Co-creation and Participation as a Means of Innovation in New Media: An Analysis of Creativity in the Photographic Field

GEMMA SAN CORNELIO[12]
Universitat Oberta de Catalunya

EDGAR GÓMEZ CRUZ
University of Leeds

This study endeavors to shed some light on the notion of co-creation in the global context of new media user participation and its relationship with innovation. First, the different discourses surrounding the notion of co-creation will be discussed, which are mainly addressed to industry-oriented projects. Alternatively, a nondirected case study focused on digital photography will be presented, enabling an analysis of co-creation through the lens of the theories of creativity. Consequently, through connecting creativity with our fieldwork, we suggest that the transformation of a cultural field by means of co-creation can lead to innovations that affect the entire field.

Characterizing Social and Cultural Production in New Media

The global phenomenon of participation in digital culture has been extensively discussed and theorized in recent years. A very simple way to summarize the various discourses surrounding this fact is to use the warfare metaphor: Users (or consumers) are pitted against companies. In this space of tensions and convergence, the narratives of the triumph of the multitudes have emerged, highlighting their empowerment with respect to the traditional media and cultural industries that dominated the previous scenario (Jenkins, 2006). Concepts such as prosumer or viewser represent the hybrid nature of users today. Moreover, the success stories behind some amateur or self-produced media (Ardèvol & San Cornelio, 2007; Van Dijck, 2009) have nurtured the positions that contend that new media have brought about new ways of content creation, thus sidestepping or replacing traditional roles and models of production. Although there are several critical voices with this statement, posing it as a problem of the neoliberal transformation of cultural work (Banks, 2006; Ross, 2009), it is very difficult to avoid the

Gemma San Cornelio: gsan_cornelio@uoc.edu
Edgar Gómez Cruz**:** E.Gomez@leeds.ac.uk
Date submitted: 2012–10–30

dichotomy between industry and users and to devise alternative discourses on participative processes of creation.

In this study, we explore a different path. We suggest a new approach for the social production of new media by combining the theories of creativity and co-creation with ethnographic fieldwork carried out by a group of amateur photographers in Barcelona. This way, we attempt to understand creative practices of new media as a less goal-oriented co-creation process than in mainstream approaches. In several studies we conducted, we observed that the divisions between industry, infrastructures, users, and content are more fuzzy and chaotic than previously stated. Therefore, an alternative framework is proposed to study processes of co-creation and creativity in media practices.

The article is organized as follows: The first part of the article involves an overview of the main approaches to co-creation focusing on three key elements: (a) creativity, (b) participation, and (c) motivations. We show how these elements have tended to focus on the industry-user relationship and how the final product of co-creation is accomplished. Using examples from our fieldwork, we propose focusing on processes and context instead. The second part of the article develops a nondirective analysis of co-creation in the field of photography using our fieldwork as the foundation. Finally, our conclusions provide some elements for the construction of an alternative analytical framework for co-creation.

User-Industry Relationship in New Media Cultural Production and Co-creation

In the context of new media production, the relationship between users and industries is twofold. On the one hand, any consumer can easily become a producer and, hence, audiences have the power to influence not only their favorite cultural products (movies or videogames, for instance) but also the reputation of such products, franchises, or even entire brands and companies. On the other hand, even if some major companies underestimate the value and influence of these practices, as Deuze (2008) has pointed out, they occasionally take advantage of the social production (Benkler, 2006) in relation to their products and sometimes there is an appropriation of participatory culture (Jenkins, 2006) to increase their profits. For example, some video game companies have strong communities that produce feedback on their games and also generate *mods* (modifications) or pieces of software that improve the quality of their products. In many cases, this collaboration is unpaid (often the participants agree to do it that way), and, for that reason, it can be considered in the framework of free labor or immaterial labor (Lazzarato 1996; Ross, 2009). Paradoxically, these initially "liberating" experiences would nevertheless contribute to adding a certain degree of insecurity to current cultural work, which is characterized as being self-disciplined, flexible, and precarious (Banks, 2006; Gill, 2007; Hesmondhalgh, 2010). This approach to the phenomenon unveils the labor aspects that emerge when social production collides—or collaborate—with corporate conventional media production.

An alternative viewpoint is provided by Lobato, Thomas, and Hunter (2011), who see user-generated content (UGC) not as being in opposition to producer media (made by media industries) or as a

hybridized form that combines with it, but instead see UGC in relation to the concept of informality in media production, distribution, and consumption (p. 890). They define informal media systems as those that fall outside the purview of state policy, regulation, taxation, and dimension. Thus, informal media would include DIY publishing, video, photography, and many other forms of amateur production and distribution activities, such as family photography. The interesting aspect about this conceptualization is that it implies that UGC moves back and forth between formality and informality over time and that the different components of specific UGC platforms and content exhibit differing degrees of formality at any one time. These formal/informal components are then intrinsic to many cultural practices, as illustrated with the example of photography (Lobato et al., 2011, p. 894). Moreover, the field of UGC would also be engaged with and reliant upon a variety of industrial and institutional media systems and governmental policies. Consequently, to pose the question from the side of users or from the side of companies is not sufficient to see the impact and interrelations of user/consumer practices within the cultural industries. This space of relationships, understood as a context to observe creative processes, is what we will try to develop in the subsequent sections.

The research on participation and collaboration of users in new media has recently evolved to the notion of co-creation, which is commonly used to name participative forms of creation and production that involve industries and external agents including audiences, fans, amateurs, or independent artists. The initial understanding of the idea comes from industry (Prahalad & Ramaswamy, 2004), and ultimately the term has become a buzzword in business arenas, gaining traction as a potential source for value creation and innovation in different areas, for example, product design (Sanders & Simons, 2009). Further, the term continues to be used in the cultural and creative industries (Banks & Potts, 2010). However, the term has been expanded to other contexts, and other authors have introduced nuances to the phenomenon. This connection will be developed in this article, contrasting and connecting previous studies with our own research.

