Wikimedia movement governance: the limits of a-hierarchical organization

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Abstract

Purpose – The purpose of this paper is to show the limits of a-hierarchical organization in the Wikimedia movement governance model. Wikimedia governance, as well as the dynamic transformations it is currently undergoing, remains to be covered by the literature on organization and management studies; yet, they exemplify the problems with the "organization of the future," which is highly idealized throughout the management literature.

Design/methodology/approach – The research design relies on an ethnographic, long-term, participative study of the Wikipedia community at large. The methods used rely mainly on discourse analysis and interviews. The study benefits from the unique participant immersion of the researcher (who spent six years participating in the studied community, making over five edits each day on average, and being elected to several positions of highest trust within the organization).

Findings – The findings show that the open, participative, and democratic character of the organization, which in theory is oriented toward sustainable solidarity, as well as the semi-anonymous character of some of the members' identities, makes the community more empowered yet more belligerent. Also, the entirely open and flat governance model makes it more difficult to establish a stable leadership consensus.

Research limitations/implications – Research is limited due to its methodological design, as it relies on in-depth qualitative case studies, rather than wider analysis. Further quantitative research is needed to confirm the findings on a bigger scale and in other open collaboration organizations.

Practical implications – The findings show that participative organizational design, especially in open collaboration projects, have adverse effects in leading to overly confrontational and quarrelsome organizational culture, which not only makes decision making more difficult, but also deters people less used to debating and conflict.

Social implications – The social implications of the findings suggest that even in highly democratized structures, some minimal forms of leadership, and governance are useful to facilitate the decision-making processes.

Originality/value – This paper extends the understanding of organizational dynamics and governance in open collaboration organizations, and exposes the shortcomings of this model, which are an inevitable trade-off for its indisputable benefits.

Keywords Participative management, Wikipedia, Virtual teams, Online cooperatives, Open collaboration governance, Organizational democracy

Paper type Research paper

Introduction

Organizations of the future have long been described as a-hierarchical and flat (Argyris, 1973; Ostroff, 1999). The new model for organizing work is supposed to rely on expertise rather than formal authority (Mallet, 1975; Castells, 1996; Schein, 1996), and on flat, networked open collaboration structures (Benkler, 2006). Such a pipedream

of a fully meritocratic organization has been challenged (Schön, 1983; Jemielniak, 2012); yet, the belief that getting rid of hierarchies in organizations is unequivocally positive is still quite popular.

For instance, one of the suggestions of Frances Hesselbein and Peter T. Drucker is to "ban the hierarchy" as it is "not suited to today's knowledge workers" (Hesselbein, 2011, pp. 79-80). It is believed that, in organizations of the future, shared leadership "effectively substitutes for hierarchy" (Lawler and Worley, 2009, p. 200). Hierarchies, it would seem, are perceived as becoming increasingly obsolete (Pursuer and Cabana, 1998), and they epitomize an extreme of organizational inefficiency characteristic of large bureaucratic corporations (Whyte, 1956/2002), and to be gradually replaced by other forms of organizing (Powell, 1991).

According to some, a central authority and a certain degree of hierarchy in open collaboration is essential to making it work (Carr, 2007). Yet, other authors insist that loosening hierarchy is crucial for new organizational designs (Townley, 1994; Atton, 2003). While the advantages of such an organizational solution have been widely discussed, it may be worthwhile to pinpoint the dysfunctions and disadvantages of a-hierarchical designs. Since Wikipedia, similarly to Mondragon cooperatives (Greenwood *et al.*, 1991), relies on radically loose hierarchy and egalitarianism but also gathers people who have no professional or financial interest in participating, it is a perfect model community[1] for studying the negative side of the a-hierarchical approach. Also, it is often esteemed as the paragon of a successful a-hierarchical organization and is even considered to be on the cutting edge of incoming organizational changes (Malone, 2004), which makes it a great topic for such an analysis.

In this paper, I will describe the managerial and group decision-making practices utilized in Wikipedia and discuss governance issues among the main stakeholders. I will show the high level of conflicts and the common disagreements in the community, which are both strongly collaborative and entirely voluntary (and thus create weak incentives to stay when discord persists). I will explain that the highly quarrelsome character of interactions is actually part of the governance system, relying on sustainable solidarity, and allowing individuals to vent all doubts and encouraging disputes, in the absence of any fear of hierarchy or punishment. Yet, I will also show that this system, while sustainable, is also making the establishment of leadership much more difficult, and decision making and coordination more chaotic. I will point out, on the studied example, that the main shortcomings of a-hierarchical governance include much more time-consuming negotiations, a possibility to overturn a decision even after a consensus has been reached by a determined minority group, and a general volatility of all agreements.

