Crowdsourcing: Questioning and questions about the crowd

Sophie Renault,
Institut d'Administration des Entreprises, Laboratoire Vallorem, Orleans University

The definition of the word "crowd" at the heart of "crowdsourcing" is prone to controversy. Its original meaning is a multitude of people gathered in one place. In the context of crowdsourcing however, this "place" is mainly virtual; we are talking about a digital crowd. Many of the facets of what we call a crowd come under question. Is the crowd a large number of individuals? Are they all in the same place? Does the crowd produce quality? This article discusses seven misconceptions about the word "crowd" in order to better delimit its morphology and contour.

Introduction

"*Emotional, impulsive, violent, fickle, inconsistent, irresolute and extreme in action, displaying only the coarser emotions and the less refined sentiments; extremely suggestible, careless in deliberation, hasty in judgement, incapable of any but the simpler and imperfect forms of reasoning, easily swayed and led, lacking in self-consciousness, devoid of self-respect and sense of responsibility, and apt to be carried away by the consciousness of its own force, so that it tends to produce all the manifestations we have learnt to expect of any irresponsible and absolute power*" (MCDOUGALL 1920, p.45).

Such is the crowd in an extreme sense. The spotlight is often directed at its dark side.[1] Emotive, capricious, lunatic, flighty, passive, submissive, these are the traits Moscovici (1985, p. 153) used to describe both women and the crowd.[2] Others have said that the crowd is manipulable, irresponsible, indomitable…. Several authors (LE BON 1895, McDOUGALL 1920) have stressed the darker aspects, like Guy de Maupassant (1888): "*How many times have I noticed that intelligence augments and rises when you live*

alone, that it diminishes and lowers as soon as you mix, once again, with other people*". This is how the crowd is often described in the literature: it attracts as much as it frightens. As Pénin *et al*. (2013, pp. 50-51) wrote, "*The crowd tends to bring up an imagery related to a follow-the-leader attitude, an absence of creativity, and even group violence. The crowd's image in the stagecraft of totalitarian regimes interferes with any talk about the crowd's intelligence.*"

However the crowd is also capable of magnificent acts: "*In exceptional circumstances there may arise in communities the phenomenon of enthusiasm, which has made the most splendid group achievements possible*" (FREUD 1921, p.38). Follett (1918) has also drawn attention to a duality in descriptions of the crowd: the crowd's enthusiasm can lead to not only riots but also heroic actions. She reminds us that, despite frequent mentions of panic seizing a crowd, every soldier knows that people, within the mass, can prove courageous.

Crowdsourcing: The crowd at the center of value creation

Since the Web 2.0, individuals and organizations, whether or not for commercial purposes, want to take advantage of the many resources and skills held by the crowd, to benefit from its work, creativity, knowledge and, too, financial resources. "Crowdsourcing", a neologism combining "crowd" with "outsourcing", is an outsourcing to the crowd via the electronic media (HOWE 2006a). This article focuses on the crowd to whom activities are outsourced.

---

[2] This critical approach seeks to question the writings of those who have dwelled on the subject of the crowd, whence this ironical remark.

Crowdsourcing is a form of open outsourcing (LEBRATY 2009). Unlike the purportedly "closed" classical outsourcing, the client (called "crowdsourcer") does not know who, in the online crowd, is likely to respond to his request. A wide range of requests can be addressed to the crowd as an atypical supplier of… well, here are a few examples:

● The website NameMyDaugther was set up in 2014 by a father who wanted cybernauts to help him choose the first name for his future child.[3]
● The platform eÿeka proposes talented creators who want to solve the "challenges" launched by brand names (RENAULT 2013). In 2016, this crowd was asked to find a brilliant idea for Ben & Jerry's new line of ice cream, a challenge that delighted urban youth of Generation Y.
● Recipay connects firms in the food industry with a crowd of persons who want to offer contents, in particular recipes. In 2016, the offer was made to buy cheese pastry recipes that, using the Tartar brand of cheese, would be perfect for accompanying a drink with friends.
● Every day via reCAPTCHA (*cf*. Insert 6), thousands of cybernauts help digitize books (VON AHN *et al*. 2008).

● On Duolingo, language-learners help translate the Web (GARCIA 2013).
● Via crowdfunding platforms (ONNEE & RENAULT 2013 & 2014), the crowd follows up on the various plans proposed and helps finance them: a snail farm, a "solidarity" driving school, a cupcake store, etc.

In the Web 2.0 era, having recourse to the crowd does not seem as dangerous or reckless as we might imagine. On the contrary, crowdsourcing platforms are thriving, and organizations are increasingly turning toward them (ROTH 2015).

As an undeniable source of value creation for organizations, the crowd is the basis of various forms of crowdsourcing: crowdfunding, crowdvoting, crowd creation and crowd wisdom (*cf*. Insert 1). However questions arise: Who forms the crowd? What are its tratis? Is it incarnated in any passerby on line? As Freud (1921, p. 39) stated in another time and context, "*A number of very different formations have probably been merged under the term 'group' and may require to be distinguished.*" This remark, to which I fully adhere, calls for giving thought to the crowd in crowdsourcing. Is it made up of a large number of individuals? Does it come together in a single space? Does it produce quality?… In pursuit of answers, this article has adopted the approach described in Insert 2.

_____

[3] http://namemydaughter.com/pending.php

Le design of this research

My research since 2010 has concentrated on the different forms of crowdsourcing (RENAULT 2012, 2013, 2014a/b, 2015 & 2016a/b/c; RENAULT & BOUTIGNY 2013 & 2014; ONNEE & RENAULT 2013 & 2014). Herein, data collected earlier have undergone further analysis (HEATON 2004, THORNE 2004). Qualitative data (interviews, research notes, etc.) have been re-examined to answer a question I had previously but broached: Who is the crowd in crowdsourcing? Given the density of the data collected since I started research on crowdsourcing, I thought it worthwhile to use a methodology to examine this question. Researchers (especially in managerial sciences) can draw on the wealth of their qualitative data and renew their thinking (CHABAUD & GERMAIN 2006).

