## New Media and the Knowledge Management: the Wikipedia Project

Anca-Gabriela GHIMPU Babes-Bolyai University, Clui

Our job is to provide the sum of all knowledge. Eric Möller<sup>1</sup>

Keywords: encyclopaedia, Wikipedia, wiki, new media, user-generated content, virtual community

**Abstract.** Encyclopaedism exists since ancient times as an important human activity that materializes in the attempt of gathering and preserving human knowledge in its totality. This article aims at analyzing one of the most important encyclopaedic projects of our modern times, Wikipedia, a free user-generated content internet site, constantly edited and updated by anonymous users forming a virtual community, based on the shared value of free access to knowledge. We focus on describing the Wikipedia's new media context and its main challenges in order to draw a conclusion about the philosophical importance of such projects as a creative alternative to the corporate media.

E-mail: ancaxxghimpu@yahoo.com

# Introduction: the global context of new media

It has become a commonplace to state that economic and technological development in post-industrial societies has brought unprecedented changes and has paved the way for the information society. Nowadays knowledge and information have diversified because of the incredible technological development of our world. Communication technologies and globalization, as both phenomenon and ideology of our time, are co-working to make knowledge and information universally available. We cannot conceive of the world we live in without the quick or instant access to information and entertainment that we have nowadays with our modern devices and platforms and cannot even conceive of ourselves as not being part of virtual communities.<sup>2</sup>

Organizing, preserving and accessing knowledge has always been an important preoccupation of humankind, but the above described context has opened completely different possibilities for initiatives in knowledge management and related fields. As things happen very fast and we feel more and more controlled and sometimes

<sup>&</sup>lt;sup>2</sup> Sometimes the use of internet and social media makes us feel rather "globally" integrated than "locally" determined. At the same time it can also be perceived as an isolation of the individuals in the virtual world, the ideal place where they are free to search for information that is not immediately available to them in the actual life, construct identities, reinvent themselves, virtualize their relationships, express their projections, or even be part of political activities.



<sup>&</sup>lt;sup>1</sup> Wikimedia Foundation's deputy director.

overwhelmed by these drastic changes, a legitimate question arises: what is the ideological context in which collective projects like *Wikipedia* evolve?

In the following pages I aim at analyzing the particularities of the famous free online encyclopaedia, a case that reflects the creative way in which new media meets the collective initiative of individuals in the common cultural effort of making knowledge accessible. In the first part I describe the cultural context and the factors that contributed to its appearance, in the second one I try to briefly show how the project works and the way people take part in it; finally, in the third part, I focus on the challenges and the future of the project. The three sections of my analysis are organized as an attempt to answer three major questions so that I can draw a conclusion about the philosophical importance of Wikipedia as an active virtual community in the human knowledge management.

### Wikipedia or the modern encyclopaedia

a.) What is Wikipedia and what makes it a specific "knowledge tool" of our modern times?

Wikipedia<sup>1</sup> could be regarded as one of the greatest attempts at creating a free online encyclopaedia,<sup>2</sup> one that is accessible in two senses – by the free use of its content, but also by anyone's free contribution in creating it. In other words, it allows free spreading and developing of human knowledge, in a general sense.

There are several factors that made the necessity for an online encyclopaedia become more and more obvious: first, the large use of the internet technology and the cultural changes it brought. We are living in information societies in which the new media and communication technologies have radically changed or imposed immediate change in most fields of human activity. If we consider the encyclopaedic effort of knowledge diffusion in its educational aspect, we can speak of a revolution taking place in the sense of the *virtualization* of education: "Developments in multimedia, increased communication and other ICT<sup>3</sup> innovations are obviously key components of the information society. In this new era, managers must be prepared to abandon everything they know – and the same may hold for teachers, educationalists, researchers, students, and policy makers. Maintaining the *status quo* is not an option".

Secondly, it was a historical development in the sense that an "encyclopaedic" attitude towards knowledge existed since ancient times<sup>5</sup> as an expression of the human

المنسارة للاستشارات

<sup>&</sup>lt;sup>1</sup> The word "wiki" comes from the Hawaiian language and means "quick". "Encyclo*paedia*" comes from the Greek words *enkyklios*, meaning "regular, circular, recurrent" and *paideia* – "education". Together they can be translated as "common knowledge".