Wikipedia as a model of collaborative organization

When Wikipedia started in 2001, it became an instantaneous success. It is currently visited by nearly half a billion unique visitors monthly[2]. The total number of edits on all Wikimedia projects as of December 2012 exceeds 1.7 billion[3]. Currently, it has over four million articles in the English alone[4]. Yet, the sheer number of encyclopedic articles is just the tip of the iceberg: the total number of all pages on English Wikipedia exceeds 28 million[5]. These include page redirects, categories, and other technical pages, but also large amounts of discussions on article content, rules, policies, and participant interaction. Wikipedia projects, irrespective of the language, are filled with

textual accounts of community life and culture (Wikipedia community relies almost entirely on written discourse as the means of social communication and interaction), far larger than the encyclopedia itself.

The community of the English Wikipedia is enormous as well: as many as 300,000 people edit every month. With such a huge population, and a meritocratic aim, it is essential that the project be guided by many rules and regulations; indeed, there is a huge para-legal side to Wikipedia (the total number of policies, rules, guidelines, and behavioral essays reaches 2,000, with the total word-count in the millions). While the phenomenon of spontaneous bureaucratic regulation is interesting in itself, I would like to focus in this paper on the issues of movement governance and management, as they are unique, interesting, and useful for making comparisons to brick-and-mortar organizations.

The Wikimedia[6] movement's formal governance structure relies on:

(1) the Wikimedia Foundation (often abbreviated to WMF), which owns the domains and trademarks, and is responsible for collecting most of the funds;

(2) Wikimedia local chapters – typically volunteer-driven, although sometimes professionalized, associations of Wikimedia editors and enthusiasts, self-governed and often organizing Wikimedia events; some or sometimes all of the donations collected locally stays with the chapters;

(3) the so-called "Wikimedia community," which includes all editors of Wikimedia projects, often uninterested in participation in any chapter work, but with a strong feeling of ownership and empowerment to make decisions for the movement; and

(4) the Board of Trustees, which is the highest decisional body within the movement, formally overseeing the Foundation and setting its strategy, and composed of Jimmy Wales as the founder, the people elected by the chapters and the community, as well as nominated by the Board itself for special expertise.

The Wikimedia movement, unlike many other virtual communities that rely on the leadership of a few representatives (Butler *et al.*, 2007; Lessig, 1999), uses entirely democratic and participative governance, relying on diverse range of mechanisms (Schroeder and Wagner, 2012). The very rhetoric and culture of Wikipedia relies on equality, and even if this equality is illusionary in some cases (as power differentials naturally emerge in an informal manner). The formal structure and governance are fully participative, although the number of formal rules, both in terms of strict policies and less formal advisory essays, is very high (Butler *et al.*, 2008; Morgan and Zachry, 2010). Sustainable solidarity is considered to be an important part of the organizational culture. All rules can be challenged by any participant, and decision making is based on the principle of consensus; more specifically, instead of voting, users are expected to try to persuade each other, until they reach a high level of agreement (typically, around 80 percent).

Additionally, the Wikimedia movement is voluntary, and all participants do their share without any financial remuneration and not following own self-interest (Benkler, 2011), and even without the professional recognition that is typical for other open collaboration projects, especially in the field of open source software (Wasko and Faraj, 2005; Von Hippel and Von Krogh, 2003). They do so voluntarily and without direction or coordination (all editors are free to choose their interests and to develop Wikipedia in

the way they see fit, and are challenged only if other editors object). Also, participation in Wikimedia does not require regular editors to disclose their identity, and many editors participate anonymously. As a result of these phenomena, Wikimedia forms a nearly perfect example of a spontaneous collaborative organization (Shirky, 2009). When its size is taken into consideration, it is unprecedented and incomparable to any other social movement. Therefore, it is a great object for the study of grassroots governance and self-organizing communities.

