Motivation Factors in Crowdsourced Journalism:
Social Impact, Social Change, and Peer Learning

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This article examines participants' motivation factors to contribute to crowdsourced journalism. Drawing on interviews from cases in which professional journalists used crowdsourcing as a knowledge-search method, the article shows the primary motivation factors are intrinsic, altruistic, and ideological. By sharing information, the crowd wants to contribute to social change and mitigate power and knowledge asymmetries, thus empowering their peers and creating a more informed citizenry. Peer learning and deliberation also drive participation. Participants don't expect tangible rewards like money; instead, they want to contribute to a better society, and crowdsourced journalism becomes a medium for social change and grassroots advocacy. These motivation factors resemble some of those driving Wikipedia creation. The idea of a more equitable society, created by collective knowledge sharing, also drives the participation in crowdsourced journalism.

Keywords: commons-based peer production, crowdsourcing, crowdsourced journalism, digital journalism, motivation factors, open journalism, open knowledge, participatory journalism

Introduction

In recent years, crowdsourcing has become a more common knowledge-search method among professional journalists (Aitamurto, 2015; Bradshaw & Brightwell, 2012; Dailey & Starbird, 2014). In crowdsourced journalism, participants contribute to journalistic processes by sharing their knowledge. A journalist asks the crowd to share information, and individuals submit their knowledge online. The journalist sifts through the crowd's contributions and decides how to use the input in an article.

There is a growing body of literature on the drivers for participation in crowdsourcing in several fields, including idea crowdsourcing among companies (Kosonen, Gan, Olander, & Blomqvist, 2013), and paid crowdsourced microtasking (Kittur, Chi, & Suh, 2008). However, there is a lack of empirical studies about why people contribute to crowdsourced journalism. Knowing what drives the crowd helps us understand the act of participation from the participants' perspective. It also helps us in seeing what

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crowdsourced journalism means for the participants—whether it is about work or voluntary activity, for example—and thus helps design more optimal crowdsourcing processes for both the crowd and the journalists. To contribute to filling this gap, in this article I examine the participants' motivation factors in crowdsourced journalism by drawing on data from interviews with participants in crowdsourced story processes.

Theoretical Framework and Key Concepts

Crowdsourced Journalism

Crowdsourcing is an open call for anyone to participate in an online task (Brabham, 2008, 2013; Estelles-Arolas & González-Ladrón-de-Guevara, 2012; Howe, 2008) by sharing information, knowledge, or talent. Instead of relying on a few known experts or sources—like in outsourcing—crowdsourcing opens up tasks so that anybody may participate in them. The participants often remain anonymous. Therefore, the online crowd is undefined in its nature and profile. Crowdsourcing has become a popular method of engaging people in processes ranging from public policy making to new product design and solving complex scientific problems (Aitamurto, 2012; Aitamurto & Landemore 2013; 2015; Aitamurto, Holland & Hussein, 2015). Crowdsourcing can be voluntary or reward-based, and in the latter case the reward is typically money.

As a knowledge-search method, crowdsourcing has specific characteristics that differentiate it from other large-scale online collaboration architectures. The locus of power lies with the crowdsourcer, who conducts the initiative. The crowdsourcer decides when, where, and how the process takes place and how the input will be used (Brabham, 2013). In this way, crowdsourcing differs from commons-based peer production (Benkler, 2002) such as Wikipedia article creation and open source software production, in which power lies with the community and the process involves a minimal amount of hierarchy.

In crowdsourced journalism, the crowd is invited to participate in journalistic processes in various ways, by submitting knowledge, sharing opinions, or sending pictures. One well-known example of crowdsourced journalism is the British newspaper *The Guardian*'s use of crowdsourcing. The crowd was invited to examine hundreds of thousands of documents related to the 2009 expense scandal involving British politicians (Aitamurto, 2011; Daniel & Flew, 2010). Journalists in the United States used crowdsourcing for information gathering in 2011 during Hurricane Irene (Dailey & Starbird, 2014), and the British Broadcasting Company has used crowdsourcing to track the effects of public transit strikes in London. Journalists typically use crowd-generated input in their stories only after conducting normal fact-checking procedures. In some cases, however, the volume of crowd-generated input is too large to be verified, and journalists may decide to use the input regardless. This compromises the traditional journalistic norm of data verification and calls into question the accuracy of the stories (Aitamurto, 2015).

Crowdmapping is a subtype of crowdsourcing. In crowdmapping, the crowd is asked to submit information, which is situated on digital maps based on each contributor's geographic location (Furtado, Caminha, Ayres, & Santos, 2012; Liu, 2014; Meier, 2012). More recently, crowdmapping in journalism has extended to sensor-based journalism. To predict the reemergence of cicada swarms, WNYC—a public radio

station in New York—asked residents of certain areas to use sensors to track the soil temperature. The crowd-reported temperatures were displayed on a map on WNYC's website.