<sup>&</sup>lt;sup>2</sup> Wikipedia is not the only project of this kind: there are other similar projects issued out of the fast development of multimedia, such as *Everything2*, Microsoft's *Encarta* or BBC's h2g2.

<sup>&</sup>lt;sup>3</sup> Information and Communication Technologies.

<sup>&</sup>lt;sup>4</sup> M. Gell and P. Cochrane, "Learning and Education in an Information Society", in *Information and Communication Technologies. Visions and Realities*, ed. William H. Dutton (Oxford: Oxford University Press, 1996), 249.

<sup>&</sup>lt;sup>5</sup> One of the oldest known encyclopedias, Pliny the Elder's *Natural History*, published between 77 and 79 AD, is an exhaustive account of ancient knowledge which became a model for future encyclopaedias.

#### Philobiblon - Vol. XIX (2014) No. 2

ideal of gathering and preserving all knowledge for cultural, educational, scientific or archiving purposes. We cannot speak of encyclopaedias in the modern sense before the Enlightenment, but rather of *encyclopaedism*, as a compilatory activity with the purpose of creating knowledge-ordering works of different kinds: "The ideal was to present a total coverage of the whole of what was knowable, or at least the whole of what was knowable about a particular subject – although, of course, in practice that claim always entails a degree of compression and selectiveness, which reins in and summarizes that total knowledge with a view to making it accessible". As far as the word "encyclopaedia" is concerned, it came into use only by the end of the fifteenth century.



**Teodora Cosman**, *The Summer Without Stalin (Afterimage)* 50cm x 50cm, acrylic, gouache on tissue, 2014

From a philosophical perspective, *encyclopaedism* can also be interpreted as the human reason's desire to synthesize and take universal knowledge into account. From the earliest encyclopaedias trying to retrieve most of the ancient knowledge, passed on to the medieval ones written by Christian, Muslim or Chinese scholars, hand copied so thus

<sup>&</sup>lt;sup>1</sup> Jason König and Greg Woolf, *Encyclopaedism from Antiquity to the Renaissance* (Cambridge: Cambridge University Press, 2013), 7.



٠

available to a very narrow group of people, the tradition of preserving human knowledge has been kept on until the Renaissance and the beginning of the printing age. Encyclopaedias could then be published, diffused and re-edited on a larger scale, but the technological progress and the development of multimedia and internet in modern times has taken this effort even further, transcending the limitations of the printed versions. The evolution from the paper to the digital support has changed education and thus traditional ways to handle information: "Most of these traditional methods were paperbased. This meant many people spent the majority of their time collecting and gathering information before being able to perform any analysis, gain understanding, form a view, take decisions, and act. Most of this work can be eliminated by recording, publishing, and disseminating information electronically and using software agents to do our tedious searching – rather than buying, consuming, storing, shifting, collating, filing, searching, stacking, burning, posting paper, and devastating increasing amounts of rain-forest. Instead books, journals, lecture notes, business briefings, ideas, research results, business games, on-screen experiments, market analyses, animations, video, and other multimedia information can be handled in purely electronic forms."<sup>1</sup>

Thirdly, there is a socio-political reason as well: knowledge has always been the privilege of only a few social categories. Even nowadays we still have to pay to get high quality education, to study at a top university, to access an article in a renowned academic journal or even for simple access to specific information. The need of free access to knowledge and information, doubled by the technological progress, the development of new media and the success of the non-formal education concept, has become very clear in recent years. Thus, a bunch of people passionate about technology and knowledge have started one of the greatest projects in the recent history of human knowledge: *the free online encyclopaedia*. It can also be considered a form of resistance against the media trusts and corporations that are taking more and more control over the internet and the entire media production. In a context dominated by huge media trusts, in which we can barely talk about independent media production, a free online encyclopaedic project was more than welcome.

