

Contribution for the workshop

## **Participatory knowledge production 2.0: Critical views and experiences**

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## **Wikipedia – participatory knowledge production or elite knowledge representation?**

### *Extended abstract*

### **Introduction**

Ten years ago the peer reviewed and expert-based online encyclopaedia *Nupedia* introduced Wikipedia as “a fun project loosely associated with Nupedia”<sup>1</sup>. Obviously, the developers themselves regarded it as rather “wild-and-woolly” in contrast to their main project which they characterized as “much more rigorous and serious.”<sup>2</sup> Today most people have not heard of Nupedia. Wikipedia has not only pushed its predecessor aside, but also seriously challenges traditional, well-institutionalized competitors such as the Encyclopædia Britannica. Besides the enormous pace of Wikipedia’s success, this development is especially remarkable because of the revolutionary organization of the encyclopaedia: Instead of relying on trusted experts and a rigorous peer review system the encyclopaedia seems to be built on a principle that was often euphemistically associated with a “wisdom of crowds” (Surowiecki 2004), allowing basically everybody to produce and edit content.

This new way of participatory knowledge production found many proponents as well as critics. Of course, the articles’ quality soon became one of the biggest concerns, especially when the encyclopaedia gained popularity. Indeed, there were many incidents which illustrate Wikipedia’s lack of quality control. For example, a contributor jokingly claimed in an article that one of the prizes of the 1987 women’s European cup was an ironing board. Although it was corrected quickly, several big media outlets repeated the mistake until finally even the German president at that time, Horst Köhler, referred to the never existing ironing board when he awarded the women’s national team in 2007.<sup>3</sup>

Such incidents illustrate Wikipedia’s weakness, while prove the relevance of the platform at the same time. In a highly influential essay Lanier (2006) described the dangers of such a combination that he coined as “digital maoism”. Despite of such criticism, Wikipedia became one of the most popular websites worldwide.<sup>4</sup> Proponents pointed out that traditional encyclopaedias contain many errors as well and indeed a comparative study (Giles 2005) concluded that Wikipedia and Encyclopædia Britannica go “head to head” in terms of accuracy. No matter how reliable this and similar studies are, it seems obvious that Wikipedia and its participatory architecture has to be regarded as a success. This challenges traditional elite expert-based models

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<sup>1</sup> <http://web.archive.org/web/20010118225800/http://www.nupedia.com> (all websites retrieved in February 2011).

<sup>2</sup> [http://web.archive.org/web/20010406105416/www.wikipedia.com/wiki/Welcome,\\_newcomers](http://web.archive.org/web/20010406105416/www.wikipedia.com/wiki/Welcome,_newcomers).

<sup>3</sup> This was revealed by a blogger who wrote an article including all relevant sources about the incident (Nordmann 2007).

<sup>4</sup> In February 2011 the web company Alexa ranked Wikipedia as number 7 on a list of global top sites (<http://www.alexa.com/topsites>).

of knowledge production. Further, it leads to the question if such a participatory model might be more effective than traditional modes of knowledge production? If “the one is smarter than the many” (Lanier 2006) or the other way round? This debate is neither new nor settled, as described below.

## Expertism vs. lay participation

The idea that elite experts significantly influence publicly important issues seems problematic for democratic societies (Fischer 2009). While the first half of the 20<sup>th</sup> century was rather techno-optimistic with a generally positive view on science, technology and expertise, this began to crumble when the public got increasingly aware of the problems associated with this development. In the 1970ies we can observe a wide debate especially about ecological damages caused by science and technology themselves. Correspondingly, the image of experts as problem solvers as it was outlined in technocratic visions, received more and more blemishes. At the same time, complex knowledge societies highly depend on expertise, which leaves them in a dilemma.

One suggestion to deal with this situation is a call for “democratising expertise” (Nowotny 2003), e.g. by involving lay people in decision-making as it is done in many participatory procedures nowadays, or by opening science itself to the public in various ways. However, others critically referred to problems such developments may pose, for example by undermining the autonomy of science (Weingart 2001). Common fears are that the quality of science might suffer from such openings or that it could be exploited for politics or economic purposes. Obviously, the dilemma connected to expertise is far from being solved and the expert’s role is still vividly discussed (Bogner/Torgersen 2005).

The Internet fans the flames of this debate even more. It seemingly brings a new independence of exclusive expertism by allowing lay people to access information more easily and giving them the chance to publish content themselves. Wikipedia can be regarded as a prominent example of this development, incorporating many of the conflicts described above. It depends on expertise to produce articles on a high qualitative level, while it lacks traditional selective *ex ante* peer review mechanisms<sup>5</sup>. Contrary to the academic system, basically everybody can edit everything. However, it is important to note that Wikipedia’s organization is not completely anarchic. In fact, the community has developed a quite sophisticated quality control system which just – unlike academia - works *ex post*. Moreover, it is not limited to selected experts with institutionalized social roles and authority. Rather, participants have to establish their social status themselves with their contributions within the platform. Because of this lack of predefined roles it has to be negotiated which knowledge is included and how it is presented. As a result, experts and lay people might confront and are forced to deal with each other. Discussion pages connected to each article form an important arena where this takes place.