In our recent trajectory, our work on creative practices and participation in new media through several case studies has been focused on collaborative filmmaking, a modding community, a digital photography community, or artists participating in innovation programs, to name but a few. Through the lens of the theories of practices (Knorr-Cetina, 2001; Schatzki, 1996; Warde, 2005) and qualitative approach, we have analyzed different key aspects of these practices, such as motivations and labor and professional issues. Considering this background, we will be discussing the conceptualization of co-creation according to current literature on the topic and eventually focusing on the case of a community of photographers. The 18-month ethnographic fieldwork with amateur photographers in Barcelona helps us to understand how a cultural field (Bourdieu, 1984, 1996) could be changed with a less clear division between industry and users. The analyzed group, organized through several social network sites and created in Flickr, presents some interesting examples to discuss co-creation practices ultimately capable of transforming, creating and supporting companies but neither directly related or controlled, nor formally involved in the process.

Deconstructing Co-creation

Co-creation in the Framework of Creativity

Co-creation is a very fashionable term that has been applied to rather different initiatives; co-creation is sometimes considered as a trend oriented to social or collective achievements, but at other times it is viewed as an opportunity for companies to meet the needs of their customers through working with them**.** These approaches are related to the first part of the concept, "co" (doing with others); nevertheless, the aspect of "creation" has not been at the core of the debates on such projects. Consequently, we would like to address the question of how co-creation can be analyzed as a form of creativity.

Our point is that understanding co-creation in the framework of creativity involves, in the first place, that the term *cocreate* is a way to create. Following the definition of creativity, it means to produce intentionally valuable novelties (Amabile, 1983; Marina & Marina, 2013). In this sense, not only should the new creations be original but they also should have an essential quality, for instance, efficiency, beauty, grace, usefulness (Marina & Marina, 2013, p. 12). Even though the more visible aspect of creativity is the outcome (what is created), this is not the only dimension of the phenomenon. In fact, the definition of creativity by Rhodes (1961) describes four dimensions that are summarized in the four p's: person, process, product, and press.[3] These aspects are normally dealt with separately at both a theoretical and a practical level.

Taking into account this statement, the approaches to participation in new media expressed in the previous section only deal with two dimensions of creativity: first, the notion of UGC focuses on content (i.e., the product), and second, the notions of *prosumer*, *viewser*, and the like only focus on the subjects ("persons"), both users and companies creating media products. As a result, they address a part of the phenomenon, and some questions—the creative process and the context of creativity—are not being considered. In contrast, we would like to place emphasis precisely on the other two aspects: process and context.

Then, the notion of co-creation is referred to as a process of creation with at least two agents involved. This definition may include different combinations: users working together collaboratively, users participating in industrial projects, and industries collaborating with them. The last option—commonly known as coproduction—is not considered in most of the literature reviewed and falls outside the scope of this study.

Involving public users in cultural production has a long-standing history in different fields from contemporary art to literature or journalism with differing levels of engagement, from more cognitive to more hands-on. In fact, the suggestion that creativity is not only something that happens individually is not new; most contemporary theories of creativity in their different approaches demystify the notion of

---

[3] *Press* refers to the creative environment or the press surrounding the process of creation.

the creative individual genius (Amabile, 1983; Robinson, 2011; Csikszentmihalyi, 1996). Moreover, in other disciplines such as art history, education, cultural studies, and cultural psychology,[4] the understanding of creativity is also beyond the notions of work and author (Burgess, 2007; Peters, 2009); it is located in the social context as a space of interrelationships (Glăveanu, 2010).

Taking this into account, the "co" in "co-creation" is understood as an emphatic point to the relational dimension of creation rather than a completely new concept. Hence, "co" mainly refers to the collective, although sometimes it is understood in a wider form, connecting with the notions of commons, collaboration, or consumers. For some authors, co-creation is present in collaborative platforms or Web 2.0 sharing communities (Bauwens, 2009; Sanders & Simons, 2009). For others, co-creation is exemplified in some formal agreements between expert users and industries—for instance, communities of modders in the video game industry (Banks & Potts, 2010; Kücklich, 2005). It is also considered the result of different actions on a media product (like fan subbing) made up of different consumers (Barra, 2009). More generally, the term co-creation is used to describe the phenomenon of consumers who are increasingly participating in the process of making and circulating media content and experiences (Banks & Deuze, 2009).

In this regard, the initial classification of co-creation made by Zwass (2010) of "autonomous co-creation" (co-creation originated from consumers, such as Wikipedia or open source software) and "sponsored co-creation" (co-creation directed by a company) (Zwass, 2010, p. 11) is useful in so far as it describes who can initiate a process of co-creation (and, therefore, who has control of it): consumers or companies. Both Bauwens (2009) and Zwass (2010) (in the cultural and the commercial perspective, respectively) establish useful taxonomies explaining the many types of existing co-creative situations, although they do not delve into the complexities of the practice. In order to deal with the different aspects of co-creation, and following the literature review on co-creation and our empirical research, we will focus on three key elements: power/control, participation, and motivations.

Power, Control, and Acknowledgment

Despite the different nuances present in the previous definitions of co-creation, there is an implicit or explicit relationship in all projects between corporations (whether they are part of the

---

[4] Taking as a reference art history, and the Romantic conception of creativity Peters (2009) suggests that creativity is based on the dissolution and deconstruction of the concept of work and author. According to Burgess, the construction of creativity in cultural studies has long been rejected on the basis that it reifies cultural production as the magical result of the mind of a creator (Burgess 2007, p. 36). In the area of cultural psychology, Glăveanu (2010) identified three paradigms in creativity theory and research: the He-paradigm, which focuses on the solitary genius, followed (mainly after the 1950s) by the I-paradigm, which was equally individualistic in nature but attributes creativity to each and every individual, and, finally, the We-paradigm, which incorporates what became known as the social psychology of creativity.

production process or just a platform or context to develop the products) and external collaborators (irrespective of the number or if they collaborate with each other). This is quite obvious in sponsored co-creation but not so evident in autonomous co-creation.

