are influenced not only by their external and internal capital stocks and the position of their neighbors, but also by the consumers whose tastes producers must learn to please (the arrow from consumer's capital in the online field back to producer contributions in Figure 2). Bourdieu articulates how different producers may choose to please elite or broad audiences. That is, producers in online fields may cater to the tastes of those who control more economic capital (passive consumers, mass raters, authorized evaluators, and platform designers) or other producers (expert evaluators).

One advantage of Bourdieu's theory is that it can be applied at different levels of analysis in the field. On one hand, the relationships between producers and consumers of cultural capital are somewhat stable in a given online field following the structure we proposed in Figure 1. However, the positions of specific users are always at stake. While many of the forces we have described stimulate reproduction of cultural elites, there are also forces of transformation as newcomers try to gain recognition and position vis-à-vis veterans. It is well documented that membership in the core group of producers online is fairly fluid and if one is to remain in the core, he/she must continue contributing valuable content (e.g., Faraj et al. 2011).

4.3.4 Dynamics of producer's status accumulation

We have described the dynamics involved in producing, reproducing, and transforming various forms of capital in online fields and the flow of capital to and from other fields. The final part of our theoretical model focuses on how producers' behavior is represented through various properties of their contribution stream, which in turn, shapes their position in the field. Figure 3 simplifies the complexity of these interactions by hiding action (depicted in Figure 2) and highlighting how contribution stream characteristics (objectified actions) shape producers' capital accumulation. We propose this simplification because it will help relate our work to the extant positivist literature on social media.

— Insert Figure 3 around here —

In Figure 3, we illustrate how a variety of characteristics of content can be differentially rewarded with consumers' attention as well as show how the theoretical relations we summarized in Table 2 apply to online UGC fields. Prior literature on social media that we have reviewed documents that it is not only the quantity and regularity of contributions, but many other properties such as the tone and language of text, originality, timeliness, uniqueness, and potentially other characteristics that appeal to consumers' tastes, leading to distinction. Each field has its own logic in differentiating what matters. Indeed, the language use may be less applicable on Flickr (beyond tags and comments) but is critical in the blogosphere. Similarly, timeliness may be critical on Wikipedia where news events (e.g., Olympic games' results) need timely coverage, whereas the usefulness of answers may be critical on Yahoo! Answers where users often pose less-time sensitive questions about health, style, household electronics, etc. Moreover, producers differentiate based on which tastes they want to please. For example, on Wikipedia, article writers tend to be more concerned about the originality and perceived accuracy of their content, while editors focus on enforcing Wikipedia's norms and linguistic standards (Bryant 2005; Kane et al. forthcoming).

Each platform also differentially rewards producers with diverse types of symbolic and other forms of capital (Tenet 1). Visible status can come in the form of favorable rating of content or content producers or in the form of notable appearances of the content on the platform or awards and other forms of formal

recognition by the platform designer for the producer. Producers can convert their recognition within the field into the accumulation of cultural skills (learning how to please their audience), a better social network position, and the ability to influence others (control over attention currency) (Tenet 3). Having accumulated diverse forms of capital, producers can attract further attention to their contributions and beget more status (Tenet 4). The outlined relationships equally apply to those agents who produce major cultural goods as to those who only rate and view. For example, frequent rating can lead to little visible status in a field, but may lead to significant cultural capital accumulation.

Next, we use our framework to elaborate how diverse design choices of platform designers as well as platform use practices and norms developed within particular fields can explain similarities and variations that exist on UGC platforms and associated user status-seeking strategies.