Crowdsourcing can be used as a knowledge-search method for both participatory and citizen journalism. In participatory journalism, readers participate in journalistic processes (Domingo et al., 2008; Singer et al., 2011) as, for example, commentators or content producers (Bruns, 2005; Holmes & Nice, 2012). In citizen journalism, people who are not professional journalists produce news and content that can be perceived as journalism (Gillmor, 2004). Citizen journalism is often defined as reporting in which ordinary people adopt the role of journalist, and citizen journalists produce articles and pictures that can appear either on independent blogs and news sites run by citizens or on established news sites (Allan, 2013; Holton, Coddington & Gil de Zuniga, 2013; Mortensen, Keshelashvili & Weir, 2015). In crowdsourcing, instead, the crowd contributes raw material to a process run by a journalist, who decides if and how to use the crowd's input in her or his story. Participation in crowdsourcing is often a quick, one-time act (Aitamurto, 2015). Citizen journalists can use crowdsourcing in their reporting, and established news sites can deploy crowdsourcing by asking citizen journalists to submit certain types of information. However, not all participatory journalism is citizen journalism, and vice versa. Nor does all participatory journalism or citizen journalism use crowdsourcing as a knowledge-search method.

So far, the research on crowdsourced and participatory journalism has focused on the journalists' perspective (Hänska-Ahy & Shapour, 2013; Singer et al., 2011). Little is known about the crowd's motivation factors for participating in crowdsourced journalism. To illuminate crowdsourcing from the participant's angle, we turn to social psychological theories to explain drivers for online participation. The focus of inquiry is on the two following questions: Why do people contribute to crowdsourced journalism? What manifestations of knowledge do the motivation factors depict?

The paper is structured in three sections. First I review key concepts related to motivation factors in social psychology, and I review empirical studies on motivation factors in crowdsourcing, commons-based peer production, and citizen journalism. In the second section, I introduce the case profiles, the data, and the methods. In the third section, I present the findings, discuss the limitations of the study, and provide an agenda for future research.

Intrinsic and Extrinsic Motivations in Self-Determination Theory

According to self-determination theory in social psychology, human motivations are either intrinsic or extrinsic (Deci & Ryan, 1985). Intrinsically motivated activities are undertaken for their own sake while extrinsically motivated activities bring direct rewards such as money or other goods (Deci & Ryan, 1985; Ryan & Deci, 2000). Intrinsic motivations include the human needs for competence and self-determination, which are linked to the emotions of interest and enjoyment (Deci & Ryan, 1985). Intrinsic motivations are divided into enjoyment-based and obligation/community-based factors (Lindenberg, 2001). In enjoyment-based intrinsic motivations, individuals are motivated by having fun or enjoying themselves (Deci & Ryan, 1985). In obligation/community-based motivated behavior, individuals are motivated by a desire to follow the norms of a group or community (Lindenberg, 2001). Extrinsic motivation "pertains whenever an activity is done in order to attain some separable outcome," such as

financial rewards, fame, or social pressure (Ryan & Deci, 2000, p. 60). For example, in free and open-source software development, the immediate payoffs for participation may include financial compensation or software (von Hippel, 2001).

Motivations to Participate in Crowdsourcing

The literature on motivation factors in voluntary-based crowdsourcing, which is crowdsourcing without pecuniary rewards, is scarce. In a crowdsourced film project, *Star Wreck*, the crowd participated because it was a fun way to pass time, and because they appreciated the chance to share knowledge and skills with others as well as the respect and recognition gained. The drivers for their participation were thus a mix of intrinsic and extrinsic factors (Lietsala & Joutsen, 2007).

When studying motivation factors for participating in a crowdsourced design contest for bus stop shelters, Brabham (2012) found the extrinsic motivations included advancing one's career, being recognized by peers, low barriers to entry, and an appealing and usable website. The intrinsic factors included expressing oneself and having fun. For two factors—contributing to a collaborative effort and acquiring new skills and knowledge—the intrinsic and extrinsic categories overlapped. In crowdsourced science projects, like Galaxy Zoo, the participants are motivated by intrinsic factors. They are driven by the enjoyment of participation, identification with the goals of the project and possibility of contributing to science, which the contributors care about as an interest, hobby, or profession (Nov, Arazy & Anderson 2011; Raddick et al., 2013).