## Discussion pages as an arena for the social construction of reality

Although a detailed set of guidelines and rules define how Wikipedia articles should be constructed, many of them leave room for interpretation. This especially counts for the core

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<sup>5</sup> At least for the German language version this is not entirely true anymore because it now includes a system of „viewers“ who check edits in articles before they appear in the normal public version. However, also the unchecked version is accessible, too. For a deeper analysis of the relation between science and Wikipedia see König/Nentwich (2009).

policy *neutral point of view* (NPOV) which asks for “representing fairly, proportionately, and as far as possible without bias, all significant views that have been published by reliable sources.”<sup>6</sup>

Not surprisingly, the different elements of this policy are controversially discussed in the community itself but also in wider debates, e.g. in the conference series “Critical Point of View”. On the discussion pages connected to the articles we can observe debates about what exactly a “reliable source” is, what makes a view “significant” and how it can be represented “fairly” etc. Here the participants concretely negotiate, whose expertise is trusted, what knowledge is included and how.

Therefore, discussion pages can be seen as an important arena. Here not only the construction of an article, but – given the societal importance of Wikipedia – also the construction of a significant objectified social reality may be observed. Drawing on Berger and Luckmann (1966), I conceptualize them as a central location where knowledge / social reality is negotiated, framed and legitimized, revealing structures of inclusion and exclusion in the construction process.

This makes discussion pages an interesting material for social research. They open up the view on social dynamics of this participatory project, and allow for empirically observing how the theoretical problems described above are handled by the actors involved. It is predictable that such conflicts particularly occur when it comes to complicated, politically-loaded issues. These cases motivate a large number of contributors with different perspectives and levels of expertise, which hinders a consensual coherent view as it is intended in form of the encyclopaedic article. To gain a better understanding of these social dynamics, I focussed on an example with such a complicated context – the September 11 attacks (9/11).

## Case study: The article on 9/11

Following most mass media reports, there seems to be a wide consensus on what happened on September 11, 2001 in the USA: Islamist terrorists hijacked four passenger planes and steered them into the Twin Towers of the World Trade Center (WTC) in New York and the Pentagon in Washington. A third one ended up on a field in Shanksville, presumably after a fight between passengers and hijackers. Moreover, the mainstream media coverage was pretty coherent in regard to many details, e.g. that the WTC collapsed because of the planes that hit it / the fires this caused (and not because of bombs or other factors). Since this interpretation is in line with official reports (e.g. Kean et al. 2004) it was later called the “official story”.

However, immediately after the attack alternative interpretations of the event were spread, especially over the Internet. Their main claim is that not Islamic terrorists but other forces orchestrated the attacks, e.g. the Bush administration itself. While ignored or labelled as questionable “conspiracy theories” by the mass media, these alternative interpretations became increasingly popular around 2006, when the first part of the film series “Loose Change” climbed the charts of video portals like YouTube. Later it was labelled as “the first Internet blockbuster” (Sales 2006). According to a large-scale representative opinion poll conducted in 17 countries (World Public Opinion 2008), only 46% believed Islamic terrorists were responsible for 9/11. In Egypt even a majority of 43% saw Israel behind the attacks, while in Germany 23% blamed the US government.<sup>7</sup> Numerous proponents of alternative interpretations gather online and offline, framing themselves as a social movement, the so-called “9/11 Truth Movement”, including

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<sup>6</sup> [http://en.wikipedia.org/w/index.php?title=Wikipedia:Neutral\\_point\\_of\\_view&oldid=414045101](http://en.wikipedia.org/w/index.php?title=Wikipedia:Neutral_point_of_view&oldid=414045101).

<sup>7</sup> For more opinion polls on the issue and their further discussion see König (2009, p. 24 ff.).

supportive “experts”, such as the *Journal of 9/11 Studies* that portrays itself as a “peer-reviewed (...) outlet for evidence-based research”.<sup>8</sup>

Given this context of heterogeneous and contradicting interpretations of this complex and politically-loaded event, it becomes obvious that formulating a coherent encyclopaedic article about it is a very challenging task, especially when Wikipedia’s participatory architecture and the conflicts between experts and lay people (as described above) are considered. Therefore, in my case study (König 2009) I took a closer look on the discussion pages of the German Wikipedia article on 9/11. Following a Grounded Theory orientated content analysis, I focussed on the question of how the community decides what knowledge is included and what is excluded or marginalized, particularly in regard to the popular hypothesis of a controlled demolition of the WTC.