In this regard, it is essential to bear in mind how co-creation is managed in terms of establishing the rules of participation, the space for negotiation, and the ownership of the results. Such issues are so crucial that the success or failure of co-creation initiatives depend on a process of negotiation between both parts in a sense that "one must look at the polarities of power and control that determine the context in which the co-creative processes take place" (Bauwens, 2009). In fact, the balance between power and control over creative development and more especially over the results is fundamental, as we concluded in our research on the Moviestorm modders' community (San Cornelio, Roig, Sánchez-Navarro, & Ardèvol, 2013). Moviestorm, which is virtual moviemaking software, initially established some implicit rules of co-creation with the modders; among these rules was the right of modders to manage and control their own mods. However, when the company introduced a change in the business model that affected this freedom, there was a conflict. Analyzing the discussion generated around this problem allowed us to understand that the key issue for modders was to keep control over their products (no matter whether they wanted to monetize the mods or to distribute them freely among the community). Otherwise, these dedicated creative users interpreted that they had become surrogate co-creators (Roig, San Cornelio, Sánchez-Navarro & Ardèvol, 2013). After a period of discussion, modders and company managers reached an agreement that satisfied both parts, which allowed modders to regain control over their creations.

It is, therefore, essential to take into account how this relationship is shaped—more or less formally—in terms of authority and results and in terms of personal sensibilities, trying to find a balanced point between the two implicated parts. In other words, it is crucial to pay attention to "how the participants themselves (both professional and non-professional, commercial and non-commercial) negotiate and navigate the meanings and possibilities of these emerging co-creative relationships for their mutual benefit" (Banks & Deuze, 2009, p. 419). In this sense, as in the case of digital photography that we will present later, it is interesting to observe that this aspect is precisely what makes Flickr relevant as a cocreative space: the coexistence of different photographic practices that clash and merge with each other (some professional, others amateur, historical, etc.). In this regard, the tensions and negotiations are located not only between the company and the users but also between the different types of co-creators involved in the process. This is important to notice since these invisible struggles are also part of the field's constitution.

Relevance and Significance of Participation

Since co-creation has become a popular term, it is sometimes applied to any project or situation where a group of people participate through giving their opinions. For instance, Zwass (2010) includes testing products in his taxonomy of co-creation while Bauwens (2009) draws up a scale of co-creation possibilities partly based on the level of user participation in cultural products and platforms. Another example of scaling participation in co-creation is the pyramid of participation elaborated by Literat (2012)

in relation to crowdsourced art projects (which are a specific case of co-creation) (p. 2976). Subsequently, the level of participation has, in our view, a direct relationship with the impact of users in co-creation: The greater the implication of users, the greater the impact they have on the process and results. In this respect, testing products or other evaluation activities would not be sufficiently relevant to be considered co-creation. In other words, users are not really creating, but they are contributing to add some insight, once the product has been designed, which, for instance, is substantially different from participating in the conceptualization or preproduction of a cultural product. In this regard, the definition from Banks and Potts (2010) captures this idea identifying co-creative media: "when a non-trivial component of the design, development, production, marketing and distribution of media proceeds through the direct involvement of consumers or users" (p. 254). Put differently, referring to the participation model of Carpentier (2011, p. 225), co-creation could be considered as a maximalist exponent, where the (often participatory) production process is an intrinsic part of the organization. In this sense, platforms like YouTube or Flickr would be clear examples since they are based on public content production.

A high level of participation and the relevance of the users' contribution are, then, key factors in co-creation, as has been demonstrated in the cases of modders in the video game industries (capable of changing or reorienting games) or in the example of photographers, whose creative practices are capable of introducing changes to devices, platforms, or markets.

Motivations

Another focus of the research in co-creation projects is the motivations of users and companies. Motivations, in most of the scientific literature coming from psychology, are classified as extrinsic or intrinsic. On the one hand, extrinsic motivations are those external to the individual, and they are expressed in economic terms or through social recognition. On the other hand, intrinsic motivations as those connected to personal drives—as altruism or self-reward—or to the pleasures of doing an activity (Janzik & Herstatt, 2008). This distinction is problematic when applied to co-creation research, as it tends to simplify motivations in two types: monetization or for art's sake. Banks & Potts (2010) synthesize these motivations similarly as market or cultural motivations, although for them they are not exclusive. Avoiding such a separation, Zwass establishes a catalog of users' motivations that range from "altruistic desire to contribute" (or "passion") to "financial rewards" (including "acquiring social capital and peer recognition," among others) (Zwass, 2011, p. 19).

Conversely, our understanding of motivations does not come from a psychological point of view but from a social constructionist perspective formulated by the theories of practice. That means that motivations are not only defined with respect to a person (thus positioning external and internal issues) but also embedded in the practice itself. This understanding allows us to approach motivations without an initial distinction (intrinsic/extrinsic), and, actually, our experience points to a multifaceted nature of motivations for users to become involved in cultural production. For instance, the results of our research show that motivation is sometimes the proficiency in the practice itself or the admiration of peers. Moreover, we suggest that motivations can change over time. Our research on photography (Gómez Cruz,

& Ardèvol, 2013) reveals that some practices are actually the result of the continuation of previous ones For example, mountain trailers became interested in photography to capture and share what catches their eye, or plane-spotters turned into photographers. They are the result of the evolution of motivations embedded in practice, in this case, photography.