This analysis is based on a review of the literature spiked with information from interviews with participants in crowdsourcing, webmasters, etc. Since the electronic media is a characteristic of crowdsourcing, I have adopted a "netnographic" approach (KOZINETS 2009) for observing several crowdsourcing platforms. I intended to observe them as they ask for the crowd's participation and to extract data. The texts accessible to the public on line stimulated my thinking on this topic. This netnographic approach entailed regularly monitoring several platforms (among them: eÿeka, CREADS, Wilogo, Agorize, Duolingo, Mobeye, Ulule and KissKissBankBank). To obtain a better view of practices, I adopted the position of a participant observer: I submitted creative proposals on platforms, monitored and financially supported several projects on these platforms, and collected marketing information via applications such as Mobeye. This study's qualitative design thus relied on an approach that crossed findings from a review of the literature, the interviews from previous research, a netnographic study, and participant observation.

Sophie Renault

This article inquires into seven prevailing ideas about the crowd. The first two questions are inferred from the traditional definition of the crowd as a multitude of persons in a single place. So, is the crowd involved in crowdsourcing formed by a large number of individuals? Does it simultaneously come together in a single space? The next question is about what the crowd does: work or not? And can we consider, as some do, that this work is a form of exploitation? By emphasizing the crowd's amateurism, the literature has raised concerns about the quality of what the crowd produces (HOWE 2006b). Moreover, the crowd is said to have very little time to perform tasks (HOWE 2006b). Finally, the crowd is said to volunteer and consciously participate in crowdsourcing (ESTELLÉS-AROLAS & GONZÁLEZ-LADRÓN-DE-GUEVARA 2012). As the following discussion will show, some of these aspects might not always fit.

Is the crowd made up of a large number of individuals?

The original definition of the crowd refers to a multitude, a large number of individuals. In contrast, the crowd in crowdsourcing is a potential that is not necessarily activated. This crowd is the millions of individuals who enter reCAPTCHAs (*cf.* Insert 6) or the handful who backs a project on a crowfunding platform. Only a dozen persons participated, for instance, in the success of the project "Tee-shirts qui déshabillent" on KissKissBankBank in September 2012.[4] The person posting this project for a line of clothing for "*feeling naked while being dressed*" requested only €300. In 2016, it took only twenty contributors on Ulule to raise €250 to "Save Simone", a Renault L in need of a new

engine.[5] Two dozen people, sometimes fewer… a far cry from what we normally call a crowd. On the other hand, a project might receive backing from a crowd much bigger than what the crowdsourcer had expected. Take the example of these two projects posted in 2014 on the American platform Kickstarter: a) the "coolest cooler" received $13,285,226 in funding, overshooting by far the $50,000 requested by the crowdsourcer, who surely did not expect to have 62,642 backers; and b) Zack Danger Brown requested a meager $10 to make potato salad, but ended up with $55,492 dollars from 6,911 individuals.[6]

Despite the possibility via Internet to enter into contact with millions of potential backers, only a few backers might be needed to turn a project into a success. So, in crowdsourcing or crowdfunding, the crowd is a potential; and no one knows beforehand whether it will be effectively activated. In crowdfunding, the crowd "*is not just made up of isolated individuals but can, at times, claim to be a relatively united group whose cohesion (as a community) will necessarily influence the success of a call for funding*" (MÉRIC *et al*. 2016, p. 64). The word "community" is used in place of "crowd" when a desire or enthusiasm forms a bond between a set of individuals and leads them to form a group for a crowdfunding project.

Let us take the case of another form of crowdsourcing. Crowd creation platforms such as CREADS or eÿeka, which bring together thousands of "creators", have adopted a competitive business model (RENAULT 2014b).[7] Platforms like eÿeka register creators who take part in contests (or challenges), but only a few

---

[4] https://www.kisskissbankbank.com/tee-shirts-qui-deshabillent--3

[5] https://fr.ulule.com/sauvons-simone/

[6] Respectively: https://www.kickstarter.com/projects/ryangrepper/coolest-cooler-21st-century-cooler-thats-actually & https://www.kickstarter.com/projects/zackdangerbrown/potato-salad

[7] https://en.eyeka.com/ & https://www.creads.fr/

of them will be rewarded. CREADS has announced a community of more than 50,000 creators, but the number of proposals posted might be small. In 2016, the community was asked to create a logo for an NGO in the performance arts and personal development; and 48 proposals were submitted. As stated previously, what is meant by "crowd" is a potential, since only a dozen persons — or thousands — might respond.

As Cardon (2010, p. 19) has pointed out, "*Whereas, in real life, any work group poorly accepts the unequal participation of its members, what characterizes online cooperation with volunteers is the widely variable degree of participation. The latter is systematically distributed following a 'power law' (sometimes called the '1-10-100 rule') whereby a very small fraction of participants is very active, a small minority takes part on a regular basis, and the mass benefits from the community's resources without making any decisive contribution.*" The communities on competitive crowd creation platforms do not seem to escape from this rule. Talking about a crowd or community when referring to the thousands of creators enrolled on a platform tends to be misleading since, ultimately, only a finite part of them actually takes part in creation.