Motivation factors for financially rewarded crowdsourcing have been examined in business contexts. Brabham (2010) found that the primary motivations for people to contribute to Threadless, an online T-shirt design company, were the opportunities it offered to make money, develop creative skills, pick up freelance work, and contribute to the Threadless community. Similarly, in a study of contributors to iStockPhoto, a crowdsourced online image market, Brabham (2008) found that the desires to make money, develop individual skills, and have fun were the strongest motivators for participation. Lakhani, Jeppesen, Lohse, & Panetta (2007) studied motivation factors at InnoCentive, a problem-solving intermediary for corporate research and development, and found that intrinsic motivators like the enjoyment of cracking a tough problem, coupled with financial rewards, had strong positive correlations with success.

Drivers of Commons-Based Peer Production

Let us examine the motivations for commons-based peer production in Wikipedia article creation and in free and open source software development. Nov (2007) studied motivation factors of Wikipedians by using Clary, Snyder and Stukas' (1998) motivational categories for volunteering—values, understanding, social, career, protective, and enhancement. The values function allows participants to express their values related to altruistic and humanitarian concerns for others by volunteering. Understanding as a function encourages new learning experiences, including self-development, exercising knowledge, and acquiring new skills and abilities. The social function reflects a concern for relationships with others, as volunteering can lead to friendships and other social connections and activities. The career

function benefits the volunteer's career, such as helping prepare for a new career or practicing skills. The protective function protects the ego from the negative features of the self, may address personal problems, and reduces guilt about being more fortunate than others. The enhancement function enhances personal development, thus serving the ego positively. By using a framework by Clary et al.(1998) framework and enhancing it by adding fun and ideology, Nov (2007) found that the primary drivers for Wikipedians were ideology and fun, followed by values and understanding as secondary drivers. *Ideology* refers to the contributor's perspective that information should be free, and *fun* refers to the enjoyment of contributing (Nov, 2007).

When studying motivations of programmers involved in open-source development, Lakhani and Wolf (2003) found that enjoyment-based intrinsic motivation—namely, how creative a person feels when working on a project—was the strongest and most pervasive driver. They also found user needs, the intellectual stimulation derived from writing code, and improvement of one's programming skills were among the top motivators. In contrast, Hars and Ou (2002) found an extrinsic motivation—career enhancement—to be the dominant driver in open-source programming.

Motivation Factors in Citizen Journalism

Citizen journalism is driven by both intrinsic and extrinsic motivation factors, which are similar to those driving commons-based peer production. The factors driving citizen journalism are enjoyment and fun, as also shown in other studies of user-generated content creators (Mortensen, Jones, & Keshelashvili, 2015; Mortensen, Keshelashvili, & Weir, 2015; Stoeckl, Rohrmeier, & Hess, 2007). Citizen journalists also want to correct the biases they perceive in the mainstream media, to advance their career by their contributions, and to practice their skills (Mortensen, Jones, & Keshelashvili, 2015). Contributing to citizen journalism has also been found to foster feelings of empowerment and enhance local connections (Robinson & Deshano, 2011).

Knowledge Perceptions and Motivation Factors

In the review of the motivation factor literature, let us turn to the wider framework of organizational research. In organizational research, knowledge practices have been defined as knowledge as an object and knowledge embedded in people (Wasko & Faraj, 2000). When knowledge is defined as an object, the knowledge is perceived to exist independently of human action. It is also a private good, which can be exchanged just as any other commodity (Davenport & Prusak, 1998).

The model of knowledge embedded in people views knowledge as being difficult to separate from human actors. This approach holds that knowledge is only meaningful and actionable to those already knowledgeable (Hansen, Nohria, & Tierney, 1999); knowledge is owned by individuals, is a private good, and can be developed and exchanged in one-to-one interactions (Wasko & Faraj, 2000). When knowledge is seen as embedded in individuals, people are more likely to exchange their knowledge for intangible returns, such as reputation and self-esteem (Constant, Kiesler, & Sproull, 1994; Jarvenpaa & Staples, 2000). Wasko and Faraj (2000) suggested the perspective of knowledge embedded in people predicts that

knowledge exchange is motivated by self-interest, but that the returns (e.g., reputation, self-efficacy, and obligation of reciprocity) are intangible.

Knowledge perceived as embedded in a community positions knowledge as a public good that is created socially and is spread in the community without losing its value or being used up (Wasko & Faraj, 2000). It is considered a public good, such that members of the community collectively contribute to its provision and all members may access it. From this perspective, the motivation for knowledge exchange is care for the community, not self-interest (von Krogh, 1998).

When studying the motivations for people to contribute to three Usenet mailing list communities in which participants shared information about programming and related subjects, Wasko and Faraj (2000) found that people participated primarily out of community interest, generalized reciprocity, and prosocial behavior. Members of the community did not expect to receive help specifically from others whom they themselves had helped; rather, their expectations for reciprocity lay in future interactions with the community (i.e., "If I have helped somebody, somebody else will help me in the future"). In another study of digital networks of practice among legal professionals, Wasko and Faraj (2005) found that contributions were motivated by a desire to enhance one's professional reputation and contingent of possessing a knowledge level high enough to share with others as well as being structurally embedded in the network.