Approaches to Co-creation

For Banks and Potts (2010), the main academic approaches to the phenomenon of co-creation are divided into either cultural or economic perspectives. Consequently, they propose a third alternative model that seeks to integrate both market exchange and cultural production explanations at the same time. This theory is defined as a "co-evolutionary analytic model" in which economic and cultural factors are conceptualized in a dynamic open relationship (Banks & Potts, 2010, p. 260). For Banks and Potts, the intersection and coevolution of these two economies (the social/affective and the business) would produce not outright exploitation of unpaid labor by capital but a terrain of negotiation and power relations quite different from those of the industrial era production as Banks and Humphreys (2008, p. 402) state, whereas the coevolutionary model proposed by Banks and Potts involves an alternative to both economic/cultural approaches. Nevertheless, the conceptualization of co-creation as a "social network market" has some hitches: First, it is a kind of protomarket environment (in their words, "immature market") that has to evolve, so we do not yet know how this business model will take shape and what the labor conditions would be. Second, it can be interpreted that such an evolution is related—in part—to the professionalization of some consumer co-creators that will become part of the industry. In this regard, we agree with Lobato et al. (2011) on the point that informal economies (in relation to affective ones) are not necessarily predetermined to become formal economies. In other words, affective economies would not automatically become market economies; rather, they would both coexist. As our fieldwork demonstrates, new roles are emerging that are not substituting for the current ones.

Interestingly, at an empirical level, the studies on co-creation have mainly focused on projects where industries are in a way running the process of co-creation, thus directing their relationship with users to innovation (what Zwass denominates as sponsored co-creation)—for instance, Banks & Potts' (2010) and Kücklich's (2005) studies on modders in the video game industry, or Pagès, San Cornelio's, and Roig's (2010) case study of artists participating in programs to produce specific interventions in industries. That is presumably related to the fact that this is the kind of co-creation model promoted in business and management contexts (Füller, 2010) for designing products through processes of open innovation. However, what kind of co-creation is produced for sites like YouTube, Flickr, and others? What is the managing role of companies in the cases where there is no explicit (co-creation) agreement with users? The changes in the terms of use of Instagram in 2013 could be a paradigmatic example of the clashes between the interests of users and companies and understanding of the content. In these cases, there is no straightforward way to identify the impact of the actions carried out by users, not only on the products but also on the companies (the one involved or any other derivatives) or markets in terms of innovation. But changes and innovation happen, as we will show in the following section.

All in all, according to the literature review and our previous research, co-creation can be understood as a collective way to create, in which both industries and external creators (be them named as publics, users, fans, prosumers) come into play in a meaningful way. Consequently, it is necessary to devise a complex look at the context and process of creativity, focusing on the agents involved, their power relations, their motivations, and their mutual benefits. In this regard, even if some current approaches to co-creation show some compelling angles on co-creation, they would not entirely explain the phenomenon. At an empirical level, the approach to specific projects and results would only show the tip of the iceberg for more profound changes that are transforming cultural practices in new media.

In consequence, we suggest moving to a wider perspective of cultural production using the notion of field by Bourdieu (1984, 1996) and the theories of creativity as a framework. This argument is further developed by taking as an example our research findings on digital photography. This case is particularly interesting since it constitutes a nondirected way to cocreate, in a sense that there is not an explicit agreement with users and companies, and consequently there is no initial objective to be achieved.

The Photographic Field: A Critical Nondirective Approach to Co-creation

Creativity and the Photographic Field

In the context of research on creativity, some contemporary authors distinguish two types of creativity: Marina and Marina (2013) referred to general creativity present in our everyday acts and to a more particular creativity that occurs in specific fields of activity.[5] In general creativity, we find original ways to solve problems that occur quite often; whereas, in specific creativity, the changes introduced have a more profound impact in the field and do not happen as easily. Therefore, the notion of field is of particular importance in this approach as far as it is necessary to have a certain degree of knowledge or experience in order to be creative and innovate in a specific field. Here, the notion of field could be understood in a more general sense, but we will refer to the notion of field by Bourdieu (1984, 1996), which is defined as a setting in which agents and their social positions are located. The position of each particular agent in the field is a result of the interaction between the specific rules of the field, the agent's habitus, and the agent's capital (social, economic, and cultural). In Bourdieu's work, a field is a system of social positions structured internally in terms of power relationships. More specifically, a field is a social arena of struggle over the appropriation of certain kinds of capital—capital being whatever is taken as significant for social agents. And although the fields interact with each other and are hierarchical (most are subordinate to the larger field of power and class relations), they constitute within themselves and their capitals.

In this framework, co-creation could be regarded as a set of nondirected creative practices, produced collectively and fostering alternative circuits of interchange (symbols, knowledge, tools) and

---

[5] Other similar distinctions are: Everyday creativity and Sunday creativity, elaborated by Pekhonen, in mathematics, or Possibilistic and Probabilistic creativity defined by Boden.

eventually introducing innovation and changes within a field—in this case, the photographic one. Changes in the photographic field are due to more than the emergence of new actors that possess different capitals and meanings. The transformation of photography was caused by not only the change in tools and devices needed to produce images (from a light/chemical to light/digital processes) but also because new actors that had no previous participation in the field (new companies of cameras along with memory sticks, computer software, computers, printing services, etc.) gained presence and capital. Further, practitioners of photography could transform, with their practices, some of the formal and stable arrangements within the field, and these subtle changes are capable of transforming the entire configuration of the practice itself and therefore the field as a whole. Innovation and creativity, in this sense, could be seen not only as the result of the direct collaboration between industries and users but as an output of different changes and struggles within the field.