Finally: even though crowdsourcing is, as pointed out, an "open outsourcing", this opening is sometimes an illusion. To correct the emotional skew due to the crowd, some platforms limit the crowd by selecting profiles (GIRARD & DEFFAINS-CRAPSKY 2016). For example: Agorize offers several challenges to its community of students; platforms of equity crowdfunding might require a minimal investment or membership in a professionally recognized investors' group (GIRARD & DEFFAINS-CRAPSKY 2016), and platforms such as InnoCentive require a high level of qualifications (LIOTARD & REVEST 2015). In other words, some activities might be open to many participants while others are reserved for cybernauts with specified skills, resources or qualifications.

Does the crowd come together in a single space?

Traditionally, the crowd is taken to be a large number of persons assembled in a single place: "*When individuals are together in a large number (several hundreds or thousands) in a single place, without having deliberately tried to meet, we are dealing with the phenomenon of the crowd*" (ANZIEU & MARTIN 2013, p. 29). Since this definition excludes demonstrations prepared in advance, these authors have added that a crowd can intentionally be organized in a political or social context. In crowdsourcing, the place where the crowd forms is, of course, virtual and not physical. In this virtual space, the crowd is not, strictly speaking, co-present: it is a potential that can be activated via the electronic space visited by its members. The presence of individuals on the Web has two aspects, synchronous and asynchronous. The participants in a crowdsourcing project are, therefore, not necessarily virtually present in a single space-time.

It is also important to point out that this crowd is not always made up of individuals who interact and, as a consequence, is not necessarily beset by a form of subjectivity. I have been led to distinguish between two sorts of crowds: a crowd in interaction; and a crowd of scattered individuals who do not interact with each other (RENAULT 2014a).[8] There are forms of crowdsourcing that use each sort of crowd.

● Brainstorming typically entails interactions between hundreds (even thousands) of persons on line, as via IBM's Jam (BJELLAND & CHAPMAN WOOD 2008, RENAULT & BOUTIGNY 2013). Value creation takes its source by crossing all these viewpoints. This form of crowdsourcing involves exchanges among the crowd's members.[9]

● In others cases, the individuals said to form a crowd do not interact with each other. We need but to think of the platforms that use a competitive business model for finding the appropriate response to a challenge. Crowd creation platforms, like eÿeka or CREADS, emblematic of this trend, bring together communities of creators who compete with each other in solving a challenge, each competitor submitting his response on line. There can also be a "cumulative crowdsourcing" where organizations create value by aggregating responses from individuals, crowdvoting being an example thereof. In the case of reCAPTCHA (*cf.* Insert 6), cybernauts do not know how other cybernauts have interpreted the characters.

So, the crowd can have two distinct forms. On the one hand, it can be considered to form a whole; to borrow an image: the crowd is a molecule formed by several atoms. On the other hand, the crowd can be perceived as the sum of its parts each taken independently; its member are scattered atoms who do not necessarily, in response to a crowdsourcer, interact with each other.

Contrary to the determinants of the crowd in the traditional sense, Howe (2006b) has provided evidence of the crowd's dispersion in crowdsourcing: the crowd is made up of persons from around the planet who participate in a series of tasks ranging from very common to quite specific. The electronic realm makes possible a wide distribution of the crowd, and geographical bounds are

---

[8] In the literature, some authors have made a distinction between "group" and "crowd". For Follett (1918), these two words are too often (wrongly) used for each other: while crowd psychology raises questions about subjectivity and imitation, group analysis emphasizes interactions in a process of interpenetration. Accordingly, the crowd acts in unison, whereas harmony governs the group. Certain crowdsourcing practices involve interactions among a limited number of individuals that, we conclude, form a group rather than a crowd.

[9] Yet another example, the encyclopedia Wikipedia relies on the collaboration and interaction of its contributors. However the pertinence of referring to Wikipedia as a crowdsourcing project is moot. According to Roth (2016, p. 16), this encyclopedia is "*considered as an example of crowdsourcing by some, because of the distributed nature of the crowd of contributors, whereas others explain that it is not a case of crowdsourcing since there is no centralized control and no organization staffing the process*". A similar debate surrounds YouTube.

blurred. "*Potentially, any individual having a connection and understanding the Web interface's language may offer their services*" (LEBRATY 2009, p. 153).

Other studies have, however, drawn attention to geographical proximity as a factor in the cybernaut's decision about whether or not to participate. The crowdsourcer's success is grounded on a social capital, namely relationships, which are galvanized by proximity. Many crowdfunding platforms, like La Ruche in Quebec, adopt a strategy based on geographical proximity. Generalist crowdfunding platforms, where geographically dispersed projects are posted, do not overlook the criterion of proximity: as in the case of Ulule, geolocation devices help backers find projects within a circumscribed geographical area.

Likewise, "citizen crowdsourcing" (RENAULT & BOUTIGNY 2014) is based on the interest of individuals to place their resources and skills at the service of a project that benefits the area where they reside. Via Adopt-a-Hydrant, residents in Boston can adopt a hydrant and make sure it remains operational and accessible (for example, by removing snow). Cities, especially in North America, have used this model to build platforms: applications for adopting a sidewalk in Chicago, a siren for tsunami alerts in Honolulu, and a rain-catchment system in Seattle or Bloomington (RENAULT & BOUTIGNY 2014).

While the electronic realm makes it possible to ask for time, money, skills and ideas from geographically dispersed persons, certain projects or challenges imply that potential investors are located in a given geographical area. Information and communications technology (ICT) makes possible forms of crowdsourcing that necessitate interaction, collaboration or even competition involving a multitude of individuals all around the planet; but in certain situations, individuals within a delimited geographical area are the ones who will take part in a crowdsourcing challenge.

Is the crowd of "workers" on the Web exploited?