Case Profiles, Methods, and Data

Case Profiles

This study employs a multiple case study methodology to emphasize discovery (Eisenhardt, 1989; Miles & Huberman, 1994). Four journalistic processes employing crowdsourcing were chosen as case studies through which to gain an understanding of the phenomenon (Pettigrew, 1990). The cases were chosen based on their characteristics. The four crowdsourced processes aimed to gather knowledge for articles in established publications, and the processes were driven by professional journalists. Readers were asked to submit information, share their experiences and expertise as bases for stories, and develop questions for interviewees.

Case A: Schoolbook investigation, quality in services, and gender differences in math and science education. Crowdsourcing was used in three different story processes in two magazines in Finland in 2011 and 2012. The first story examined inaccuracies in physics schoolbooks, the second story investigated quality problems in Finnish products and services, and the third story investigated gender inequalities in math and science education. These three stories are grouped together as Case A, because the same journalists worked on all three, using similar story processes.

The crowd was invited to participate in two publications' blogs, websites, and social media and on a specific platform (http://www.huuhkaja.fi) from 2011 to 2012. The journalists asked readers to identify incorrect information in schoolbooks, to share sources that could be interviewed, and to relay their experiences with problematic products and services. The journalists published several updates about the

progress of the investigations during the story processes. The story about quality in services was published in a women's lifestyle magazine. Both the schoolbook investigation story and the story about gender differences in math and science education were published in a science magazine.

Case B: Home loan interest map. In 2012, *Svenska Dagbladet*, one of Sweden's leading daily newspapers, conducted an investigation of mortgage interest rates in Sweden. *Svenska Dagbladet* developed a crowdmap, and people were asked to submit information about their mortgages and interest rates by filling out a web form. The information was then displayed on a map on the newspaper's website, with all the information geographically located and visualized. By July 2013, about 40,000 interest rate submissions were placed on the map and the number of submissions has since increased. Users could compare rates using several variables, such as postal codes, banks, and loan lengths.

The map broke online traffic records for the newspaper. The investigation resulted in approximately 30 articles on mortgage interest rates, their inequalities, and the lack of banking regulation, provoking nationwide discussion. People used the map's information to renegotiate their interest rates and some received discounts. Other news outlets used data gathered on the map, and external web developers built related applications.

Interviews with Key Informants

In-depth interviews were conducted with people who participated in crowdsourced journalistic processes. Interviewees were chosen based on their expertise in the act of participation, in accordance with the key informant approach (Kumar et al., 1993). All interviewees had participated in at least one of the four crowdsourced processes recounted above.

Eighteen readers who participated in the three story processes detailed in Case A were interviewed in 2011 and 2012. The participants were recruited via e-mail through the journalists working on the articles. The contact information for those participants who responded positively to the request were forwarded to the author. Three participants were interviewed face to face, 13 were interviewed over the telephone, and two responded to questions via e-mail. Four participants were interviewed twice, both during the story creation process and after they had read the story. In all, 22 interviews were conducted with the participants in Case A. Five online participants in the investigation in Case B were interviewed by phone between June and August 2013.

Altogether, 27 interviews were conducted with 23 participants across both cases. Nine of the participants were women, and 14 were men. Their occupations varied, including a teacher, a pastor, a retired grandmother, a high school student, a military staff member, and a nurse. The average interview length was 42 minutes. Some of the interviewees were regular readers of both the print and online publications that ran the crowdsourced process, some subscribed only to the print or the online publication, and some were introduced to the publications via the crowdsourcing process.

In the semi-structured interviews, the questions focused on the interviewees' motivations to participate in crowdsourced journalism, their experiences of participation, and their relationships with the

publications. The interview included the following questions: How did you hear about the story process? Why did you decide to participate? What were your expectations toward participation? The interviews were recorded and transcribed. The interviewees are referred to with numbers from 1 to 23 in the analysis section.

Data Analysis

Interview data were analyzed following Strauss and Corbin's (1998) analytical coding system. Open coding was used in the first round of coding, allowing key themes and patterns to emerge from the data and guide further analysis (Strauss & Corbin, 1998, p. 101). In the next round of coding, axial coding was used to relate the emerging categories to subcategories (Strauss & Corbin, 1998, p. 123), including contributions to social change, impact on society, the mitigation of knowledge and power asymmetries, peer learning, argument exchange and deliberation, and tangible outcomes. Finally, selective coding was applied to integrate and synthesize the subcategories (Strauss & Corbin, 1998, p. 143) with the following main categories: striving for impact, pluralism, equality, and self-enhancement through learning and deliberation.