#### b) How does Wikipedia work and what is the philosophy behind it?

From a technical perspective, Wikipedia is an internet website that uses a *wiki software*.<sup>2</sup> It is created and developed in a collaborative manner, meaning that anyone can create and add, edit or delete content, using a simple method of text editing. It exists in multilingual versions and statistically is one of the most visited websites by internet users, ranked on the fifth place among all existing websites.<sup>3</sup> The online environment and the *wiki*-type website makes it possible for Wikipedia to be constantly updated and

<sup>&</sup>lt;sup>3</sup> It is ranked fifth after Yahoo, Facebook, Microsoft and Google, has more than thirty million articles (of which five million in the English version) and is constantly edited by volunteers worldwide.



<sup>&</sup>lt;sup>1</sup> Gell and Cochrane, *Information and Communication Technologies*, 263.

<sup>&</sup>lt;sup>2</sup> A *wiki* is a web application that allows users to edit content with a simplified text editing software, e.g. rich text editor. It was invented in 1995 by Ward Cunningham who developed the software and the first wiki website under the name of *WikiWikiWeb*. The most famous wiki website is now Wikipedia, launched in January 15, 2001 by Jimmy Wales and Larry Sanger.

enriched by its users thus being, as opposed to classical printed encyclopaedias, a dynamic knowledge environment. As we can read on the welcome page of the WikiWikiWeb: "Welcome to WikiWikiWeb, also known as Ward's wiki or just Wiki. A lot of people had their first wiki experience here. This community has been around since 1995 and consists of many people. We always accept newcomers with valuable contributions. If you haven't used a wiki before, be prepared for a bit of CultureShock. The beauty of Wiki is in the freedom, simplicity, and power it offers. This site's primary focus is PeopleProjectsAndPatterns in SoftwareDevelopment. However, it is more than just an InformalHistoryOfProgrammingIdeas. It started there, but the theme has created a culture and DramaticIdentity all its own. All Wiki content is WorkInProgress. Of all, this is a forum where people share ideas! It changes as people come and go. Much of the information here is subjective. If you are looking for a dedicated reference site, try WikiPedia; WikiIsNotWikipedia!"

It is also considered a *social software* given its collaborative nature and the fact that users can "meet" online, share opinion, create content, debate different subjects, work on different projects, giving and receiving feedback or even taking action. This is what Wikipedia has in common with other types of social software like blogging, online chats, internet forums, social network services, etc.

We can now analyze the way this website is organized in order to better understand how it functions, what its philosophical assumptions and its most common challenges are.

First of all, Wikipedia is hosted and supported by a non-profit organization called *Wikimedia Foundation*, along with other websites that are part of the *wiki*-universe: *Wikipedia Commons*, *Wikispecies*, *Wikinews*, *Wikiversity*, *Wikidata*, *Wikivoyage*. It was created in 2003 by the co-founder of Wikipedia, Jimmy Wales, in order to financially sustain these websites and to ensure support for free *wiki* projects mainly by the means of donations. This form of financial organization is meant to maintain the idea of an open content and free use of information but, as we will later see, it has become a huge challenge for the future of Wikipedia.

Readers have free access to diversified content organized by overviews, outlines, lists, glossaries, categories, indexes. Each of these criteria cover common fields: General references, Culture and the arts, Geography and places, Health and fitness, History and events, Mathematics and logic, Natural and physical sciences, People and the self, Philosophy and thinking, Religion and belief systems, Society and social sciences, Technology and applied sciences.<sup>3</sup> Users can either search for different entries in these fields or directly search for the item's name, like in any other encyclopaedia.

As far as content creation is concerned, as we said before, in most cases anyone can add new articles or edit already existing ones in the encyclopaedia. There is a certain restriction for some language versions – for example, one must be a registered user to edit the English version. But in general free access for both readers and contributors is guaranteed. The website is created and structured so that the article modifications

<sup>&</sup>lt;sup>3</sup> http://en.wikipedia.org/wiki/Portal:Contents



-

<sup>&</sup>lt;sup>1</sup> "Welcome Visitors", last edited July 20, 2014, http://c2.com/cgi/wiki?WelcomeVisitors.