How to qualify the crowd's activity is a topic of debate (FAVREAU *et al*. 2014, RENAULT 2015). Does the crowd in crowdsourcing "work"? If so, is it exploited? Many an article has dwelled on the "*neofeudalism*" to which "*workers of the Web*" are subject (LECHNER 2010). Relayed by the media, such attacks have become more frequent. This focus on a labor force "*who works more to earn nothing*" (VION-DURY 2014) has called attention to the dark side of crowdsourcing. Is this true? It is hard to draw general conclusions since practices are so variable and not all of them address outright the question of work. We can, however, shed light on a few points.

This debate is especially intense about "crowd creation". Professionals have criticized the "*perverted crowdsourcing*" (*cf*. Insert 3) or "*speculative work*" of this form of crowdsourcing. What do these phrases mean? Crowd creation platforms regularly organize challenges, or contests, for pitting crowd members against each other. Out of the responses to these challenges, crowdsourcers choose the ones that appeal to them. When a new logo is to be designed, a brand name to be found or a forceful theme for an advertising campaign to be invented, there is no question of rewarding all participants in the challenge. Only the best one(s) will receive a reward. The aforementioned phrases thus refer to the fact that some individuals work without financial compensation. They will have spent time responding to a creative challenge but will receive no recompense.

As the saying goes, work deserves its pay; but is this work? Under French law, "work" refers to accomplishing a service/task when a counterpart is provided and there is a relationship of subordination. In crowdsourcing, no one is *a priori* forced to engage in an activity; and,

Sophie Renault

The outcry from creative professionals

"*Free-lance professionals, studios of creation, communication groups or agencies, future graduates in the graphic arts, we have denounced for years the platforms based on industrializing the for-free work done by persons in creation. These platforms are still, day after day, in the headlines.*

Under the cover of dynamic start-ups that have found favor with the press, all of these companies with operations based on the principle of 'perverted crowdsourcing' are designing sales offers on the backs of a labor force whom they do not pay. Thousands of professionals and, too, private persons are working without any contract or status, and with no consideration of the most elementary legal obligations. Perverting to their own advantage the foundations of the sharing economy, these platforms are jeopardizing a major part of the economy represented by freelancers and small structures, destroying many more jobs than they create.

The underlying principle is simple but deleterious: to each client who submits a project with a few instructions, these platforms promise dozens, if not hundreds, of responses, the work made to measure by participants just as numerous. The client who has passed the order will freely choose among responses, or even require an indefinite number of alterations and modifications; the winner alone will be paid — next to nothing — while the margin of each project adds to the margin of the company serving as intermediary thanks to all the for-free work vaunted in its sales offer."

SOURCE: Excerpt from the open letter to Axelle Lemaire (Secrétaire d'État in charge of the digital economy): "Non à l'exploitation du #travailgratuit comme levier de réussite en France" at http://www.travailgratuit.com/. The petition had more than 8000 signatures in February 2017.

there is no relation of subordination between the person who freely chooses a challenge and the crowdsourcer. These platforms have carefully worded terms of service, most of which clearly state that there is no relation of subordination (RENAULT 2016a).

The criticisms made by those who fight against the development of crowdsourcing hinges on the question of fair pay. Besides crowd creation platforms, criticism has also been directed at the platforms that pay cybernauts to undertake small assignments, or "microtasks". Such is the case of Amazon Mechanical Turk (MTurk) where payments to "turkers" (workers) might amount to a pittance (KAUFMANN *et al*. 2011). In contrast, Crowd Factory claims to offer fair pay (a minimum of €10/hour).

Nonetheless, as several studies have pointed out, the financial aspect alone cannot explain why participants become involved in crowdsourcing (KAUFMANN *et al*. 2011, RENAULT 2013). In the case of platforms asking for creative input from cybernauts, Roth (2016) has listed several motivations, among them: wanting to learn, wanting to meet people, the pleasure derived from participating, the appeal of dares and challenges, recognition, visibility, curiosity or even altruism.

Is the crowd made up of amateurs?

The word "amateur" needs to be clarified since it has many meanings. Herein, it refers to someone who devotes time to an activity that is not his occupation, in contrast with "professionals". The word as often used in relation to crowdsourcing carries its most pejorative acceptation as persons who lack skills or qualifications or who are dilettantes lacking the required assiduity or effort.

The very first writings on crowdsourcing (and, of course, HOWE 2006a & 2006b) highlighted the crowd's amateurism. Brabham (2013) has pointed out that the initial title that Howe gave to his foundational article associated amateurism with the neologism, namely: "Crowdsourcing: Tracking the rise of the amateur". Later, in 2008, Howe would state that the majority of those who participate in a crowdsourcing project are freelance "*artists*". For Howe, talented individuals are facing an ever more specialized world of work and are

trying, through crowdsourcing, to use their untapped skills. Their wage-paying job or the activity to which they devote most of their time does not correspond to their online activity. These persons are "pro-ams", a term introduced by Leadbeater & Miller (2004) to refer to "*amateurs who work to professional standards*".

Brabham (2013) has, furthermore, identified several professionals who invest time in crowdsourcing activities. His argumentation (BRABHAM 2010 & 2013) came out of a study of platforms (such as iStockphoto and Threadless) typical of what is called amateurism; and it mentions the two finalists in the 2007 "Crash the Super Bowl" challenge organized by Doritos (*cf*. Insert 4). Platforms of this sort are mostly visited by individuals who have a high level of skills in photography or creative design, either because they have received an education therein or because these specialities are their principal source of employment. A study of the platform InnoCentive wholeheartedly agrees (LAKHANI *et al*. 2006): 65.8% of those who solve challenges have a doctoral degree. As a consequence, Brabham (2013) has railed against the press for its part in spreading the idea that the crowd is made up of amateurs. His study of articles using the words "crowdsourcing" and "amateurs" provides evidence that the press has been very wary, contemptuous or even condescending toward the crowd, thus associating it with work of poor quality.