Research methods
This paper results from a six-year ethnographic project on Wikipedia, conducted from 2006 to 2012. It is a qualitative account, gathered by an organizational ethnographer (Hammersley and Atkinson, 1995; Schwartzman, 1993; Kostera, 2007; Krzyworzeka and Krzyworzeka, 2012), and relies on participative inquiry (Denzin and Lincoln, 2007; Van Maanen, 1988/2011): the researcher was immersed in the studied culture and "went native" during the process of the study. Such an approach is one of the strategies deemed to be legitimate for anthropological projects (Sperschneider and Bagger, 2003; Gatson and Zweerink, 2004; Van Maanen, 1988/2011). Although in traditional qualitative studies, this approach is criticized by some authors as being risky (Leach, 1982, p. 124; Walsh, 2004; Lobo, 1990), in some approaches, such as action research and performative studies of cultures, it is considered to be superior to a non-participatory or disengaged approach (Reason, 1988; Jemielniak, 2002, 2006; Greenwood and Levin, 1998). Also, in mainstream anthropology, going native has sometimes been considered as justified by the benefits it brings (Tresch, 2001; Hayano, 1979; Sperschneider and Bagger, 2003). Additionally, in studies of virtual communities, where "natives" are never born but always encultured, going native while keeping an "anthropological frame of mind" (Czarniawska-Joerges, 1992) is particularly useful when understanding the proper context of discussions, viewpoints, ideas, and organizational meanings (Magala, 2009; Dobosz-Bourne and Kostera, 2007; Krzyworzeka and Krzyworzeka, 2012), which are difficult for strangers to comprehend.

Over a period of six years, the researcher logged into Wikipedia practically every day (mainly on Polish and English Wikipedia, but also on other projects), and made a five-digit total of edit counts. The researcher was elected to be one of about 100 administrators, one of seven "bureaucrats" on Polish Wikipedia, and one of approximately 40 stewards for all Wikimedia projects, and served as one of seven ombudspersons for the whole movement. The fact that the researcher is conducting an academic study of open collaboration virtual communities has been made explicit throughout.

The main research method used for the paper has been participant observation (Flyvbjerg, 2001; Denzin and Lincoln, 2003), which in the case of virtual ethnographies or netnographies (Kozinets, 2010) combines elements of observation and discourse analysis (Grant et al., 1998), as almost all interactions and behaviors are inherently textual and must be analyzed narratively (Boje, 2001; Jemielniak and Kostera, 2010). In terms of practical presentation of the interpretation of the observed processes, representative cases, and quotes were selected to exemplify processes considered typical for the studied community, chosen from many similar others.

Although the paper does draw from grounded theory heritage (Glaser and Strauss, 1967) in terms of creating categories and systematizing the material, it is an organizational ethnography and relies more on anthropological reflection (Czarniawska-Joerges, 1992; Clifford and Marcus, 1986) than on coded

categorizations. For the purpose of this paper only, the number of relevant discussion, talk, and comment pages that were carefully analyzed and interpreted exceeds 150,000 words of field material[7].

Decision-making rules on Wikipedia

Wikipedia is created through the entirely voluntary contributions of editors who have no financial incentive to participate. There is a plethora of studies on motivations to participate in Wikipedia (Forte and Bruckman, 2005; Ciffolilli, 2003; Yang and Lai, 2010; Baytiyeh and Pfaffman, 2010; Kuznetsov, 2006; Lee and Jang, 2010). For the purpose of this paper, it is sufficient to acknowledge that some people are eager to spend significant amounts of time developing Wikipedia, and they often perceive their contributions as a fun hobby or play, rather than work, which is not unusual for knowledge-intensive environments (Hunter *et al.*, 2010; Huizinga, 1949; Sørensen and Spoelstra, 2012).

Since all contributors have the right to remain anonymous and can edit under nicknames, the issue of trust, characteristically for open collaboration organizations (Ciesielska, 2010; Ciesielska and Iskoujina, 2012; Latusek and Cook, 2012; Latusek and Jemielniak, 2007), becomes highly important. In the case of Wikipedia, interpersonal trust is replaced by trust in procedures (Jemielniak, 2015), and the internal order of the collaboration is partly sustained by the trust endowed in policies and their execution.

As a result, the number of policies, rules, and other regulations on English Wikipedia is tremendous: including essays and advisory notes, there are more than 1,200 regulatory documents, and the word count of just the main 50 policies is close to 150,000 words. This phenomenon is interesting in itself (Jemielniak, 2013; Konieczny, 2009a); yet, for the purpose of this paper, it is important mainly to describe the core rules guiding the process of decision making on Wikipedia[8].