5. Implications for platform design choices and understanding of user behavior

We have argued that decisions digital businesses make in designing and promoting UGC platforms shape online social dynamics in profound ways. Our framework helps digital business leaders better understand how these decisions impact the motivations and behaviors of diverse users. Focusing first on platform designers, we can see that by empowering certain groups of consumers and producers, they can stimulate behaviors that they desire. Much of the work on mechanism design from economics has focused on this topic (e.g., Dellarocas 2003b, Ghosh and Hummel 2011, Ghose et al. 2009), but it has typically centered on a single type of distinction, either reputation or content rating. Our theory goes beyond that research by recognizing that different types of agents with different interests emerge when there are multiple forms of recognizing and capital operating in a field and shaping the field from outside (external capital). Some platform designers may want to rely less on external capital if their goals are to create novel cultural artifacts. For example, crowdsourcing of innovation platforms such as Innocentive and Dell Ideastorm tend to deemphasize offline identities and associated external status, as their goal is to find novel ideas (cultural goods) rather than to appeal to broad audiences. However, if a platform's business model is to capitalize on offline status, networks, information, or money, they may want to reward disclosing of offline identities. Thus, Facebook, which monetizes information it collects about users' tastes and preferences, hopes that users register under real names so as to tie this information to offline identities.

Similarly, platform designers can manipulate which audience their content targets. Platform designers that want to promote mass consumption may want to empower passive consumers and mass raters as opposed to authorized evaluators and expert evaluators, by displaying the number of views and making all ratings equal (be they from an expert or not). Such platforms differ from those that aim to please niche audiences, wherein they may want to give more power to expert evaluators.

Other decisions made by platform designers involve the number and type of status markers used. Recognizing content (and not its producers, for example) may stimulate more newcomers as a producer's position in the field is more closely tied to the content it has and is producing. This is why in the early days of YouTube, Wikipedia, and many other platforms, producers were in the shadows of their contributions. However, our framework suggests that such field structures will encourage frequent rotations in membership, which may or may not be desirable. Ransbotham and Kane (2011) argue that some balance between old and new is best for producing valued contributions. Thus, we see that, over time, many sites create some markers of recognition directly associated with producers. Some of these titles may stay with producers permanently while others require continual valuable contributions.

Although the illustrations we have given are necessarily limited, our framework affords an understanding of social stratification that would help site owners to make better-informed design choices. Moreover, we believe that our framework could also stimulate future empirical research on how design choices enable diverse field structures to emerge through users' actions. For example, Susarla et al. (2012) research on YouTube is an excellent example of how content propagates on this platform, while Forman et al. (2008) offers significant insights on influential reviews on Amazon. Our work would allow businesses to better understand why insights from YouTube and Amazon studies may generalize to some settings (with similar logic of practice) but not to others.

Beyond platform designers, our framework has implications for status seeking strategies for businesses and consumers. Much is written on how novice users can move up the social hierarchy by emulating prominent others who already have a broad appeal (e.g., Kraut et al. 2011, Preece and Shneiderman 2009). Our work points out that such direct status-seeking strategy is risky and resource intensive as current cultural elites are likely to hold on to their positions. While emulation strategies may succeed with sufficient resource investment, newcomers may also initiate "micro-revolutions" attempting to shift the needle on the key tensions that are present in any field. For example, a very "different" content producer may try to oppose popular producers by creating new circles (sub-fields) where her avant-garde contributions are highly valued. Alternatively, in niche fields focused composed of small circles of mutual admirers, a newcomer may bring in external capital (e.g., money or fame) to broaden the appeal of content that such circles produce.

Naturally, more empirical research using our framework will help develop more specific implications for digital businesses, but even at this point having a cohesive view of the social stratification can help businesses develop their own data-driven techniques to understand and reshape social dynamics online.

6. Implications for research

We have outlined a number of gaps in the literature on social stratification on UGC platforms. Here we elaborate how we filled these gaps and propose ways of using our framework for future research.