Findings

Having an Impact Drives Participation

The findings show the main motivation factors for participating in crowdsourced journalism are the desires to have an impact on the common good, to contribute to pluralistic views about a given story topic, to strive for equality in society by mitigating knowledge and power asymmetries, to achieve self-enhancement through peer learning and teaching, and to participate in deliberation, which builds one's identity. In this section, I will examine these factors on the axis of intrinsic and extrinsic motivations, starting with impact.

The primary motivation for contributing to crowdsourced journalism is to have an impact. The scope of the desired impact varies: It could involve influencing society at large and affecting societal power structures, thus contributing to social change. Participants also want to influence others' opinions, worldviews, and perspectives in the virtual space created by crowdsourced journalism. The journalistic process and the story become channels for societal change, and affecting the process can influence the outcome—the journalistic article—which in turn can have a wider influence on society. If participants' voices are heard in the making of a story, they become part of the change. For example, in the physics schoolbooks investigation, the participants were concerned about inaccurate information in books and how it could influence students' understanding about the topic. This concern was driving them to participate. Similarly, in the investigation about gender differences in math and science education, the participants perceived a problem that they wanted to resolve, as described in the following response from participant 6: "In my opinion they [gender differences in math and science education] are part of larger societal segregation, of which math is one manifestation. That's why I commented."

For the participants, contributing to crowdsourced journalism was on a continuum of actions for resolving an issue they care about. When they contributed to the crowdsourced investigations, they were fulfilling their mission, as reflected in the following excerpt:

> I hope my comment will end up in the story, because we have to change the conditions. Maybe I should go back to the site, to make sure my voice is heard, and comment again? It would be important to get girls and women to study math, as well. (15)

For the crowd, participation is a means to create social change, whether that involves balancing gender issues or power hierarchies between powerful institutions and citizens, as described in the following excerpt from a participant, who contributed to the mortgage interest rate investigation:

> We as a community are borrowing money from a bank. If we could get together and find some way to pressure them to change, it would be good for all of us, not good for the banks, so I gladly participated. (21)

By sharing their knowledge, the readers strove to balance the inequality between banks and citizens; they situated themselves as part of a community, which could create pressure on banks by collective action. Their contribution was an act of control intended to help level the playing field in relation to banks, as the following excerpt depicts:

> I felt when I read that, "Oh, this is a way to inspire people to get better interest on their mortgage." [—] You have to understand that you are, in many cases, valuable to the bank. You need to demand better terms. (20)

The participants wanted to use their knowledge to support their peers and to level the knowledge and power asymmetries in society, thus striving for a more equitable and thus more ideal society. This motivation is similar to the one that drives contributions to open knowledge creation on Wikipedia and volunteerism in general (Nov, 2007). That is, contributing is driven by ideology and involves an expression of values to support others. The motivation also resembles the protective function that drives volunteer work. Volunteering involves sharing one's fortune (e.g., products, knowledge, and skills) to protect oneself from feeling guilty about being fortunate. In this case, the fortune was having a good interest rate and negotiation skills, and the sharable object was knowledge, meaning one's interest rate.

Furthermore, the mere act of participating in crowdsourced journalism is perceived as an act for change because the crowdsourced process can instigate a meaningful public debate, as is reflected in this excerpt from a reader who participated in the investigation into mistakes in schoolbooks: "How the influence appears depends on the context. [—] I feel these discussions can change the public opinion about a certain matter nationwide, and I become part of that change" (2).

Participation feels rewarding and worthwhile even when it involves only one piece of information and one voice in the public debate. This reflects the instrumental value of open procedures: the process itself is seen as valuable, because it exposes issues to the public and can be a catalyst for change, even

when such change happens slowly and subtly, or even not at all. Participants acknowledged that such change might not happen, as in the following excerpt from an interviewee who participated in the schoolbook investigation: "Just like my comment is perhaps a small tile in a large wall—I hope that the story will be a miniscule seed to societal debate and perhaps also to change people's attitudes" (14).

Participants hoped that their input will attract others to contribute. Thus, participants could influence others and spread change through their advocacy. They also hoped that there will be a collective solution to the issue; they have at least contributed to the knowledge universe—or to the "general public knowledge base," as one participant (7) described the object of his contribution. By expressing their opinions and contributing their knowledge, the participants believe they can have an impact on public opinion.