One of the main policies of Wikipedia describes how disputes should be resolved, and it refers to consensus (WP: Consensus):

> When agreement cannot be reached through editing alone, the consensus-forming process becomes more explicit: editors open a section on the talk page and try to work out the dispute through discussion. Here editors try to *persuade others*, using *reasons* based in policy, sources, and common sense; they can also suggest alternative solutions or compromises that may satisfy all concerns. The result might be an agreement that does not satisfy anyone completely, but that all recognize as a reasonable solution. Consensus is an ongoing process on Wikipedia; it is often better to accept a less-than-perfect compromise – with the understanding that the page is gradually improving – than to try to fight to implement a particular "perfect" version immediately. The quality of articles with combative editors is, as a rule, far lower than that of articles where editors take a longer view.

Similarly, one of the fundamental Wikipedia policies (WP: What Wikipedia is not) states:

> Wikipedia is not an experiment in democracy or any other political system. Its primary (though not exclusive) means of decision making and conflict resolution is editing and discussion leading to consensus – not voting. (Voting is used for certain matters such as electing the Arbitration Committee.) Straw polls are sometimes used to test for consensus, but polls or surveys can impede rather than foster discussion so should be used with caution.

In general discussions, consensus is typically considered to be reached if at least 80 percent of the good faith disputants agree (bad faith comments and votes are ignored). There are also several mechanisms aimed at dispute resolution and mediation (Billings and Watts, 2010), which allow to mitigate conflicts.

There are many essays and instructions on how consensus can be reached. Voting is perceived as the last resort. One of the Wikipedia adages states that "voting is evil." In the same vein, a behavioral guideline on English Wikipedia says (WP: Polling is not a substitute for discussion):

> Wikipedia works by building consensus. When conflicts arise, they are resolved through discussion, debate and collaboration. While not forbidden, polls should be used with care. When polls are used, they should ordinarily be considered a *means* to help in determining consensus, not an end in itself.

These rules are not unusual for organizational models that rely on egalitarianism and solidarity, such as for the search conferences (Trist, 1983; Williams, 1979) or action research approaches (Oels, 2002; Crombie, 1985; Jemielniak, 2006), and for industrial democracy designs in general (Bass and Shackleton, 1979; Greenwood *et al.*, 1991). They are also quite commonly used in contemporary knowledge-intensive organizations, as in IT project management, for example (Koch, 2004; Marks and Lockyer, 2004). Undoubtedly, they fall directly into the postulates of cooperative and participative management theories (Bass and Shackleton, 1979; Kim, 2002; Canet-Giner *et al.*, 2010) oriented toward the benefits of employee empowerment.

Yet, the effects of an a-hierarchical and consensus-oriented organization design are amplified in an environment where identities can be created freely, and personas enacted on the spot. Many phenomena take different forms in a virtual organization environment. In online communities such as Wikipedia, although credentials are built gradually and trust gained through extended presence in the community, the separation of one's professional, regular life persona from one's fluidly created online persona encourage the expression of open dissent even more so, as the consequences in terms of organizational power relations are much smaller, and all consequences are related to the virtual persona.

Thus, in this paper, I will provide examples of the typical trajectories of group decision making on Wikipedia and emphasize its democratic and open character but also expose the dysfunctions that it entails.

Governance and decision making in practice

Three cases, which will be briefly (due to the word-count limit) presented here to portray the practical problems with fully egalitarian governance in virtual communities have been chosen from many similar cases, and are considered very representative of the described phenomena.

The first incident took place in December 2011. Jérôme Hergueux, a talented PhD student of economics from Paris who was conducting a study at the Berkman Center for Internet and Society at Harvard University on the dynamics of online interactions and behavior[9], wanted to engage the Wikipedia community in an experiment. His research was conducted under the supervision of the European Research Council and the French ethics committee, and he requested comments and support for the project from the Wikipedia community months ahead of time, discussed it in the so-called administrators' noticeboard[10] starting in March 2011, obtained formal support from both Wikimedia Foundation and the Wikimedia Research Committee[11], and even publicly discussed the project on the foundation's mailing list in April 2011[12].

Yet, when the banner that was used to invite potential candidates to participate in the survey, was published on the English Wikipedia in December 2011, a community's uproar[13] led to the banner being taken down within several hours[14], although the

poll was far from getting enough respondents. Most of the protests were against using the banner space for any reason other than fundraising[15], and the main immediate reason for taking the banner off Wikipedia was the mistaken assumption of one of the administrators that the banner was shown to all logged-in visitors (in fact, it was not, as it relied on a special algorithm, and was displayed only to users matching certain criteria)[16].