<sup>&</sup>lt;sup>2</sup> "Wikimedia Foundation", last modified August 22, 2014, http://en.wikipedia.org/wiki/Wikimedia Foundation

become visible in real time and users can easily keep track of the most recent changes just by clicking on "history". In theory this makes Wikipedia a dynamic, ever changing encyclopaedia and its article subjects of permanent improvement. But does that really happen? I shall try to answer this question in the next chapter but before that I shall summarize the principles guiding this project so that we understand the general idea behind it.

In its essence Wikipedia is a collective work-in-progress and has no interest in the identity of its particular contributors. Articles cannot be signed by their authors and there is no possibility for them to claim ownership. The anonymity guarantees to some extent a small part of the freedom Wikipedia is based on. Unlike traditional encyclopaedias, there is no selection of the authors based on other criteria than their own interest and knowledge and a few basic rules to observe. No hierarchies, no specialists, no authorities in a particular field or subject. Identities are dissolved in the common effort of the virtual community engaged in this project. From a philosophical perspective, they appear as a potentially single subject dispersed in the actual writing of a particular entry. Or one can sociologically regard them as a network community. Either way, this collective "subject" is flexible, dynamic and always ready to integrate newcomers, preferably from the most various geographical areas and with the most different educational backgrounds. Since the launching of Wikipedia, the virtual community of wikipedians has significantly grown but in a biased way. Apparently gender, ethnicity and revenue of contributors are unevenly represented, given the fact that "today's bunch are 90% male and mostly from rich countries. One recent analysis found that only 2.6% of its 'geo-tagged' articles are about Africa, which accounts for 14% of the world's population". Wikipedia's "life blood is the 'community' of over 76000 volunteers who create and update entries remotely." Content is created and edited following some basic rules<sup>2</sup> that are meant to keep the encyclopaedic nature of Wikipedia and prevent it from becoming something else, for example a mere dictionary or data base, meaning that it must explain notions not words. Articles' approach should follow two basic principles: verifiability and neutrality. The former refers to the fact that articles should be able to indicate sources whenever possible, while the latter is more like an ideal that this project shares with science in general, namely objectivity. We consider this principle idealistic because first of all, the authors of Wikipedia articles, like any other people, are culturally determined and can be ideologically biased; secondly, because Wikipedia has carefully distinguished its approach from the scientific one. This encyclopaedia does not want to interfere with any original research or work that would make the object of specialized scientific and academic writings. It only deals with established knowledge. The provided information must be objective, reliable and relevant. Neutrality of the point of view remains a ground rule in this project, but impossible to be completely attained; still, judging by many of its articles, most of us would agree that Wikipedia has succeeded in maintaining a fair degree of objectivity in its approach.

<sup>&</sup>lt;sup>2</sup> "Wikipedia: List of policies", last modified August 10, 2014, http://en.wikipedia.org/wiki/Wikipedia: Content policies#Content.



<sup>&</sup>lt;sup>1</sup> *The Economist*, http://www.economist.com/news/international/21597959-popular-online-encyclopedia-must-work-out-what-next-wikipeaks.

Probably the most important thing that makes Wikipedia be what it is, namely a collective project democratically organized, is *consensus*. When dealing with problematic subjects or controversial issues that contributors disagree upon, they can use forums to debate issues until they finally reach agreement: "Consensus among equals is our only tool for resolving content disputes, and our main tool for resolving all other disputes," it is mentioned in the brief ethical code made available on the website. This code was created in order to protect the content from vandalism and the living persons that make object of Wikipedia articles from personal attacks, harassment or false biographical information. There have been established methods to discourage users' misconduct, for example administrators can restrain access to frequently vandalized articles but apart from that, it is the community's shared responsibility to keep the content uncompromised.

c.) What are the main challenges that Wikipedia has to meet and what can we retain from its criticism?