Desire for Accuracy and Pluralistic Perspectives

Another strong driver, which parallels acting toward social change through participation, is that participants wanted to share their knowledge to mitigate knowledge asymmetries between themselves, journalists, and peers. The participants did not perceive the journalists as knowledgeable enough in all of the topics they covered. Therefore, their participation was needed to decrease biases and prevent incorrect information in the articles. As one participant described: "It is really good that they ask others first before making too strong statements. [—] That way they can filter out overreactions before publishing the story" (13). Another participant noted, "In articles, I always notice where the journalist didn't understand certain parts. The journalist can't be an expert in every field. And that is where small mistakes accumulate." (11)

The participants hoped that their input helps the journalist develop a more accurate picture of the topic and see multiple perspectives. In addition to sharing information, participants wanted to contribute to a diversity of perspectives and values: "The topic, and particularly how the others had commented [on] it, seemed totally different from my experience. So I thought I'll add another perspective there" (18).

The participants saw their role as filling knowledge gaps in the journalists' understanding. For the participants, a more accurate and full picture, built on a foundation of diverse views, means better journalism. This driver is similar to the one found in citizen journalism about writing and publishing articles to correct the biases of the mainstream media (Mortensen, Keshelashvili, & Weir, 2015). The difference is that in crowdsourced journalism, the contributors do not write or publish stories but contribute to a journalistic process with their knowledge and let the journalist write the article, hoping that the knowledge they shared will be used in the article.

Interestingly, in crowdsourced journalism the crowd perceives participation as something like a duty, resembling the civic duty of voting in elections (Strate, Parrish, Elder, & Ford, 1989). The participants felt a responsibility to contribute to topics in which they had expertise:

If you have expertise about a particular topic, you have some sort of responsibility to follow the public conversation related to your field of expertise. And if you discover something that you could contribute with your comment, you should do it. (9)

This sense of responsibility resembles an obligation-based intrinsic motivation except for the lack of a clear norm to which the participants could feel obligated to conform. Rather, this situation involved a responsibility seasoned with the pride of knowing and being able to share knowledge. This factor resembles that found in crowdsourced citizen science (Nov, Arazy, & Anderson, 2011; Raddick et al., 2013), in which the participants contribute because they have knowledge that can benefit both the project and science in general.

Peer Learning and Deliberation as Motivation Factors

A desire to learn from others also drives participation in crowdsourced journalism. As one participant described it, "I am involved in these [online processes] because of curiosity and desire to learn. Even if I didn't write anything myself, I read others' comments, so one basic motivation is clear information search" (8). The participants wanted to learn both from diversity and sameness:

> Maybe I ask myself if I feel that I'm like others: have they thought about the topic in some fashion? Have they thought about it the same way I have? And is my thinking somehow strange, or is it human? (10)

In crowdsourced journalism, learning happens through reading others' comments and sharing one's own. Participants also want to teach others, and the act of participation becomes a part of identity building. Learning can be seen as both an intrinsic and an extrinsic motivation. It is intrinsic in that it can lead into a better understanding of others, and extrinsic in that the goal is to achieve further knowledge and practice one's skills.

Peer learning and peer teaching leads to an exchange of information: "The incentive is that I can share my information, and then I can take part in a big amount of information that wouldn't be mine otherwise. It's natural to want to add, if I haven't done that" (20). Another participant concurred, saying, "We have to share. The more we share, the better. It's not like it's important to me to share, but it's important to the others to know, like I want to know what my neighbor pays" (21). The participants felt an obligation to share what they knew, particularly when they had already benefited from others' contributions. This perspective reflects the ideology that drives the participation: By sharing their knowledge in crowdsourced journalism, the crowd can mitigate power asymmetries and increase the efficacy of citizens and their collective action.

No Expectation for Financial Compensation

The participants did not expect financial compensation for their participation. They compared their participation to writing a letter to the editor or being interviewed by a journalist. This parallel is described in the following comment from a reader who participated in the story regarding gender inequalities in math education:

> This is not about writing a story [for] a paper. If I were to write an article, then of course I would be paid. But to participate in something like this, the motivation is not to get paid. If a journalist interviews me for a story, I'm not paid, either. (1)

The participants also saw their participation as a form of exchange. By participating, they made their voices heard in the story process, which was rewarding in itself.

> This is an absolutely voluntary activity from my side. The thinking that everything should be compensated for . . . I don't think it is right. This is like a form of civic influencing from my side. I don't get compensated for many other types of volunteer jobs I'm doing. (16)

The participants believed that if this effort was monetarily compensated, it could actually be dangerous and skew participation:

> I think it's very dangerous if you are just trying to get paid for helping people. This is about trying to help the big community and also trying to help change this very big inequality when it comes to our relationship with banks. (20)

If someone were compensated for sharing, crowdsourcing could lead to false information. For example, in the home loan case, people could have falsified their interest rates. This would have jeopardized the trust between the participants and the journalists. Payment is also seen as a factor that could change the tone of the crowd-generated input, encouraging people to revise their comments to make them more likely to be used in the article.