The crowd extends far beyond a set of amateurs. It is also made up of professionals and experts who have a keen interest in the crowdsourcing activities in which they take part. Jérôme Bazin, general manager of Wilogo, whom I interviewed in April 2013, said he was turning away from the word "crowdsourcing": "*We've somewhat stopped using the word 'crowdsourcing' because we soon realized it had nothing to do with a 'crowd'. It's not a crowd of amateurs, it's not Madame Michu who's going to make logos. We have a platform of pro's. An amateur, unless he's a real self-learned person, doesn't compete.*"

As Howe (2008) suggested, crowdsourcing implies rethinking amateurism and professionalism. It tends to put boundaries in question, since amateurs or pro-ams compete alongside experienced professionals in creative contests (RENAULT 2016b). Crowdsourcing

The advertising contest for Doritos

The Super Bowl, the most viewed event in the United States, runs commercials with high visibility. In 2007, Doritos, a brand of tortilla chips, cleverly launched a worldwide contest "Crash the Super Bowl" to involve consumers in its commercials and have the public help choose advertisements for the company's audience. Billy Federighi and Brett Snider won the contest with their commercial "Mousetrap". These students in cinema (in Hollywood) had not only the necessary training but also access to the equipment needed to make a professional quality commercial. They had made an advertisement for the brand Converse in 2006.

In 2009, the Herbert brothers won the Doritos contest. Although the winners were said to be (as in the magazine *USA Today*) two unknowns from nowhere, their commercial "Free Doritos" was made with the help of a dozen persons, including media professionals.

Source: BRABHAM 2013.

is based on the idea that each member of the crowd, independently of his/her presumed qualifications and status, can take part in value creation (SUROWIECKI 2008).

The profiles of participants in the crowd are disparate: amateurs, pro-ams, professionals, experts. Given this disparity, crowdsourced activities require quite varied skills; and therefore, "*the chance of succeeding in a problem-solving contest is probably all the higher insofar as the distance between the origin of the problem and the sector of the person who proposes a solution is large*" (DUVAL & SPEIDEL 2014, pp. 23-24). It is not, therefore, always of prime importance to have a specific skill in a given activity. According to the aforementioned research on InnoCentive, the solvers increased by 10% their chances of figuring among the winners whenever the challenge was completely outside their field of qualification (LAKHANI *et al.* 2006, p. 10).

Does the crowd produce poor quality?

According to Howe (2006b), any crowdsourcing operation, regardless of its purpose (a scientific challenge, design of new products, media creations, etc.), will receive a stream of contributions of poor quality in response. He called on firms to adopt filtering systems in order to make an efficient selection among responses and "*separate the wheat from the chaff*". For this reason, many crowdsourcing platforms have chosen to make crowd members compete with each other (RENAULT 2014b) — a choice that foils several of the benefits expected from the crowd's wisdom in the collective sense (as in SUROWIECKI 2008). In any case, what the crowd produces comes at a cost in terms of lackluster quality (IREN 2014). Even when crowd members work together, a method of selection is worthwhile to identify the contributions that best suit the problem or challenge.

Even though the crowd does not always produce good quality, Howe (2006b) has recognized its talent for correcting errors and discovering innovative products. Cybernauts on YouTube, he has noted, are soon able to find an amusing video in the vapid stream of posts. He also pointed to Wikipedia, where inaccuracies in the articles are soon corrected. However he probably overestimated the crowd's potential since Hasty *et al.* (2014) have shown that 90% of the articles on ten health conditions in this online encyclopedia contained numerous errors.

Many pundits have lambasted the crowd's presumed wisdom. According to Ettighoffer (2008), online crowds are similar to the "*big schools of silvery fish that you see fluctuating in the ocean, their erratic movements intended to trick predators*". According to him, to talk about the crowd's "*collective intelligence*" is a shortcut and moot point since the crowd is not any less dangerous, anodyne, wise, perspicacious, creative or intelligent than the crowd disparaged by Le Bon (1895) and even Freud (1921). Let us come back to the story of the Canadian couple who decided to leave the choice of their daughter's first name up to the crowd. What to think of popular suggestions such as Cthulhu All-Spark, Slagathor or Megatron? The happy parents proved their lucidity by making their final choice (Amelia Savannah Joy) among the more conventional proposals.[10]

Notwithstanding the necessity of managing it and controlling the quality of its output, the crowd is a powerful lever in value creation.

Does the crowd have little time for crowdsourcing projects?

Since the "*new labor pool*" on the Web is said to have a short attention span, "*these new workers find time after dinner and on weekends. So jobs need to be broken into 'micro-chunks'*" (HOWE 2006b). This author mentioned the platform Amazon Mechanical Turk "*where most tasks take less than 30 minutes to complete*".

My observations confirm that crowdsourced tasks take a few seconds or minutes. Here is an emblematic case: ESP, a game where two persons connected at random simultaneously see the same image (VON AHN & DABBISH 2004). Unable to communicate with each other, they have to come up with the same description to win. Each player thus lists a certain number of words to describe the image within a set time. This game can be used to obtain a precise description of the image, which can then be entered in a database. Here are a few other typical examples: entering a reCAPTCHA (*cf.* Insert 6) only takes a few seconds but helps digitize books; backing a project on a crowdfunding platform such as Ulule takes a scant few minutes; collecting marketing information for applications like Mobeye or Clic and Walk is also very fast (*cf.* Insert 5).

---

[10] There are platforms (such as http://namecontests.com/) for naming parrots, shops, works of architecture or babies.

Crowdmarketing, or how to earn money in a few minutes?