In a world governed more and more by "two economic trends, globalization and digitization" (*News Corporation* - Annual Report 2007), the freedom and independence of the Wikipedia project is seriously challenged. First of all, even if most of the donating campaigns were successful until now, its financial future remains uncertain. How long it will take before Wikimedia foundation starts considering advertising as a source of constant revenue is becoming a legitimate question. Moreover, "as more and more media is delivered online, global media giants (as well as other media organizations) have introduced numerous initiatives that attempt to monetize this network in terms of advertising"; plus, Internet advertising revenue is growing six times faster than the revenue of traditional media as shown by the *The Economist*. Wikipedia intends to keep out of reach of media giants and their strategies even if this will make it very hard for the project to survive. Advertising is not – at least for now – an option because that would sooner or later bring it under corporate control and Wikipedia would become a mere business instead of a free non-profit project.

The sociologist Manuel Castells underlines the interconnection between media trusts and other apparently not related fields: "media networks are interlocked with networks of finance, production, advertising, technology, research, and politics through multiple switches. By bringing together money, culture and power, they have claimed the commanding heights of the global network society. There are also horizontal networks of digital communication that value autonomy, individual freedom, and self-identification. *User generated content* and autonomous social action are now fundamental components of the global network of communication. As they recognize their market potential, global business networks are bringing these new networks of communication under their corporate control."

<sup>&</sup>lt;sup>2</sup> Amelia H. Arsenault and Manuel Castells, "The Structure and Dynamics of Global Multimedia Business Networks," *International Journal of Communication*, 2707-48, 2, 2008: 124, http://ijoc.org/index.php/ijoc/article/view/298/189.





<sup>&</sup>lt;sup>1</sup> http://en.wikipedia.org/wiki/Wikipedia:Content\_policies#Content.

Another important challenge is coming from the separation of wikipedians in two factions that are becoming more and more incompatible in their views and keep an on-going quarrel about which ideological path Wikipedia should follow. These two groups are known as the "inclusionists" and the "deletionists". The former are in favour of including every aspect of human life as trivial as it might appear to most people, as long as there are people willing to write about these things and these things can be of any interest for them. They consider that this encyclopaedia, by its virtual nature, should not be limited in its entries to so-called relevant knowledge<sup>1</sup> and argue that more selective criteria would discourage a lot of its users. The Economist makes a comparison between 500 Pokémon characters that all have entries in the encyclopaedia and the leaders of the Solidary movement in Poland whose biographies are poorly represented.<sup>2</sup> Deletionists, on the other hand, are concerned more about Wikipedia's reputation as a relevant and reliable source of information and are in favour of deleting trivial entries. Both views have pros and cons and it is still unclear which path this project will follow in the future. In practice, the divergence of views makes the editorial process quite challenging as, even if Wikipedia defines itself as a non-hierarchical organization, there is always an active group of wikipedians who often take the role of zealous guardians of this project. They sometimes mercilessly delete<sup>3</sup> new entries that do not correspond to their standards, even though these are not agreed upon by everyone. Wikipedia is confronted with a decrease in the number of its contributors, especially because a lot of their work is being deleted by the group that is becoming more and more an "elite", a thing so contrary to the essence of this project itself. Wikipedia's bureaucracy discourages a lot of specialists from letting this project benefit more of their knowledge and expertise. They would rather not contribute at all than engage in endless, inefficient debates with the administrators. Plus, as we have seen in the previous chapter, the statistics shows us a clearer image of the profile of the average wikipedian: male, under the age of thirty, single and without children.<sup>4</sup> This means Wikipedia lacks the experience and the knowledge of the other unrepresented categories of users and is often seen as "wisdom of the crowds" – not a flattering label.

We can put Wikipedia's philosophical and practical dilemma in these terms: should it privilege users' unlimited contribution even if this extends to trivial subjects or the quality of its content? The dispute between these two views can decide Wikipedia's future. Finally, this project will have to choose the least bad option: "It is the biggest encyclopaedia in history and the most successful example of "user-generated content" on the internet, with over 9m articles in 250 languages contributed by volunteers collaborating online. But Wikipedia is facing an identity crisis as it is torn between two

<sup>&</sup>lt;sup>4</sup> E. Bobrow, "The Wizards behind the Wikipedia Curtain", http://www.moreintelligentlife.com/blog/emily-bobrow/wizards-behind-wikipedia-curtain.