Apparently, even though the banner was discussed in the community in general, it did not reach the ones who were puzzled by it. Clearly, the omission of a reminder about the study a day or two before it started was quite grave. Also, the incident sparked a wider discussion as to whether any banners unrelated to fundraising should be allowed at all, even if they were not commercial ads. The whole discussion led to the rather puzzling conclusion that it is not even clear, in the social and legal sense, who "owns" the banner space, as the Foundation assumed that it has the community's mandate to use it for whatever purposes it deems valuable, while many in the community believed that the community owns it in principle, and the Foundation is only allowed to use it to raise funds.

Another somewhat typical example of how decisions are made and internal governance is enacted comes from Italian Wikipedia. Its community wanted to protest a bill being discussed in the Italian Parliament, which according to many interpretations imposed a requirement on all websites operating in Italy to correct any content that some party considered to be detrimental to his or her image. Such amendments were supposed to be published within 48 hours, without a possibility to comment; furthermore, failure to adhere to the regulation was to be penalized by a fine of up to 12,000 Euros[17]. After a discussion in the Italian community, Italian Wikipedia was blacked out from October 4 to October 6, 2011 (i.e. content was inaccessible to the general public). That was the first time in history that any Wikimedia project protested in such a way.

Interestingly, from the point of view of internal communication, governance, and decision making, any discussion within the international Wikimedia community started only after the protest was initiated[18]. The information on the protest reached the Foundation mailing list as late as the first day of the protest[19]. Moreover, even though all major world media considered the situation as a piece of news worth covering, and many contacted the Foundation to ask for comments and the rationale for the protest, the Foundation was informed that the blackout had been planned only several hours before it started[20]. Apparently, none of the Italian editors or local leaders of the protest even thought that it might be a good idea to contact the Foundation and give advanced notice, not to mention consulting them on such a major move that affected the whole Wikimedia community.

It should be noted that the Foundation immediately expressed official support for the blackout[21]; yet, the spontaneous and democratic style of decision making quite clearly amplified the informational chaos.

Both examples show that many decisions within the Wikimedia movement are made on an ad hoc basis, and in the absence of a controlling body. Although the Foundation serves as the main organizational backbone of the movement (as it owns the domains and servers, and runs the fundraising campaigns), it does not serve as a decision center or as an information coordinating hub.

There are many reasons for this phenomenon. One is the radical empowerment that is ideologically followed within the movement, as Wikipedia denounces formal hierarchies and, at least on a rhetorical level, attempts to keep them to a minimum;

consequently, all editors are supposed to be treated with equal voice. Rejection of all hierarchies may go in tandem with the rejection of information flow coordination as well. Also, within the movement, there are stakeholders who sometimes minimize the influence of the Foundation on the decision making (for instance, some local chapters perceive their role as taking over some of the responsibilities and resources previously belonging to the WMF, to better address the movement's mission locally). Yet, what is quite clear is that such governance and decision-making models result in the higher contingency and uncertainty of organizational actors.

Discussions similar to that described above take place all the time. For instance, the Wikimedia Foundation is often criticized for spending too much money on non-technical expenses and being overstaffed. At the same time, it is also criticized for spending too little on staff and it has to justify the salary levels as fair when suspected of underpaying its employees[22]. The open and a-hierarchical mode of decision making, as well as the focus on a consensus, often results in stalemates and lengthy discussions without a resolution.

This was the case in a discussion about certain forms of image filtering. In a large, international poll, the majority of the Wikimedia community expressed support for controversial content filtering (including drastic or nude images used for educational or artistic purposes on Wikipedia) in 2011[23]. (13,526 supporters – 65 percent) The Board of Wikimedia Foundation passed a resolution, supporting the development of tools that would allow users to opt into some form of such content filtering[24]. Yet, the strong opposition of smaller groups of editors in local communities, and in particular on the Spanish Wikipedia[25] (74 people against – 79 percent), the French Wikipedia[26] (63 people against – 81 percent), and the German Wikipedia[27] (356 people against – 85 percent) made the changes impossible to implement, due to a lack of consensus. The continuing debate effectively blocked any resolution: even though the Board possesses the formal authority to introduce policy changes, and even though it did have a majority mandate in this particular case, they did not dare to push the issue. A strong and disciplined group of dissenters, eager to spend their time debating the issue, and aware of wide support coming from some of the leading Wikimedia communities (i.e. German, Spanish, and French Wikipedias), was able to torpedo the change. Additionally, a mainly theoretical but nonetheless verbalized threat of forking[28] made it clear that the editors who opposed content filtering were very determined to preserve the status quo. Discussions on how controversial content could be tackled both with respect for those who would not like to see it and respect for those who perceived any form of limiting access, even when conscious and voluntary, as censorship ultimately took the voluminous form of hundreds of thousands of words[29].