One of the key implications of our work is in recognizing that diverse online contexts can be seen under the general lens of the power dynamics: when users start investing their resources into a joint area of interest (albeit with diverse motivations), they also start differentiating among themselves. We have argued that such differentiation happens according to the basic tenets of Bourdieu's theory and shown how they translate into UGC settings (Table 2). Moreover, online fields generate multiple sources of distinctions and each field has a number of common tensions among diverse groups of producers and consumers (Table 3). Whereas prior literature talked about these social dynamics in diverse and incompatible language—some focusing on social network positions, others on diverse contribution behaviors, and yet others on external sources of influence—our work posits that these are diverse aspects of the same underlying social stratification process. In other words, in some form tenets put forward in Table 1 and Figure 3 should find a broad support base across diverse online fields. On the other hand, our theory also suggests that online fields (both on the same platform and across platforms) are substantially different from each other in how they generate distinction and address the tensions among diverse types of contributors (Table 2). Each field has its own unique set of status markers and logic for generating them through users' actions and interactions. Prior literature has documented contradictory findings about who plays the more important role in content propagation online (see Romero et al. 2011 and Watts and Dodds 2007 for a review). Our work suggests that it depends not just on the structure of ties in a field (Watts and Dodds 2007), but also on the specific logic of a given field and associated relative position of agent groups (Figure 1). Mass raters and passive consumers may be more empowered than expert evaluators in some fields, making the influenced more important than the influencers, but this may not be true in other fields. Similarly, in some fields, popular contributors may be the same users as expert evaluators but, as evidenced by prior studies (Agarwal et al. 2008, Cha et al. 2008, Romero et al. 2011), that is not always the case. Our framework should enable future studies to hypothesize which forms of distinction, beyond social network position, explain content propagation.

The most significant implications of our work are related to the platform design choices and associated practices that arise in online fields. Platform designers can to some extent shape the social dynamics by designing how attention currency is allocated within an online field (Lampe and Resnick 2004). However, in doing so, they will be making a series of trade-offs in response to the key tensions we have outlined in Table 2. For example, Wikipedia has de-emphasized user offline identity and heavily discounted external capital (Kane et al. 2009), which we would argue is one response to Tension #1 (Table 3). We can see how Tension #2 plays out in the design of formal feedback mechanisms. We started our paper with a puzzle, asking why Wikipedia — one of the most successful UGC sites today — does not adopt formal rating systems for content popular on many other platforms (Moon and Sproull 2008). Using our framework we can see that, given Wikipedia's specific cultural production goals, it should empower expert evaluators (other article contributions) and authorized evaluators (such as members of Wikipedia foundation) to respond to contributions with substantive contributions (comments and edits) and not just ratings. Although recent research has shown that providing social feedback on Wikipedia is

useful for facilitating contributions (Kraut et al. 2011), Wikipedia platform operators are wisely cautious in not adding "general reader" feedback feature for every contribution. Moreover, we can see how Tension #3 plays out on Wikipedia, where old-timers have significant authority in evaluating contributions, making it more difficult for new contributors to join (Halfaker et al. 2011, Kane et al. Forthcoming). Finally, it is well known that when outsiders to Wikipedia community try to contribute, their contributions are often rejected illustrating Tension #4 as well (ibid). Our work allows future researchers to hypothesize how certain mechanisms for distinction operating in specific online fields will trigger diverse social dynamics.

We have also introduced the term "online field," which provides us with a certain advantage when considering social stratification online. Unlike social networks, online communities, and task groups, the concept of online field is specifically targeted at understanding power relations and the nature of distinction in contexts where there may be no direct interactions but there is still influence. The concept thereby became useful in institutional theory and filled the gap that team and organizational literature left open (DiMaggio and Powell 1983). It has been applied to many diverse phenomena and has proven useful in understanding the nature of power and social dynamics. Its additional advantage is that it helps focus researchers' attention on the characteristic of the group that unites users around their pursuit of social distinction, namely, their common interests and practices.

Our work also has implications for how UGC platforms are classified. Some frameworks classify these platforms based on the type of content that is being shared (as we do in Appendix A). Other frameworks classify social media using such dimensions as self-presentation and social presence (Kaplan and Haenlein 2010). Because of the evolving nature of UGC platforms, such classifications of specific platforms are subject to debate (e.g., Shi et al. 2011). Our theory implies that instead of classifying platforms, it may be useful to talk about different types of online fields and potential homology in how the way distinctions are generated. For example, Digg, Slashdot, and Reddit are all classified as social news sharing sites based on their content. Using Kaplan and Haenlein (2010) framework they are all classified as content communities with medium social presence and low self-presentation. However,

social dynamics on these diverse platforms and even in specific subfields on these platforms differs widely with, for example, Reddit rewarding different contribution behavior (due to both positive and negative votes shaping popularity) than Digg (where only positive ratings count).