## Results: elite knowledge representation and exclusion

Not surprisingly, alternative interpretations of the event are a matter of heavy discussion. Proponents of this view are constantly questioning fundamental parts of the article, claiming that there is not enough evidence for the “official view”. Instead, they regard their interpretation as better supported by proofs. Therefore, they see a violation of the NPOV-policy whereas their opponents reject this argument by denouncing their sources as non-reliable. In the debate about the quality of sources, there are also discussions on scientific details, e.g. the process of the collapse of the WTC and its reasons. Several contributors position themselves as “limited experts” by referring to some kind of expertise on the one hand, but stressing their lack of time and qualification, on the other hand. Since there is also no predefined role for experts in Wikipedia, nobody clearly gains the status of an authoritative expert. Instead, it becomes obvious that the community is not able to judge the substance of each argument in detail and has to rely on external sources and their reputation. Thus, they increasingly become a part of the discussion in which a distinction between relevant and non-relevant sources is established. One person in favour for the “official version” e.g. argues:

*Despite the volume some profs, who were not and are not experts in the field, use to spread their “evidence” on the web, none of their articles have ever been peer-reviewed. They are not part of the scientific review of 9/11. That’s a FACT (...).*

Proponents of this perspective categorize such views as “original research” – which according to an important Wikipedia policy is defined as material “not already published by reliable sources”<sup>9</sup> and is not accepted in the encyclopedia. This leads to an increasingly restrictive policy that rigorously excludes all alternative interpretations, including related discussions. In this way, the article and its discussion pages are “immunized” against these contradictory interpretations, supported by technical measurements like a (temporary) closure of the article for further edits.

To deal with the large number of objections against the “official” line of the article, these perspectives are “outsourced” to a special article about “conspiracy theories on 9/11” and its discussion pages. Moreover, a small section in the main article on 9/11 refers to alternative interpretations, but they are also clearly marked as marginalized by stigmatizing them with the headline “conspiracy theories”, indicating they are wrong or at least questionable. The fact they

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<sup>8</sup> <http://www.journalof911studies.com>.

<sup>9</sup> [http://en.wikipedia.org/w/index.php?title=Wikipedia:Scientific\\_point\\_of\\_view&oldid=279154337](http://en.wikipedia.org/w/index.php?title=Wikipedia:Scientific_point_of_view&oldid=279154337).

are included at least somehow can be interpreted as a way to canalize protest (cf. Geser 2008, p. 136) by creating a place where it can be expressed.

With regards to the thoughts above, we might conclude that indeed some sort of lay participation in Wikipedia was observed, since nobody establishes him-/herself as an authoritative expert and lay people seem to construct the article. But we can also notice a clear favouring of elite expert knowledge by established authorities, whereas alternative interpretations are marginalized. Therefore it seems, Wikipedia's structure tends to reproduce and represent knowledge hierarchies from the offline world.

## Discussion

As mentioned above, there is a controversial debate about the exclusive policy of Wikipedia inside and outside of the community. The results of my case study are in line with other work that noticed a scientism bias (Geser 2008) and characterized the encyclopaedia as “deeply conservative” (Voß 2006, my translation). At the same time, it contradicts the idea that the participatory architecture of the Internet in general, and Wikipedia in particular, leads to a dialogue-based and more independent way of knowledge production. For example, Daniela Pscheida formulates such a vision of a cultural change of knowledge (also with regard to Wikipedia) in which “The acceptance of societal relevant knowledge is not anymore a priori determined, one-sidedly and authoritatively, but a posteriori negotiated, collaboratively and democratically” (2010, p. 436, my translation).

In contrast, my empirical observation of a discussion process rather suggests a limitation of such egalitarian and discursive elements. This does not seem to be *a contradiction to Wikipedia's participatory architecture, but rather its' outcome*. In the context of pluralistic and conflicting interpretations, a canonization about certain fundamental aspects (e.g. that it was a terrorist attack) has to be enforced, in order to construct a coherent article. The vast amount of such contributions pushes the boundaries of the involved actors who express a limit of time and expertise to handle them. Lay people might produce the text, but they favour elite knowledge of well-established authorities. This is the type of knowledge that is finally included in the article, while alternative interpretations are excluded or at least marginalized. Thus, it seems that the lack of a predefined role of experts within Wikipedia leads to an *externalisation* of this role to sources outside of the community and not to a “softening of the hierarchically-coined expert-lay-dichotomy” as e.g. Pscheida suggests (2010, p. 433, my translation).

However, the fact that alternative interpretations are mentioned at all (although they are marked as “wrong” or questionable) can be regarded as a kind of democratization. Moreover, the construction process of the article is highly transparent and the dissent formulated in the related discussion pages is accessible to all readers. This is indeed a new form of participation that is completely different from traditional forms of knowledge production as practiced by well-established print encyclopedias. But we should not assume that a participatory architecture itself “automatically” leads to inclusive democratic practices. Rather, we should carefully study the social dynamics within such technical frames because it helps to gain a more differentiated understanding of this and other participatory projects. This might also lead to other results, e.g. if the focus lies on issues that are less politically-loaded.

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