Unfortunately for this governance model, even though it allows for open discussion without fear of hierarchies and punishment, it also brings more adverse effects. As seen on the examples from Wikimedia, open collaboration governance not only bears the cost of more resource-intensive negotiations (which would be understandable and fine, especially when justified by more informed results), but also inescapably results in the possibility of small groups of highly motivated individuals blocking a consensus. A consensus is always at threat of not being implemented or overturned, and no decision is written in stone – a tedious discussion can always be started.

In fact, lengthy debates are the heart and soul of the Wikipedia experience. Organizational policies, encyclopedic rules, and even the content of encyclopedia articles are all disputed, and the arguments grind on *ad nauseam*. Even the most insignificant topics become bones of contention. For instance, between April and June 2012,

a discussion on English Wikipedia took place to decide if Mexico actually has any official language[30]. Reliable sources were exchanged, links posted, quotes given, and the whole discussion reached over 17,000 words without reaching any clear consensus. Similarly, deciding as to whether the proper spelling for another article should be "yoghurt" or "yogurt" took ten large debates, and many conflicts between editors, in the time between November 2003 and December 2011 when it was finally resolved in a more permanent way[31]. One of the largest conflicts on English Wikipedia community (Ayers *et al.*, 2008; Anderson, 2011; Lih, 2009) took six years, 400,000 words of debates and consultations, and came down to deciding if the current Polish city of Gdańsk should be described under its name, or rather its former German one (Danzig), possibly more familiar to English speakers and more frequent in older history textbooks. All in all, the discussions are often longer than the articles that they are related to (Forte *et al.*, 2009). Effectively, experienced editors who stay on Wikipedia are the ones who either enjoy disputes and quarrels, or those who are indifferent to most of the discussions. This may very well be one of the reasons for the extreme gender gap on Wikipedia (according to different estimates, as little as 16 percent of editors may be females, although the methods of measurement may partly affect the results, see: Lam *et al.*, 2011; Hill and Shaw, 2013), which is common in the free culture movement in general (Reagle, 2013).

Flat governance systems have clear advantages (Carzo and Yanouzas, 1969; Niederer and van Dijck, 2010; Benkler, 2006). They, as noted before, have already been discussed in detail in literature, and thus they are not going to be covered in this article. However, as this paper has shown, horizontal management brings also certain costs and disadvantages. As illustrated by the three cases described above, Wikipedia decision making and governance model suffer from the following predicaments:

(1) lengthy discussions where all are welcome to express their opinion at any stage and debate goes on until a consensus is reached;

(2) the difficulty of knowing when a discussion is over and one can proceed;

(3) expression of one's opinion is encouraged and the level of fear of hierarchy and power distance is low (in fact, Wikimedia luminaries are often criticized more, as a result of their greater exposure);

(4) most decisions are heavily debated and even when there is a common agreement, the decisions are likely to be criticized anyway;

(5) the lack of clear coordination center for decision making, users take on leadership positions ad hoc and execute decisions as they see fit (e.g. by turning the described banner off); and

(6) communities of editors have strong ownership of their decisions and of the websites they perceive as their own, to the extent that they do not necessarily bother to inform other stakeholders about the consequences or the possible impact of the decisions (as was in the case of Italian Wikipedia blackout).

Summary and implications
The fluid leadership and chaotic governance model of Wikipedia definitely adds to its attractiveness (Skolik, 2012); yet, as can be seen, it causes delays in the decision-making processes.

While Wikipedia governance epitomizes the consensus-oriented organizational design, which is heavily propagated as beneficial for traditional, business organizations

(Drucker, 1993; Pursuer and Cabana, 1998) and often portrayed as the future of organizational governance (Castells, 1996), it also clearly exposes the deficiencies of this model, when applied fully. Similarly to systems of concertive control in regular organizations (Barker, 1993), open collaboration governance results in unanticipated adverse effects: lengthy discussions, possibility to overturn the consensus by a determined minority, as well as uncertainty of all decisions.

"Democratic hierarchies" address the issues of ownership, authority, and leadership much more often than in regular organizations (Viggiani, 1997). On Wikipedia, the lack of dissent is treated as agreement, and since fear of hierarchy does not mitigate the participants, most topics result in heated debates. As Shirky (2012) observes:

> Open systems are open. For people used to dealing with institutions that go out of their way to hide their flaws, this makes these systems look terrible at first. But anyone who has watched a piece of open source software improve, or remembers the Britannica people throwing tantrums about Wikipedia, has seen how blistering public criticism makes open systems better.