If the analysis of the photographic field in Bourdievan terms provides the framework to understand the changes previously described, in order to deal with creativity and innovation, additional theoretical frameworks are worthy of note. In this sense, the case of digital photography allows the connection of Bourdieu's concept of field with Csikszentmihalyi's understanding of creativity. Csikszentmihalyi (1996) describes creativity as the result of the interaction of a system composed of three subsystems that are necessary so that an idea, product, or creative discovery can take place. For him, creativity is the result of the interaction between the domain, the field, and the person.

First, the notion of domain, defined as a set of symbolic rules and behaviors (Csikszentmihalyi, 1996, p. 36), evoke partially to the notion of field by Bourdieu, and so, photography would constitute a domain in Csikszentmihalyi's terms, like painting, mathematics, or other sciences.

The second subsystem is the field, which includes all the individuals who act as gatekeepers to the domain. It is important to note here that we will use the concept of field in the Bourdievan sense; is merely coincidental that Csikszentmihalyi uses the same word. In order not to confuse both terms, Csikszentmihalyi's field will be referred to as "gatekeepers," whose function is to restrict the entry of innovations in the field. In this regard, gatekeepers would be actors with a lot of capital within the field (in Bourdievan terms), and creative persons, in a sense, are forced to convince them of the value of their ideas. At the same time, gatekeepers can be either reactive or proactive by stimulating novelty or not (Csikszentmihalyi, 1996, p. 52) in such a way that it is possible to wreck a domain either by starving it of novelty or by accepting too much unassimilated novelty (Csikszentmihalyi, 1996, p. 53).

Third, the notion of person corresponds to someone whose thoughts or actions changes a domain or establishes a new domain (Csikszentmihalyi, 1996, p. 38). According to Csikszentmihalyi, the trait of personal creativity may help generate the novelty that will change a domain, but it is neither a sufficient nor necessary condition for it (p. 38). For Csikszentmihalyi, believing that creativity is either embedded in individual genius or just a result of the social consensus is an oversimplification (p. 56). This clearly refers to the concept of Habitus by Bourdieu. Mainly, we are concerned with how people, while interacting with each other and constantly producing media content, can cocreate without posing co-creation as a goal.

In summary, our point is that creativity, in a nondirective way and as a result of new practices within a specific field, could lead to co-creations that ultimately can transform the field itself.

Transformations in the Photographic Field through Co-creation

Professionals/Amateurs and Photographic New Market Circuits

One of the main borderlines within the photographic field was the dichotomy between professionals and amateurs. This separation was historically constructed (cf. Jenkins, 1975) and has to do with instruments (cameras, films, lenses), meanings (artistic photography, photojournalism, snapshot), institutions (associations, museums, journals) and circuits (galleries, press and photo albums). It took some time to be shaped, but for many years the position and institutionalization within the field was clear: museums, galleries, and journals for artistic photography published in newspapers or magazines that were taken by photojournalists and photo albums and shoeboxes for amateur snapshots. In other words, professional photography was in the public sphere, while that of amateur remained mainly in the private sphere. With the emergence of digital technology, new photographic practices, instruments, circuits, meanings, and institutions were shaped, while at the same time, the old ones seemed to be challenged (or, like in the case of Kodak, completely defeated). This reorganization of the sociotechnical networks needed to produce, process, and distribute photographs have led to innovations and nondriven forms of collaboration and co-creation that are less directed and spontaneous but that have also changed the previous divisions within the field, specifically the professional/amateur division.

Several examples from the fieldwork (see Figures 1 and 2) showed us that the professional performance was based on the use of advanced technologies but also had to do with access to specific circuits and meanings controlled by certain institutions (gatekeepers). With digital photography practices emerging and the spread of these practices to a wider audience, not only are new institutions forming and consolidating but they are also challenging the former ones. The number of practitioners is increasing, and the number of photos is growing exponentially. Digital cameras and social network sites reinforce each other. Thus, people tend to photograph more because they have a place to show those images, and because they want to share their everyday life in social networks, they photograph more (Cohen, 2005). With this constant photographic view, people increase not only the number of photographic objects, but in many cases change them from a memory of family moments to the banal of everyday life (Burgess, 2007; Okabe & Ito, 2003; Van House, 2009). With the increase of practicing, the speed of learning processes, and mostly through socialization of the practice within groups (photowalks, events, and photo contests), a new and emergent mass of "photographers" have succeeded in selling photos, gaining presence, becoming experts—even though they are not necessarily professionals.

Figure 1. Fieldwork images. Photographer shooting at dawn with professional equipment.

As Rubinstein and Sluis (2008) propose, "The little screen at the back of a digital camera has made it possible to see intuitively as the lens/camera sees without years of training, dramatically narrowing the gap between the professional photographer and the amateur one" (p. 13). Therefore, companies like Flickr or Yahoo coproduced and were shaped by the energy of these practitioners. And while Flickr offered a platform to share, exhibit, and exchange images, it also indirectly became a platform for knowledge exchange and success based on performance and self-marketing, breaking what was traditionally in the closed realm of professional photography. Cobley and Haeffner (2009) point to this when they affirm that:

> The "domestic" component of this phenomenon has been crucial, because it not only
> entails a mass market but it also puts into the hands of some members of the public a
> means of imaging which was, until very recently, only in the hands of industry and which
> thus contributed to an imbalance of power in the economy of signs. (pp. 124–125)

Photographers share, exchange, and sell, and sometimes are even able to create small markets based on their gained expertise and experience, marketing their photographic performance online. For example, one of the interviewees recounts:

> I did some photos for a friend of a new floor that was installed in a gym. Obviously they don't have the quality of a professional, firstly, because I'm not a professional and, secondly, because my equipment isn't either. But, what my friend wanted was some decent photos to show to her clients and upload them to the web, and she was not going to pay a professional job that would cost at least 300−400 euros. I think I'm going to charge her 100 euros (we still haven't talked about prices), and in return, she will have 80 correctly taken photos, although with more fuss than a pro, less sharp, and not with the best illumination.