<sup>&</sup>lt;sup>1</sup> The community has established some "notability criteria" like how many times an item is mentioned in local or international journals or the number of matches on Google.

<sup>&</sup>lt;sup>2</sup> The Economist, http://www.economist.com/node/10789354.

<sup>&</sup>lt;sup>3</sup> There are two types of removing content: "speedy deletion" when content is removed right away or "regular deletion" when content is removed after five days, if there is no objection. But so it happens that this process can turn into endless discussions and online debates with often the same entry deleted, edited, deleted, re-entered and so on.

alternative futures. It can either strive to encompass every aspect of human knowledge, no matter how trivial; or it can adopt a more stringent editorial policy and ban articles on trivial subjects, in the hope that this will enhance its reputation as a trustworthy and credible reference source."

As this was not troubling enough, Wikipedia faces a new type of challenge as new "competitors" may appear at any moment and a lot of people fear it will take its place. Google's *Knol* could be one example. It is an encyclopaedic project, but one that relies on a system of individual competition rather than on a collective work. It aims at encouraging people to contribute with articles on any topic but they will be selected and ranked by the number of votes they will get. Another significant difference will be that Google intends to remunerate the authors of the most voted articles.

Given all these challenges, Wikipedia's future is uncertain but for now the project intends to keep its free labour and "crowdsourcing" model of content creation, as it still gets a lot of support from its popularity on the web.

#### The philosophical importance of the Wikipedia community: conclusion.

"Every day thousands of people edit entries and add new ones in return for nothing more than the satisfaction of contributing to the stock of human knowledge" - that is the true essence of this project and what is keeping it "alive". At the same time it is vital for this community to become self-conscious as far as its social potential and creativity are concerned. One of its survival conditions, as we have already seen, is trying to avoid, as much as possible, the "editorial conflict" that often tends to take more energy and time than the writing of articles itself.

Another important aspect is the fact that virtual organizations seem to be one of the future's most important forms of community. What Michael Gell and Peter Cochrane state about education in the technology era entirely applies to Wikipedia seen as a virtual organization, "not defined by physical space, but collaborative international networks linking people through integrated ICTS's. (...) these capabilities could make the 'virtual organization' the dominant organizational form, which is more about self-organization and emergent behavior than planning and prediction". If Wikipedia survives as a democratic virtually constituted community and keeps its non-profit profile we assume it could become an important and powerful form of resistance against the dominating capitalist media corporations. It is very important that, in a world in which technology seems to have no destiny other than the ideology of profit, people find independent and creative ways to benefit from this technology.

The philosophical importance of projects like Wikipedia lies beyond the collective effort of gathering human knowledge and making it available to everyone. There is also a larger responsibility that this community has to take as long as it intends to remain a creative counterpart to the *other* media that seem to be completely set out on making profit from the technological development of our time. I strongly believe that free access to knowledge and information can and must have an emancipating role in

<sup>&</sup>lt;sup>3</sup> Gell and Cochrane, *Information and Communication Technologies*, 249.



\_\_\_

<sup>&</sup>lt;sup>1</sup> The Economist, http://www.economist.com/node/10789354.

<sup>&</sup>lt;sup>2</sup> The Economist, http://www.economist.com/node/17911276.

#### Philobiblon - Vol. XIX (2014) No. 2

society which does not mean that Wikipedia must assume any political views or engage in any political activity. I am just underlining the importance of free knowledge projects in a context in which the free use of media and internet seem more and more challenged by the capitalist / corporate business model. In this respective, we should keep in mind Manuel Castells's pertinent conclusion: "The greater the communicative autonomy of the media consumers, the more they are likely to become media citizens, thus restoring the balance of power vis-à-vis their <would be> controllers. As long as media businesses keep making money, the playful *netizens* may be able to experiment with their communication desires. Ideally, this new business model could end up working well both for corporate executives and for creative audience/users. But this is uncharted territory. The sustainable articulation between free culture and corporate business requires a new business model whose traces we have not found in our exploration of global media networks. Currently, the only certainty is that media are under the control of global corporate business networks and that users/consumers/citizens are trying to carve their own communication space out of the digital maze of multimedia".



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