Yet, such a design – aside from the obvious advantages of full democracy, ownership of decisions, and radical transparency – results also in problems a-typical for regular organizations.

Wikipedia, both on the level of the individual projects and the movement as a whole, has almost no centralized control (Malone *et al.*, 2010, p. 21). It is based on adhocratic principles (Konieczny, 2009a, 2010) and relies on fragile consensuses and decisions. It can only partly compensate for that phenomenon by increasing proceduralization and embedding such procedures into the technical system of the projects to rely on "algorithmic governance" (Müller-Birn *et al.*, 2013). In a sense, the Wikipedia organization is incomplete by design (Garud *et al.*, 2008), which gives its members the perception of control, but at the same time takes away the stability: all rules and decisions can be overturned, sometimes by the agreement of a small fraction of the community determined enough to insist on a change and aware of the procedures required to make that change happen. While the strong egalitarian ethos may be a result of Wikipedia history and ideology (it is a website created by a number of die-hard activists despising hierarchy, anything corporate, and also drawing heavily from F/L/OSS traditions), assuming that this, as well as other of its features are contingent, rather than structural, is quite risky. Wikimedia governance model is working also very possibly because it is egalitarian. The example of Citizendium, a failed fork of Wikipedia, differentiating itself mainly by the introduction of hierarchy of users and recognition of their formal expertise, shows that any deviations from a radically participative structure in open collaboration of knowledge production may render it ineffective.

Coordination and leadership of everyday tasks is dispersed (Zhu *et al.*, 2011, 2012) and, as already noted, Wikipedia organizational culture strongly enforces rhetorical egalitarianism and democracy. In a way, it denies having stable hierarchies and leaders. Since informal governance structures naturally emerge even in a lack of formal leadership, one consequence of the anti-leadership rhetoric and dispersed management is poorer legitimization of those who assume leadership roles (O'Neil, 2009; Epstein, 2001). Also, the resulting lack of a clear coordination center makes negotiating with the outer world more difficult (as in the case of the research banner), and makes it hard to define and narrow down internal governance and responsibilities (including the common sense of being responsible for other people in the movement whenever our actions affect their standing).

The Wikipedia community, as a whole, is deeply ideology-driven (which may make an organizational change more possible; Dobosz-Bourne and Kostera, 2007) and passionate about its mission (Antin, 2011). It is very likely that the transparency, egalitarianism, and anti-leadership dispersed governance, along with the consensus-oriented decision-making processes, contribute significantly to the success of this open collaboration organizational design. Also, one of the fundamental principles of Wikipedia is that all articles have to be created based on reliable sources, and discussed based on the merits of argumentation only, without relying on personal expertise or formal authority. Understandably, such an approach to the encyclopedic articles requires similar principles and the denouncement of formal hierarchies also in organizational governance and has, since the very beginning, been the social glue binding together people of different beliefs and backgrounds (Enyedy and Tkacz, 2011; Chen, 2011).

Yet, as described in this paper, such decision-making model and governance, besides the many benefits that it brings, inevitably results in organizational dysfunctions, too. The sustainable solidarity leads to a system which relies on endless disputes and quarrels, chaotic, and ad hoc management, erratic internal and external communication, and difficulties in enforcing even widely supported solutions. While immediate usability in traditional organizations with paid staff is unclear, in the face of growing popularity of knowledge management systems and wiki-based communities, even the most mainstream businesses have to familiarize themselves with the mechanisms of wiki-communities.

A lot of Wikipedia procedures developed in certain historic contexts (such as the lack of social networks, strong Usenet tradition and ethos, the original community with a significant domination of geeks and academics), which make a lot of Wikipedia organization *sui generis*, and difficult to generalize to other organizations. However, hundreds of projects under the Wikimedia umbrella share a lot of the original system, with all of its pros and cons, irrespective of the time of origin and the national culture.

Because of that, and since Wikipedia is a model solution of democratic and networked governance and decision making in computer-supported collaborative work, as well as since organizational designs similar to those used on Wikipedia are considered as advisable and well suited to the demands of the future, it is worth further exploring their shortcomings from the perspective of management science.