If photography can be regarded as a field in the Bourdievan sense, all these transformations would reconfigure the field, but at the same time, the transformations could be explained as innovations in the Csikszentmihalyian sense as a change in the symbolic domain. For instance, the blurring of limits between professionals and amateurs and the emergence of new semiprofessionals is a consequence of change in the historical division of the field. According to Csikszentmihalyi (1996), the more structured a domain is, the easier it is for creativity to emerge and to identify innovation in such a field (pp. 58−59). In this sense, the sum of actions of the practitioners of photography, with their technological devices, has made an impact and brought about innovation in this domain.

On the other hand, these transformations demonstrate that the notion of domain becomes very porous in the new media context, moving from the traditional and constituted media fields (e.g., photography, cinema, TV, or the Internet) to a more unstable, unstructured, and changing field. In this respect, innovations in the case of photography cannot be separated from the interaction with other fields (such as software and hardware, the Internet, or mobile phones).

Co-creation as a Knowledge Flea Market

According to our fieldwork, there seems to be a transfer from the expertise selling of professionals to a growing network of enthusiasts that acquire quality equipment. As Røpke (2009) puts it: "When new tools and materials approach previous specialist tasks within the reach of ordinary 'do-it-yourself' practitioners, more goods are bought from DIY centers for work done at home, while fewer services are bought from skilled craftsmen" (p. 2494).

With a certain touch of irony, another informant reflects on this new element of the photographic field:

> I think, we, the amateurs that sell some photos once in a while or let ourselves get roped into photographing weddings, baptisms, and communions of family members or friends cover the demand of that big gap between the very bad photos "Aunt Paquita" would do with her point and shoot camera and those taken by a professional. For most people in my circle, amateur quality is more than enough. A different issue is what happens with companies that, in my opinion, are playing with their image and prestige when buying amateur photos to save some money.

While there are some people that have become professionals through, for example, setting up a website to promote their work and finding new clients interested in low cost photographic work, the majority of informants had, at some point, been part of the emergent market that is often not remunerated but instead paid with products, exchanges, services, equipment, or goodwill (for example donating photos to be used in blogs, webpages, tour guides, etc.).

Those enthusiastic practitioners share and collaborate with each other, transferring knowledge (e.g., Photoshop or camera tricks, manuals, processes), helping and teaching each other mainly through trial and error based on constant engagement through looking and doing. While this is induced by the same social networks sites (inscribing reciprocity scripts in the system [Gómez Cruz, 2012]), the scope and possibilities are not determined or reduced by those companies. Innovation, in this sense, has to do with capturing the interest of those practitioners through, for instance, professional looking products (print on demand books, canvas, posters, cards, etc.).

Figure 2. Fieldwork images.
Photographer shooting a pair of shoes hanged on an electricity cable.

Innovation in Photographic Co-creation and the Role of the Gatekeepers

The emergence of a new market formed by low budget professionals—also known as proams or serious amateurs—and emergent companies that try to meet the demand for personalized quality products is just an example of the deep transformation happening in the field of photography. In this sense, it must be noted that innovation in the field of photography, fostered by co-creation, goes far beyond the conventional dimensions of it (product innovation, process innovation, innovation in marketing, and innovation in the organization) that are oriented to innovate in existing industries or products and not to innovate in a broader context (OECD/Statistical Office of the European Communities, 2005, pp. 156–184). More than new devices and equipment that are needed for the photographic agency (computers, digital cameras, the Internet), the changes are also between actors and photographic companies that previously did not have an important role in the photography industry (e.g., Sandisk, Sony, Apple). There are also new circuits for sharing and exhibiting photos (Flickr, Instagram), new photographic objects (the banal, everyday life), and new photographic identities (Iphoneographer, lens-based artist). These circuits do not stand out alone as innovations but are directly connected with the rest of innovations produced in the field. And although innovative companies, actors, and synergies are benefiting from these changes, these are the result of a change in practices and, in Bourdieuvian terms, in the forces that act upon the field, in this case the photographic one:

> Specific revolutions, which overthrow the power relations within a field, are only possible
> in so far as those who import new dispositions and want to impose new positions find,
> for example, support outside the field, in the new audiences whose demands they both
> express and produce. (Bourdieu, 2003, p. 98)

Returning to Csikszentmihalyi's system, gatekeepers have the function to restrict the entry of innovations in the cultural field and have the power to accept innovations or not. In the case of photography, even though the field was changing, many gatekeepers failed to recognize the importance of the changes that were taking place; Kodak is the most extreme example of it. Despite the fact that the first digital camera was created by a Kodak engineer, the company did not bet on digital technology in cameras until much later. Instead, they focused on digitization services and sharing platforms that never took off. In this sense, the role of gatekeepers is not only to verify creativity as experts but also to identify potential or actual innovations in their respective fields (Csikszentmihalyi, 1996, p. 53). The failing of Kodak could be then understood as a failure in not seeing the intimate relation of other actors interacting with digital photography.

Conclusions

In this article, we suggest an approach to co-creation that could be synthesized as a set of creative practices involving collective processes where both industries and consumers contribute in a meaningful way. These processes, which are articulated with different levels of formality, have significant results that can be potentially analyzed in terms of innovation. This idea builds on a review of the literature on co-creation, and it is also supported by our fieldwork in the specific case of digital

photography, presented as a nondirected co-creation environment that results in multiple innovations.