Crowdmarketing platforms outsource marketing activities toward the crowd. The offer made to the "mobinauts" they "recruit" is to earn money in a few minutes while shopping. This offer is two-sided. On the one side, brands try to obtain information about their sales actions from the field and at a low cost. Are their products correctly exhibited on store shelves? What price is displayed? Have advertising posters been hung in the store at the right time? On the other side, individuals with a smartphone are willing, for a few euros, to send the requested information. By downloading applications (Mobeye, Clic and Walk, Tcheck'it, LocalEyes…) on their mobile phones, they can do reconnaissance work for brands: the mobinaut goes to the store and sends the required information, usually with photographs as evidence. The platform serving as an intermediary controls the mobinaut's geolocation and thus validates the veracity of the received information.

To illustrate, here is an excerpt from the home page of the application Mobeye (https://www.mobeye-app.com/en/home):

"*How does it work*

Download Mobeye app and complete short surveys in shops around you to earn up to 10€!

1. Accept a mission	*2. Fille the objectives*	*3. Get paid*
Use our listing or map to see and choose a mission available around you. You can book a mission for 2 hours..	*Once in the shop, answer the questions, collect the information and take the requested pictures.*	*Once our team has checked your mission, your account is credited in euros. You can get paid whenever you want via bank transfer or Paypal.*"

Sources : Renault (2016a & 2016c)

The crowd might devote much more time to other forms of crowdsourcing. On Global Service Jam, participants devote 48 hours to a project in design (RENAULT 2012). Responding to a scientific problem on InnoCentive requires a long-term investment by would-be solvers. According to Lakhani *et al*. (2006, p. 8), an average of 39.9 hours is needed for would-be solvers; and "*winning solvers reported spending more than twice as much time solving problems as non-winning solvers (winning solvers: 74.1 hours, non-winning solvers: 35.7 hours).*" The time spent is often proportional to the complexity of the challenge and, consequently, to the level of the expected counterpart.

So, the crowd might give very little, or very much, time.

Does the crowd participate voluntarily and consciously?

"*Crowdsourcing is a type of participative online activity in which an individual, organization, or company with enough means proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task*"

(ESTELLÉS-AROLAS & GONZÁLEZ-LADRÓN-DE-GUEVARA 2012, p. 197). Is the crowd aware that it is participating in an act of value creation? Does the crowd always participate on its own? This mostly seems to be so, but there are exceptions.

As the case of ReCAPTCHA (cf. Insert 6) shows, thousands of human brains can respond to a problem without the individuals knowing that they are doing so and even without having the possibility of not doing so. Refusing to enter the CAPTCHA code means that the user abandons his/her online e-business transaction or effort to enroll on a website. Furthermore, when entering a CAPTCHA twice, users do not necessarily know, since the operation is divided into subsequences, that they are participating in a process of character recognition. Though only a few clicks away from information on the purpose of reCAPTCHA, many individuals lack the curiosity to look it up. This example is evidence not only that some sorts of crowdsourcing are imposed on users but also that the users are not necessarily aware of their participation in a process of value creation.

In many other contexts however, participants are informed and absolutely voluntary. This situation has led Andro (2016, p. 56) to distinguish between "*explicit*

Sophie Renault

crowdsourcing when the cybernaut's contribution is voluntary; and implicit (or involuntary or passive) crowdsourcing when it is not".

Conclusion

"*A multitude of persons together in a single place*", such is the definition of the crowd in the French dictionary Larousse. From a sociological viewpoint, it is stated that the crowd is a "*set of anonymous, similar individuals whose feelings and ideas are oriented in the same direction*". Admittedly, this definition is not fully appropriate to crowdsourcing; and it has spawned several ideas that, though misleading, are now taken for granted.

In this conclusion, I would like to propose a general answer to the question underlying this research: Who is the crowd to whom the practices of crowdsourcing are addressed? The crowd has several facets. It is universal but also specific. It has qualities that complete but also oppose each other. The crowdsourcer who asks for the crowd's participation cannot know in advance what crowd will come to the meeting or whether it will be able to find an appropriate response to the challenge. The crowd has many faces. It might be made up of ordinary people, amateurs, pro-ams or experts; and can thus be represented by anyone. However it might also be made up of cybernauts with specific resources and skills. The crowd does not necessarily produce good quality, nor does it always come up with appropriate ideas on

the problem posed. Nonetheless, it can prove to have perspicacity, talent and wisdom (SUROWIECKI 2008). After all, the crowd is not the multitude but a POTENTIAL that ICT can activate. Whether participating voluntarily or involuntarily in a crowdsourcing activity, the crowd is not always aware that it is taking part in a process of value creation.

Through crowdsourcing, individuals with different geographical origins and different profiles in terms of skills take part in creating value for organizations without being contractually related as wage-earners or suppliers. This last point is, in my opinion, fundamental. It opens onto many a research program into the crowd's motivations for offering on line its time, skills, creativity or even money or energy in behalf of a third party (individual, for-profit or nonprofit organization). From certain viewpoints, the crowd might seem venal, in the quest to obtain material or financial recompenses. But the crowd is also sentimental, in quest of an ideal.[11]

_____

[11] A reference to the song "Foule sentimentale" written and sung by Alain Souchon (on the album *C'est déjà ça* released in 1993.

References

ANDRO M., *Bibliothèques numériques et crowdsourcing. Expérimentations autour de Numalire, projet de numérisation à la demande par crowdfunding*, doctoral dissertation in information and communication sciences, Université Paris 8 Vincennes Saint Denis, 2016.

ANZIEU D. & MARTIN J.Y., *La Dynamique des groupes restreints* (Paris: Quadrige Manuels, Presses Universitaires de France) 7th edition, 2013.