Participating in Crowdsourced Journalism: An Act of Altruism

The drivers for participation in crowdsourced journalism are mainly altruistic and intrinsic, as summarized in Table 1. As defined by Heider (1958, in Krebs, 1970, p. 259), a typical altruistic act consists of three characteristics: the act "a) is an end in itself; it is not directed at gain, b) is emitted voluntarily, and c) does good." Participants in crowdsourced journalism want to contribute to the common good by sharing their knowledge and empowering their peers to do the same. The participants are driven by their values, ideology, and desire to gain a greater understanding about others' viewpoints, fostering relationships and personal enhancement. However, the participants' goal to affect a societal issue can also be seen as gain. When framed that way, the participation is not completely altruistic. Potential "gains" of crowdsourced journalism are mostly intrinsic, though, and there is no certainty in achieving those goals, as the findings show.

Table 1. Motivation Factors in Crowdsourced Journalism.

Motivation Factor	Description	Intrinsic/ Extrinsic	Category
Possibility of having an impact	Influencing society; affecting power structures; influencing others' opinions, worldviews, and perspectives to advocate for change.	Intrinsic	Ideology, values, self-enhancement, social,
Ensuring accuracy and adding diversity for a balanced view	Contributing to the journalistic process and to the larger knowledge universe with their knowledge.	Intrinsic	Values, ideology, social
Decreasing knowledge and power asymmetries	Mitigating knowledge and power asymmetries by knowledge sharing; shared knowledge intended to benefit both journalists and peers.	Intrinsic	Values, ideology, social, protective
Peer learning	Desire to learn from others' knowledge, learn to understand them, and teach others	Intrinsic/ Extrinsic	Understanding, values, ideology, social
Deliberation	Desire to debate with others	Intrinsic	Understanding, values, ideology, enhancement, social

Crowdsourced journalism participants are driven by their values, which guide them to strive for accurate and balanced journalism. The crowd is driven by the shared goal of an ideal society in which knowledge and power are equally distributed. This factor resembles the drivers in Wikipedia creation, in which participation is motivated by the ideology of shared and open knowledge as a positive force in society. Similarly, in crowdsourced journalism, the idea of a more equitable society that is created by collective sharing of knowledge drives the crowd. Interestingly, when sharing knowledge in crowdsourced journalism, the participants in this study did not expect reciprocity in the form of knowledge exchange. Sharing knowledge was an end in itself, and participants gained a feeling of satisfaction from the act of sharing, and thus the factor differs from that in crowdsourced film-making (c.f. Lietsala & Joutsen, 2007).

Participants in crowdsourced journalism show their care for others by mitigating knowledge asymmetries through sharing their knowledge. Participating in crowdsourced journalism provides readers with a space in which to gain new knowledge and learn from others. Participation is driven by a desire to better understand the world and other participants. Contributors determine themselves in relation to

others, and the act of participation becomes a part of their identity-building process and personal development. These drivers are social, in that participation is a reflection of caring about others in society and of sharing something from which others can benefit. These factors reflect the value that professional journalism has in participants' eyes—its societal impact and capacity to improve and contribute to a more equitable society.

The Nature of Crowdsourced Journalism Defines the Drivers

Incentives to contribute to crowdsourced journalism are mainly intrinsic, and they include motivations that are both enjoyment-based and obligation/community-based. Apart from learning, which can be seen both as an intrinsic and extrinsic factor, there were no extrinsic motivation factors present. Neither career advancement nor reputation enhancement were motivation factors in crowdsourced journalism, as they are in commons-based peer production, citizen journalism, and other crowdsourcing contexts. Furthermore, there is not a desire to develop one's skills. Nor is there a desire to make money, have fun, gain respect or recognition, or solve hard problems—all factors mentioned in other studies about the motivation factors of crowdsourcing (Brabham, 2008, 2010; Lakhani et al., 2007; Lietsala & Joutsen, 2007).

The motivation factors reflect the differences between these modes of online participation. Crowdsourced journalism is typically a fleeting, short act of participation, whereas citizen journalism, commons-based peer production, and crowdsourced design challenges require more time and skill and are often continuous activities for the participants. Citizen journalists often contribute full articles and pictures, which are published independently or on platforms like CNN's iReport, Broowaha, or All Voices. The content serves the readers as-is, independently of other content, and successful citizen journalists can monetize their content via payments from publishers or advertisements on their sites. Citizen journalists, like open-source software programmers and Wikipedia contributors, can engage in continuous and frequent publishing and thus gain recognition. In crowdsourced journalism, by contrast, the crowd contributes only small pieces of raw material to a journalist to consider in the story process, and the time investment is considerably less than in citizen journalism. The raw material can be as small as one's interest rate. An individual crowd member or their individual contribution rarely even appears in the end-product of the journalistic article. Instead, the participants often remain anonymous and their input is aggregated with others input, and the participation cannot thus enhance his or her career. Fun and enjoyment as drivers are missing in crowdsourced journalism, which is also due to the atomic nature of the crowd's input and sporadic possibilities to contribute. In continuous voluntary activities like commons-based peer production and citizen journalism, enjoyment is necessary to encourage the contributors to continuously invest their time.