In order to complement the research on co-creation experiences that are initially oriented to produce value in a specific product or process (be it a movie, a game, etc.), our fieldwork reveals that innovation can have a larger scope if we introduce a systemic look, which is suggested by the notion of field. The innovations produced in the field of photography are therefore the result of the interaction between new technologies, new companies, new users, and new creative practices that have fostered the emergence of innovative products, alternative markets and hybrid professional profiles.

Furthermore, all these transformations can be regarded through the lens of creativity theories in order to identify the key elements that come into play in a creative process that could result in innovation. In this sense, the introduction of creativity theories in the approach to co-creation has some implications and limitations as well. On the one hand, it implies a change in the current discourses on co-creation regarding both the theoretical framework and the focus of the research, thus displacing the focus from the creative subjects and the resulting objects to the processes and the creative practices. It also involves enhancing the discussion beyond the dualisms of users and industries, considering the role of other actors (gatekeepers) and practices that can have an impact in the field. This move will, in turn, allow us to look at the negotiation processes, the rules of co-creation (implicit or explicit), and the motivations. On the other hand, it must be acknowledged that photography—easily identifiable as a field—makes for a relatively clear-cut case analysis (something that could be more complicated in other co-creation activities). In this sense, the idea of field would be suitable to research co-creation in other established fields, such as music, in order to make a comparison with it.

Finally, Csikszentmihalyi's vision of creativity implies a change in a symbolic system, which, in turn, will generate a change in the way of thinking and feeling of the members of the culture. In this sense, co-creation practices would be an exponent of creativity in new media and a challenge in terms of introducing different ways of thinking and analyzing creative practices. Consequently, in order to identify future and current innovations happening in co-creation practices, a broad perspective is needed, understanding that sometimes there is not an immediate result or a direct cause-effect relation between co-creation and innovation (as is usually expected in industry oriented co-creation). Moreover, in some cases, co-creation might produce very conventional or inconvenient results,[6] and in other cases, the impact of the experience in terms of innovation is not to be found in a particular product or process but in a more general philosophical framework. In conclusion, a long term and systemic perspective would allow us to see changes and innovations in unexpected places.

---

[6] The case study by Banks and Potts (2010) involving video games from the game developer Auran identified some problems resulting from leaving the creative aspects in the hands of the modder community in terms of managing problems, which increased the costs of the video game production. Nevertheless, they recognized that the cocreation experience brought about some benefits in terms of innovation. This conclusion is also present in other open innovation initiatives, such as *disonancias* (Pagès, San Cornelio & Roig, 2010)

References

Amabile, T. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45*(2), 357–376.

Ardèvol, E., & San Cornelio, G. (2007). Si quieres vernos en acción: YouTube.com Prácticas mediáticas y autoproducción en Internet [If you want to see us in action YouTube.com. Media practices and self-production on the Internet]. *Revista Chilena de Antropología Visual*, *10*(2), 1–29.

Banks, J., & Deuze, M. (2009). Co-creative labour. *International Journal of Cultural Studies*, *12*(5), 419–431. doi:10.1177/1367877909337862

Banks, J., & Humphreys, S. (2008). The labour of user co-creators emergent social network markets? *Convergence*. *14*(4), 401–418. doi:10.1177/1354856508094660

Banks, J., & Potts, J. (2010). Co-creating games: A co-evolutionary analysis. *New Media & Society, 12*(2), 253–270. doi:10.1177/1461444809343563

Banks, M. (2006). Moral economy and cultural work. *Sociology, 40*(3), 455–472. doi:10.1177/0038038506063669

Barra, L. (2009). The mediation is the message. Italian regionalization of U.S. TV series as co-creational work. *International Journal of Cultural Studies, 12*(5), 509–525. doi:10.1177/1367877909337859

Bauwens, M. (2009). The ladder of participation: The gradation of control on community/corporate polarity. *Fibreculture, 14.* Retrieved from http://fourteen.fibreculturejournal.org/fcj-097-co-creation-and-the-new-industrial-paradigm-of-peer-production

Benkler, Y. (2006). *The wealth of networks*. New Haven, CT: Yale University Press.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. London, UK: Routledge.

Bourdieu, P. (1996). *Photography: A middle-brow art*. Stanford, CA: Stanford University Press.

Bourdieu, P. (2003). But who created the creators? In J. Tanner (Ed.)*, The sociology of art: A reader* (pp. 96–104). London, UK: Routledge

Burgess, J. E. (2007). *Vernacular creativity and new media* (Doctoral thesis) University of Technology, Queensland, Australia.

Carpentier, N. (Ed.). (2011)*. Media and participation: A site of ideological-democratic struggle*. Chicago, IL: Intellect Books.

Cobley, P., & Haeffner, N. (2009). Digital cameras and domestic photography. *Visual Communication*, *8*(2), 123–146.

Cohen, K. (2005). What does the photoblog want? *Media, Culture & Society*, *27*(6), 883–901. doi:10.1177/0163443705057675

Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York, NY: Harper Perennial.

Deuze, M. (2008). Corporate appropriation of participatory culture. In N. Carpentier & S. Livingstone (Eds.), *Participation and media production: Critical reflections on content creation* (pp. 27–40). Newcastle upon Tyne, UK: Cambridge Scholars Publishers.

Füller, J. (2010). Refining virtual co-creation from a consumer perspective. *California Management Review*, *52*(2), 98–123.

Gill, R. (2007). *Technobohemians or the new cybertariat? New media work in Amsterdam a decade after the web* (Network notebooks). Amsterdam, Netherlands: Institute of Network Cultures. Retrieved from http://www.networkcultures.org/_uploads/17.pdf

Glăveanu, V. P. (2010). Paradigms in the study of creativity: Introducing the perspective of cultural psychology. *New Ideas in Psychology*, *28*(1), 79–93.