Before we conclude, we want to suggest how we envision the use of the framework in future empirical studies. First, we encourage researchers to use qualitative means to get a sense of the logic of practice within a given online field they are studying and understand which internal and external distinctions matter and how they get differentially rewarded in a field (Figure 3). They can identify relevant groups of agents and describe key relations. Researchers then may also use quantitative methods to help demarcate the boundaries of the fields involved. For example, social network analysis may be a good method to start clustering users (Leskovec et al. 2008). However, given that social network position is only one type of capital in the online field, it may be fruitful to use other techniques to cluster users based on their interests, such as text mining, or to examine collaboration networks (e.g., see Ransbotham and Kane 2011). Depending on researchers' philosophical stance, some may want to focus on developing an interpretive account of field struggles and evolution (focusing more on Figure 1 and 2), while others may use hypothetico-deductive methods to test key relationships in the framework including temporal dynamics (focusing more on Figure 3).

7. Conclusion

We have argued that, while diverse research traditions have looked at social stratification on UGC platforms, without a unifying view of what constitutes distinction online and of social processes responsible for its reproduction, these traditions have led to somewhat narrow and disjoint explanations of the phenomenon. Unfortunately, traditional organizational theories were not adequate for building such a framework. Bourdieu's theory of practice, and specifically the notion of field of practice, offered us conceptual tools necessary to address this gap.

The theory has allowed us to see the social processes through which individuals and organizations compete for attention in the brave new world of UGC. This competition shapes what we have termed an online field, a social space in which producers and consumers, held together by a shared interest, deploy

different forms of internally generated and externally produced capital to gain influence. The interaction among agents pursuing a given interest in a particular social setting determines what will count as status and how it may be achieved. While status and power over resources are not the explicit motives behind contributions for many users, we have shown how these concepts can be used to account for social processes responsible for diverse content production and propagation dynamics in the attention economy. Our frameworks helps in understanding how digital businesses take advantage of users' desires to distinguish themselves and what they can do to try to stimulate desired behaviors. Its integrative nature should enable future researchers to build on each other's work, despite the differences in our research perspectives and the specific sites that we study.

8. References

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Empirical evidence from prior studies that a unifying theory needs to account for	Social Network Theory	Status in Task Groups	Bourdieu's Theory
Relational and situated nature of status and power	Yes	Yes	Yes
Multidimensionality of status and power	No	No for status Yes for power	Yes
Importing of offline status / resources into online context	Only in terms of external network position	Yes	Yes
Exporting of online status / resources into other online and offline settings	Only in terms of external network position	No	Yes
User's higher status and resources leading to higher visibility of his/her content	Yes	Yes	Yes
High visibility of user's content motivating further contributions	No	No	Yes
Status in large-scale groups with fluid memberships	Yes	No	Yes

Table 1: Requirements for a Theory of Status Production on UGC

Table 2: Summary of Basic Tenets Pertaining to the Production of Power and Status

Basic Tenets	UGC Applications
Tenet 1: Differential production of	Over time, and through the collective actions of their users, digital
capital leads (according to some logic	platforms and online fields develop unique ways in which status and
of practice specific to that field) to	power can be accumulated within them.
unequal accumulation of different	
forms of distinction	
Tenet 2: External sources of capital can	Offline cultural capital (e.g., a user's photographic skills) often is crucial
be imported into the field and capital	for the production of content within an online field. Other forms of
accumulated within the field can be	capital external to the field (e.g., leadership positions in other online
exported outside of it based on the	fields) may also be used as a resource in gaining positions in the field.
logics of each field and their relation to	Conversely, capital accumulated within an online field (e.g., knowledge
each other.	acquired by lurking on the site) can be converted into external capital
	through content production and consumption outside that field.
Tenet 3: Power begets status	Participant's social network position, cultural skills, tastes, as well as
	time and money invested into the field (already accumulated capital)
	shapes which content gets noticed and which ignored
Tenet 4: Status begets power	Having higher status can lead to improved social learning (i.e., how to
	please consumer tastes), a better network position, monetary rewards
	(e.g., payments from advertisers) and more attention currency (i.e., an
	ability to influence others) within a field.
Tenet 5: Agents will attempt to	Users will be motivated to maintain their position and some will invest in
maintain their relational positions, in	improving their relative position by learning from their prior contribution
particular vis-à-vis their closest rivals	ratings, mimicking others, and using their external capital to benefit their
	position within the online field