The required level of expertise of crowdsourced journalism differs from that of crowdsourcing in other realms and commons-based peer production, which also explains the differences in motivation factors. When crowdsourcing is used for an organizations' R&D, the processes involve determined tasks and producing innovations in which one's professional skills and experience often determine the possibility to participate and the possibility of success. Crowdsourced journalism differs also significantly from free and open-source software production (F/OSS), in which projects are long-term and participation requires

coding skills, which leads to a predefined set of participants who contribute with their professional skills. In F/OSS, potential employers can review the quality of the code and the programmer's overall performance on the given software project.

In crowdsourced journalism, participants do not have the level of expertise that is required of contributors to open-source software development. Instead, if readers have (or think they have) the knowledge solicited in the crowdsourced journalism process, they can contribute. Participants do not need journalism skills, nor do they need skills in the field of the solicited knowledge. Therefore, the threshold for participation is typically low, and because participants are typically anonymous they do not build their reputation by participation.

These differences and similarities between motivation factors reflect the role of journalism in society. Participants perceive journalism as contributing to social change; when they contribute to crowdsourced journalism, they perceive themselves as becoming agents of change. In this model, the role of journalism is to create informed citizens, as defined by Schudson (1999). Such information can lead to empowerment. Participants want their fellow citizens to be informed, and thus empowered to resist (for example) the power of banks or gender-biased school systems.

The differences in drivers are dependent on the characteristics of the tasks and the design of the crowdsourcing initiative. If crowdsourced journalism were to provide tasks to participants through which they could more fully use their creative skills, perhaps creativity would become a driver. As it was, the tasks in the cases studied were simple questions that involved sharing knowledge about the topic at hand. Similarly, if the tasks were rewarded by money they would likely attract another set of participants motivated by money. However, such an approach would probably considerably change the nature of crowdsourced journalism, as elaborated previously.

Knowledge Embedded in Community

The motivation factors in crowdsourced journalism reflect the perspective of knowledge as embedded in the community, rather than as an object or as embedded in individuals. From the participants' perspective, knowledge is a public good that is created socially and shared for the good of the community, society, or larger knowledge universe without expectation of direct reciprocity. The act of participation is relational with regard to other participants and to the contributing participants themselves as peer contributors, while also serving as a building block for the participants' identities and a space for peer learning.

These findings about motivation factors contradict speculations about organizations abusing contributors by letting them participate online in crowdsourcing. Much theorizing about voluntary online participation has centered on labor abuse, with the idea that organizations using crowdsourcing are benefiting to the detriment of volunteer participants. This notion has been particularly dominant in critical internet studies (Baym & Burnett, 2009; van Dijck & Nieborg, 2009; Fuchs, 2014; Terranova, 2000) and it appears also in journalism studies (Kreiss, Finn, & Turner, 2011; Usher, 2011). This approach frames participation in a goods-based framework and on the private and public good continuum, arguing that

knowledge is an object that is exchanged for financial reasons. Along this line of reasoning, it is abuse for people to contribute their knowledge voluntarily.

However, the findings of this study show another reality: Participants receive satisfaction from their contribution and do not expect financial compensation, even though their input is used in magazine and newspaper articles. The participants are aware that their input may end up in articles, but instead of perceiving this as abuse, they see that the inclusion of their ideas will maximize their chances of having a positive impact on issues that concern them. Results show the digital labor abuse argument does not fit to the empirical reality of online participation. Based on the findings, we can instead turn the scenario upside down: It is *the crowd* that uses journalism to advocate for its agenda—to contribute to an equitable society, creating accurate and pluralistic articles—hoping journalism will amplify their voices.

Discussion, Limitations, and the Future Research Agenda

This study had several limitations. The sample included only participants who had contributed and who accepted the interview request for the study. It is therefore not known why those who did not participate made the decision to refrain. Moreover, it is possible that only those participants who had a positive experience with crowdsourcing accepted the interview request for the study. Because of the framework of the study, the focus was on those who actually participated. However, it would be equally relevant to study those who do not participate or do so by observing.

This study was limited to a small number of cases, and therefore, future research should test the findings by studying the motivation factors with larger samples, numerous cases, and empirical contexts in several countries. Future samples should also include people who either do not participate or participate passively, by only watching, not contributing. Finally, future research should also examine how motivation factors predict the crowd's behavior, and how these factors might change over time.

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