Gómez Cruz, E. (2012). *De la cultura Kodak a la imagen en red. Una etnografía sobre fotografía digital* [From the Kodak culture to the networked image. An ethnography on digital photography]. Barcelona, Spain: Editorial UOC.

Gómez Cruz, E., & Ardèvol, E. (2013). Performing photography practices in everyday life. Some ethnographic notes on a Flickr group. *Photographies*, *6*(1), 35–44. doi:10.1080/17540763.2013.788836

Hesmondhalgh, D. (2010). User-generated content, free labour and the cultural industries. *Ephemera. Theory & Politics in Organization, 10*(3/4), 267–284. Retrieved from http://www.ephemerajournal.org/contribution/user-generated-content-free-labour-and-cultural-industries

Janzik L., & Herstatt C. (2008). Innovation communities: Motivations and incentives for community members to contribute. 4th IEEE International Conference on Management of Innovation and Technology. pp. 350–355 Retrieved from http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4654389 doi:10.1109/ICMIT.2008.4654389

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York, NY: New York University Press.

Jenkins, R. (1975). Technology and the market: Georges Eastman and the origins of mass amateur photography. *Technology and Culture*. *16*(1), 1–19.

Knorr-Cetina, K. (2001). Objectual practice. In T. R. Schatzki, K. Knorr-Cetina, & E. Von Savingy (Eds.), *The practice turn in contemporary theory* (pp. 175–188). London, UK: Routledge.

Kücklich, J. (2005). Precarious playbour: Modders and the digital games industry. *Fibreculture, 5*. Retrieved from http://journal.fibreculture.org/issue5/kucklich.html

Lazzarato, M. (1996). Immaterial labor. In P. Virno & M. Hardt (Eds*.*), *Radical thought in Italy: A potential politics* (pp. 133–147). Minneapolis, MN: University of Minnesota Press.

Literat, I. (2012). The work of art in the age of mediated participation: Crowdsourced art and collective creativity*. International Journal of Communication, 6*, 2962–2984. Retrieved from http://ijoc.org/index.php/ijoc/article/view/1531/835

Lobato, R., Thomas, J., & Hunter, D. (2011). Histories of user-generated content: Between formal and informal media economies. *International Journal of Communication, 5*, 899–914. Retrieved from http://ijoc.org/index.php/ijoc/article/view/981

Marina, J. A., & Marina, E. (2013). El aprendizaje de la creatividad [The learning of creativity]. Barcelona, Spain: Ariel.

OECD/Statistical Office of the European Communities, Luxembourg. (2005). *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (3rd e*d*.).* Paris, France: OECD Publishing. doi:10.1787/9789264013100-en

Okabe, D., & Ito, M. (2003). Camera phones changing the definition of picture-worthy. *Japan Media Review*, *29*. Retrieved from www.douri.sh/classes/ics234cw04/ito3.pdf

Pagès, R., San Cornelio, G., & Roig, A. (2010) Relaciones entre creadores e industria: El caso de los mediadores [Relations between creators and industries: The case of mediators]. In G. San Cornelio (Ed.), *Exploraciones creativas. Prácticas artísticas y culturales de los nuevos medios* [Creative explorations. Art and cultural practices of new media] (pp. 221–248). Barcelona, Spain: Editorial UOC.

Peters, M. A. (2009) Education, creativity and the economy of passions: New forms of educational capitalism. *Thesis Eleven, 96(1)*, 40-63.

Prahalad, C. K., & Ramaswamy, V. (2004). *The future of competition*. Boston, MA: Harvard Business School Press.

Rhodes, M. (1961). An analysis of creativity. *Phi Delta Kappan*, *42*(7), 305–310.

Robinson, K. (2011). *Out of our minds: Learning to be creative*. Mankato, MI: Capstone.

Roig, A., San Cornelio, G., Sánchez-Navarro, J., & Ardèvol, E. (2013). "The fruits of my own labour": A case study on clashing models of co-creativity in the new media landscape. *International Journal of Cultural Studies (15)*. doi:10.1177/1367877913503828

Røpke, I. (2009). Theories of practice—New inspiration for ecological economic studies on consumption. *Ecological Economics*, *68*(10), 2490–2497.

Ross, A. (2009). *Nice work if you can get it: Life and labor in precarious times*. New York, NY: New York University Press.

Rubinstein, D., & Sluis, K. (2008). A life more photographic. *Photographies*, *1*(1), 9–28.

San Cornelio, G., Roig, A., Sánchez-Navarro, J., & Ardèvol, E. (2013). El modding como práctica de co-creación: estudio del caso de Moviestorm. [Modding as co-creation practice: The case of Moviestorm]. In K. Zilles, J. Cuenca, & J. Rom (Eds.), *Breaking the media value change VII international conference on media and reality* (pp. 255–263). Barcelona, Spain: Facultat de Comunicació Blanquerna.

Sanders, L., & Simons, G. (2009, December). A social vision for value co-creation in design. *Technology Information Management Review.* Retrieved from http://timreview.ca/article/310

Schatzki, T. (1996). *Social practices: A Wittgensteinian approach to human activity and the social.* Cambridge, UK*:* Cambridge University Press.

Van Dijck, J. (2009). Users like you? Theorizing agency in user-generated content. *Media Culture & Society, 31*(1), 41−48. doi:10.1177/0163443708098245

Van House, N. A. (2009). Collocated photo sharing, story-telling, and the performance of self. *International Journal of Human-Computer Studies*, *67*, 1073–1086.

Warde, A. (2005). Consumption and theories of practice. *Journal of Consumer Culture, 5*(2), 131–153.

Zwass, V. (2010). Co-creation: Toward a taxonomy and an integrated research perspective. *International Journal of Electronic Commerce*, *15*(1), 11–48. doi:10.2753/JEC1086-4415150101