Notes

1. In this paper I am using the words "community", "organization", and "movement", all referring to the collective(s) of Wikimedia activists and Wikipedia editors. Quite obviously, these words are highly loaded constructs, and are definitely not interchangeable in academic discourse. It is also not entirely clear if Wikimedia can even be perceived as a social movement (Konieczny, 2009b). The use of these terms in this paper relies on the fact that "movement" and "community" are present in the everyday discourse of the studied culture in the same context (Wikimedians themselves frequently speak of Wikimedia movement and community). The word "organization", on the other hand, is introduced by me to offer a more neutral perspective on the topic, and relate it to the organization science.

2. http://reportcard.wmflabs.org/ (all addresses were visited in December 2012).

3. http://toolserver.org/~emijrp/wikimediacounter/

4. http://meta.wikimedia.org/wiki/List_of_largest_wiki

5. http://en.wikipedia.org/wiki/Special:Statistics

6. Wikimedia is an umbrella organization for many projects: beside Wikipedia, there are also Wikiversities, Wikinews, Wikiquotes, etc.

7. For the convenience of the reader, all references to Wikipedia rules are given in the format typical for internal Wikipedia links. Obtaining a full URL is very easy, since the syntax is stable. For example, whenever I refer to (WP: Policies and Guidelines), I reference the link http://en.wikipedia.org/wiki/Wikipedia:Policies_and_guidelines

8. For practical purposes, I am referring to English Wikipedia regulations, without describing all of the nuances of local projects (each of which establishes its own rules). Yet, most of the rules are shared, with minor variations, across all parts of the Wikimedia family.

9. See, http://meta.wikimedia.org/wiki/Research:Dynamics_of_Online_Interactions_and_ Behavior

10. http://en.wikipedia.org/wiki/Wikipedia:Administrators%27_noticeboard/Archive222# Researchers_requesting_administrators.E2.80.99_advices_to_launch_a_study

11. http://meta.wikimedia.org/wiki/Research_talk:Dynamics_of_Online_Interactions_and_ Behavior#RCom_review

12. See: http://lists.wikimedia.org/pipermail/foundation-l/2011-April/065229.html

13. http://en.wikipedia.org/wiki/Wikipedia:Administrators%27_noticeboard/IncidentArchive 731#Harvard.2FScience_Po_Adverts

14. http://en.wikipedia.org/wiki/Wikipedia:Requests_for_comment/Central_Notices

15. http://en.wikipedia.org/wiki/Wikipedia:Wikipedia_Signpost/2011-12-12/News_and_notes

16. http://meta.wikimedia.org/wiki/Research_talk:Dynamics_of_Online_Interactions_and_ Behavior#Banner_temporarily_disabled

17. The full text of the protest manifesto is available at: http://it.wikipedia.org/w/index.php? title=Wikipedia:Comunicato_4_ottobre_2011/en&oldid=43993454

18. See http://meta.wikimedia.org/wiki/Wikimedia_Forum/Italian_Wikipedia#Close_the_ Italian_chapter and the discussions here: http://lists.wikimedia.org/pipermail/foundation-l/ 2011-October/thread.html

19. See: http://lists.wikimedia.org/pipermail/foundation-l/2011-October/069191.html

20. See: http://lists.wikimedia.org/pipermail/foundation-l/2011-October/069258.html

21. See: http://blog.wikimedia.org/2011/10/04/regarding-recent-events-on-italian-wikipedia/

22. See: http://lists.wikimedia.org/pipermail/wikimedia-l/2012-December/123194.html

23. The referendum engaged over 24,000 voters, so it is clear that there is support for some form of image filtering. See: http://meta.wikimedia.org/wiki/Image_filter_referendum/Results/en

24. For discussions on controversial content see, e.g. http://meta.wikimedia.org/wiki/ Controversial_content

25. http://es.wikipedia.org/wiki/Wikipedia:Encuestas/2011/Sobre_el_filtro_de_im%C3% A1genes

26. http://fr.wikipedia.org/wiki/Wikip%C3%A9dia:Sondage/Installation_d%27un_Filtre_d% 27image

27. http://de.wikipedia.org/wiki/Wikipedia:Meinungsbilder/Einf%C3%BChrung_pers%C3% B6nlicher_Bildfilter

28. http://de.wikipedia.org/wiki/Wikipedia:Wikipedia-Fork

29. See: e.g. http://meta.wikimedia.org/wiki/Controversial_content/Brainstorming or http://en. wikipedia.org/wiki/User_talk:Jimbo_Wales/Personal_Image_Filter

30. http://en.wikipedia.org/wiki/Talk:Mexico#RfC:Does_mexico_have_an_official_language

31. http://en.wikipedia.org/wiki/Talk:Yogurt/Archive_6#Move_page_to_yogurt

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