Table 3: Tensions in Cultural Production Fields

Key Tensions	UGC Applications (See Figure 1 and 2)
Tension 1: In a cultural field, there is a	Online fields will differentiate themselves in the extent to which
tension between the field's autonomy from	they will allow external sources of capital (e.g., profile info, money)
and its integration with the external sources	to shape their internal social dynamics
of power	
Tension 2 : In a cultural field, there is a	Online fields will differ in the extent to which their cultural
tension between popular and elite cultural	producers will attempt to please the tastes of mass raters and lurkers
producers (e.g., in the artistic field between	vs. the tastes of other producers and elite evaluators. Moreover,
popular artists and avant-garde artists)	within each field, some producers will cater to narrow elite groups
	of fellow producers, while others will distinguish themselves by
	appealing to a more general audience
Tension 3 : In a cultural field, there is a	Online fields will differ in the range of opportunities that they
tension between old cultural elites (old avant-	afford new (and culturally different) producers to displace existing
garde) and new cultural elites (new avant-	elite producers. They will also differ in which strategies will be
garde)	available for such new entrants.
Tension 4: In a cultural field, there is a	Online fields will differ in how narrow or open they are in allowing
tension around what defines the field's	new types of contributions that do not conform in style, language,
boundary (e.g., between contributions of	and taste to the current norms of what counts as a relevant
cultural producers and laymen)	contribution



Figure 1: An example structure of an online field



Figure 2: Process Model of Power and Status Production in Online Fields





¹ This includes both contributions of original content and meta contributions such as ratings, comments, and views

Appendix	A:	Current	UGC	Examples
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Examples of	Contemporary Example 1	Contemporary Example	Contemporary
Types of UGC		2	Example 3
Social news sharing	Digg - allows users to comment on posts and vote posts up and down, with only up votes effecting popularity	Slashdot – allows users to comment on posts and selects random moderators to distribute points. Front-page articles selected by platform designers	Reddit – allows users to comment and vote posts up and down, with both positive and negative votes impacting popularity
Video or Image Sharing	YouTube - allows video sharing. Displaces number of views, allows for comments, prominently displays posters' profile info	Flickr – allows photo sharing. Displays rating and commenting of content	4chan.com – allows image sharing. Does not have user profiles and encourages anonymous posts
Social Networking	Facebook – social networking website that requires creation of user profiles and links content through social network ties. Allows sharing of all sorts of media, rating, and commenting	Twitter – microblogging website which allows users to "follow" one another; content propagates through unidirectional network ties, primarily through "retweets"	MySpace – social networking site that requires creation of user profiles. Has strong emphasis on music
Product/ Service Reviews	Amazon – ecommerce website that enables and encourages product reviews and allows for users to rate these reviews	TripAdvisor – hospitality services review sharing website that is focused on reviews	Yelp – location- specific business services review sharing website
Crowdsourcing	Innocentive – allows a sponsor to post scientific and technical problems that public participants solve for a monetary prize. Participants compete for a handful of prizes and the sponsor picks the winner	Dell Ideastorm – allows a community of Dell technology users to propose new features and services to Dell. Ideas are rated by other consumers and by Dell employees who participate online.	Wikipedia - allows users to write and edit encyclopedia articles. Specially selected editors pick which edits stay or go