BESSIÈRE V. & STEPHANY É., *Le Crowdfunding – fondements et pratiques* (Brussels: De Boeck) 2014.

BJELLAND O.M. & CHAPMAN WOOD R., "An inside view of IBM's innovation jam", *MIT Sloan Management Review*, 50(1), pp. 32-40, 2008.

BRABHAM D.C., "Crowdsourcing: A model for leveraging online communities" in A. DELWICHE & J. HENDERSON (eds.), *The Participatory Cultures Handbook* (New York: Routledge) pp. 120-129, 2010.

BRABHAM D.C., *Crowdsourcing* (Cambridge, MA: MIT Press Essential Knowledge Series) 2013.

BURGER-HELMCHEN T. & PENIN J., "Crowdsourcing. Définition, enjeux, typologie", *Management & Avenir*, 41, pp. 254-269, 2011.

CARDON D., *La démocratie Internet. Promesses et limites* (Paris: Seuil) 2010.

CHABAUD D. & GERMAIN O., "La réutilisation de données qualitatives en sciences de gestion. Un second choix?", *M@n@gement*, 9(3), pp. 91-213, 2006.

DUVAL M. & SPEIDEL K., *Open innovation. Développez une culture ouverte et collaborative pour mieux innover* (Paris: Dunod) 2014.

ERICKSON L., PETRICK I. & TRAUTH E., "Hanging with the right crowd: Matching crowdsourcing need to crowd characteristics", *Proceedings of the Eighteenth Americas Conference on Information Systems*, Seattle, WA, August 2012.

ESTELLÉS-AROLAS E. & GONZÁLEZ-LADRÓN-DE-GUEVARA F., "Towards an integrated crowdsourcing definition", *Journal of Information Science*, 38(2), pp. 189-200, 2012.

ETTIGHOFFER D., "La folie douce des foules numériques intelligentes", 19 Juillet 2008. Consultable at http://www.ettighoffer.fr/62/la-folie-douce-des-foules-numeriques-intelligentes.

FAVREAU E., LEMOINE J.F. & ROTH Y, "Travail ou pas? L'autonomie des participants au crowdsourcing et ses implications juridiques", *7èmes journées d'études TIC - Information et stratégies*, École des Mines d'Alès (Nîmes), 2-3 October 2014.

FOLLETT M.P., *The New State* (New York: Longmans, Green & Company) 1918.

FORT K., ADDA G. & COHEN K.B., "Amazon Mechanical Turk: Gold mine or coal mine?", *Computational Linguistics*, 37(2), pp. 413-420, 2011.

FREUD S., *Group Psychology and the Analysis of the Ego* translated by J. Strachey (New York: Boni and Liveright). French translation: *Psychologie des foules et analyse du moi* (Paris: Petite Bibliothèque Payot n° 834) 1921 [2012].

GARCIA I., "Learning a language for free while translating the Web: Does Duolingo work?", *International Journal of English Linguistics*, 3(1), pp. 19-25, 2013.

GEIGER D., SCHULZE T., SEEDORF S., NICKERSON R. & SCHADER M., "Managing the crowd: Towards a taxonomy of crowdsourcing processes", paper presented at the *Seventeenth Americas Conference on Information Systems*, Detroit, MI, 2011.

GIRARD C. & DEFFAINS-CRAPSKY C., "Les mécanismes de gouvernance disciplinaires et cognitifs en *equity crowdfunding*. Le cas de la France", *Finance Contrôle Stratégie*, 19(3), October 2016. Available at https://journals.openedition.org/fcs/1829.

HASTY R.T., GARBALOSA R.C., BARBATO V.A, VALDES P.J Jr., POWERS DW, HERNANDEZ E, JOHN JS, SUCIU G, QURESHI F, POPA-RADU M, SAN JOSE S, DREXLER N, PATANKAR R, PAZ JR, KING CW, GERBER HN, VALLADARES MG & SOMJI AA., "Wikipedia vs peer-reviewed medical literature for information about the 10 most costly medical conditions", *Journal of the American Osteopathic Association*, 114(5), pp. 368-373, May 2014.

HEATON J., *Reworking Qualitative Data* (London: Sage) 2004.

HOWE J., "The rise of crowdsourcing", *Wired*, 2006a. Available at https://www.wired.com/2006/06/crowds/.

HOWE J., "5 rules of the new labor pool", *Wired*, 2006b. Available at https://www.wired.com/2006/06/labor/.

HOWE J., *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business* (New York: Three Rivers Press) 2008.

IREN D., *Cost of Quality for Crowdsourcing Management*, thesis submitted to the Graduate School of Informatics, Middle East Technical University, 2014.

KAUFMANN N., SCHULZE T. & VEIT D., "More than fun and money: Worker motivation in crowdsourcing – a study on Mechanical Turk", *Proceedings of the Seventeenth Americas Conference on Information Systems*, Detroit, MI, 2011.

KOZINETS R.V., *Netnography: Doing Ethnographic Research Online* (Thousand Oaks, CA: Sage Publication) 2009.

LAKHANI K.R., JEPPESEN L.B., LOHSE P.A. & PANETTA J.A., "The value of openness in scientific problem-solving", *HBS Working Paper*, WP07-050, October 2006. Available via https://www.hbs.edu/faculty/Publication%20Files/07-050.pdf.

LE BON G., *Psychologie des foules*, (Paris: Édition Félix Alcan) 9th edition, 1905 [1895].

LEADBEATER C. & MILLER P., "The pro-am revolution: How enthusiasts are changing our economy and society", 2004. Available at http://wiki.p2pfoundation.net/Pro-Am_Revolution.

LEBRATY J.F., "Externalisation ouverte et pérennité, une nouvelle étape de la vie des organisations", *Revue Française de Gestion*, 192, pp. 151-165, 2009.

LECHNER M. "Effets de serfs sur la Toile", *Revue du MAUSS*, 1(35), pp. 519-521, 2010.

LIOTARD I. & REVEST V., "Innocentive, un modèle hybride d'innovation basé sur l'appel à la foule et l'Innovation Ouverte", chapter 7 in Benjamin CORIAT (ed.), *Le retour des communs. La crise de l'idéologie propriétaire* (Paris: Les Liens qui Libèrent) 2015.

MAUPASSANT de, G. (1888), *Sur l'eau* (Paris: Folio Classique, n° 2408) re-edition 1992.

McDOUGALL W., *The Group Mind* (New York: Putnam) 1920.

MÉRIC J., JARDAT R., MAIRESSE F. & BRABET J., "La foule. Levier de gestion, projet de société ou idéologie?", *Revue Française de Gestion*, 258, pp. 61-74, 2016.

MOSCOVICI S., *L'âge des foules. Un traité historique de psychologie des masses* (Brussels: Complexe) 1985.

ONNEE S.& RENAULT S., "Le financement participatif. Atouts, risques et conditions de succès", *Gestion, Revue Internationale de Gestion*, 38(3), a special issue on managing creativity, pp. 54-65, 2013.

ONNEE S.& RENAULT S., "Crowdfunding. Vers une compréhension du rôle joué par la foule", *Management & Avenir*, 74, pp. 117-133, 2014.

PÉNIN J., BURGER-HELMCHEN T., DINTRICH A., GUITTARD C. & SCHENK E., *L'innovation ouverte. Définition, pratiques et perspectives* (Paris: Prospective et Entreprise, CCI Paris Ile-de-France) 2013.

RENAULT S., "Du club de Jazz à l'entreprise. Quels sont les enjeux du recours au Jam – le cas du Global Service Jam", *Recherches en Sciences de Gestion - Management Sciences - Ciencias de Gestión*, 91, pp. 39-58, 2012.

RENAULT S., "Travailler pour des fèves de cacao. Crowdsourcing ou pourquoi les organisations jouissent de la contribution des Oompa-Loompas?", *Gestion 2000*, 31(4), pp. 67-85, 2013.

RENAULT S., "Comment orchestrer la participation de la foule à une activité de crowdsourcing. La taxonomie des 4C", *Systèmes d'Information et Management*, 19(1), pp. 76-105, 2014a.

RENAULT S., "Crowdsourcing compétitif. Ressorts et enjeux", *Recherches en Sciences de Gestion - Management Sciences - Ciencias de Gestión*, 101, pp. 59-80, 2014b.

RENAULT S., "Crowdsourcing: Blurring the boundaries of the organization and work", *Rimhe International*, 5(19), pp. 21-40, 2015.

RENAULT S., "Le Crowdsourcing au service de la collecte d'informations marketing. Le cas Clic and Walk", *Journal of Innovation Economics & Management*, 50, pp. 163-189, 2016a.

RENAULT S., "Quand les créatifs contestent le crowdsourcing. Une approche netnographique", *Décisions Marketing*, 81, pp. 131-150, 2016b.

RENAULT S., "Les enjeux du crowdmarketing. Le cas Mobeye", *Revue Management des Technologies Organisationnelles*, 6, pp. 153-166, 2016c.

RENAULT S. & BOUTIGNY E., "Le partage ponctuel d'idées en ligne par la pratique du Jam. Atouts et limites", *Gestion, Revue Internationale de Gestion*, 38(3), special issue on managing creativity, pp. 35-44, 2013.

RENAULT S. & BOUTIGNY E., "Crowdsourcing citoyen, définition et enjeux pour les villes", *Revue Politiques et Management Public*, 31(2), pp. 215-237, 2014.

ROTH Y., *The State of Crowdsourcing in 2015: How the World's Biggest Brands and Companies Are Opening up to Consumer Creativity*, 2015. Available via https://eyeka.pr.co/99215-eyeka-releases-the-state-of-crowdsourcing-in-2015-trend-report.

ROTH Y., *Comprendre la participation des internautes au crowdsourcing. Une étude des antécédents de l'intention de participation à une plateforme créative*, PhD dissertation in managerial sciences, Université Paris 1 Panthéon Sorbonne, 2016.

SCHENK E. & GUITTARD C., "Towards a characterization of crowdsourcing practices", *Journal of Innovation Economics & Management*, 7, pp. 93-107, 2011.

SUROWIECKI J., *The Wisdom of Crowds: Why the Many Are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies, and Nations* (New York: Doubleday) 2004. French translation: *La sagesse des foules* (Paris: Éditions Jean-Claude Lattès) 2008.

THORNE S., "Qualitative secondary analysis", p. 1006 in M.S. LEWIS-BECK, A.E. BRYMAN & T.F. LIAO (eds.), *The Sage Encyclopedia of Social Science Research Methods*, Vol. III (London: Sage) 2004.

VION-DURY P., "Travailler plus pour gagner rien? Les créatifs contre le crowdsourcing", *L'Obs avec Rue89*, 24 July 2014. Available on http://rue89.nouvelobs.com/2014/07/24/travailler-plus-gagner-rien-les-creatifs-contre-crowdsourcing-253875.

VON AHN L. & DABBISH L., "Labeling images with a computer game" in *Proceedings of the SIGCHI conference on Human factors in computing systems*, ACM, pp. 319-326, 2004.

VON AHN L., MAURER B., McMILLEN C., ABRAHAM D. & BLUM M., "reCAPTCHA: Human-based character recognition via Web security measures", *Science*, 321(5895), pp. 1465-1468, 2008.

Sophie Renault