An approach to Wikipedia as a cultural polysystem

Elisa Alonso-Jiménez / elialonso@upo.es
Pablo de Olavide University, Spain

Abstract: This qualitative and interpretative work aims at approaching Wikipedia’s cultural facet from a transdisciplinary view. For this purpose, we set to analyse the existing literature that has dealt with Wikipedia in the generic media and in academic publications on the fields of Artificial Intelligence, Information and Education Sciences and Translation Studies as well. In these works —mostly with a descriptive, empirical or pragmatic approach— Wikipedia is referred to as an online collaborative encyclopaedia that incorporates innovation and content creation devices from the free software movement. Our proposal calls for resorting to theoretical works envisaging Wikipedia’s cultural dimension. With a semiotic approach, we have based our analysis hypothesis on the social imaginary proposed by Vázquez Medel, as well as on the Polysystem Theory written by Even-Zohar. We will outline that these authors provide many clues for approaching Wikipedia as a cultural system boasting as a repository of knowledge and human relationships.

Key words: Wikipedia, culture, media, information society, free software.

Resumen: En el presente trabajo, de naturaleza cualitativa e interpretativa, se abordan los alcances culturales de Wikipedia desde una aproximación transdisciplinar. Para ello, se analiza la literatura existente centrada en Wikipedia, procedente de medios de comunicación generalistas y de distintas disciplinas académicas (inteligencia artificial, ciencias de la información, educación y estudios de traducción). En dichos trabajos, fundamentalmente de naturaleza descriptiva, empírica y pragmática, se alude a Wikipedia como enciclopedía colaborativa en línea que aúna mecanismos de creación de contenido y de innovación procedentes del software libre. Nuestra propuesta reclama la pertinencia de recurrir a trabajos teóricos que contemplan la dimensión cultural de Wikipedia. Desde una aproximación semiótica, basamos nuestra hipótesis de análisis en el imaginario social de Vázquez Medel y la Teoría de los polisistemas de Even-Zohar, en los que encontramos claves para la consideración de Wikipedia como sistema cultural, en tanto que repositorio de conocimiento y relaciones humanas.

Palabras clave: Wikipedia, cultura, medios, sociedad de la información, software libre.
Introduction

In this work we approach a critical reflection, a reading of the cultural scope of Wikipedia from semiotics and cultural systems (Lotman, 1979, 1996, 1998, 1999, 2000; Even-Zohar, 1990; Vázquez Medel, 1997, 2008/2009). From already consolidated constructs, such as “collective intelligence”, proposed by Lévy (1997), and “participatory culture”, enunciated by Jenkins et al. (2009), Wikipedia is explored as an evocation of multilingual, cybernetic, multimodal and multidirectional discourse that our globalized society generates. Likewise, in the following paragraphs there are considerations on the concepts of discourse, meaning, reality and history, around which words by Foucault (2010: 74) become an unavoidable referent: “the document is not the joyous instrument of a history that would be memory in itself and in full right; history is the peculiar way in which a society concedes statute and elaborates a documental mass from which it does not separate”. Despite these considerations are not the main objectives of the present work, they are mentioned as a note in these introductory lines, as they seem pertinent for a first approach to Wikipedia.

In the last decade, Wikipedia and its founders, Wales and Sanger, have attracted media attention because of various reasons, among other, because of the editorial policy of Wikipedia (Waters, 2006; Rajan, 2009), its open access (de Vrieze, 2012), neutrality (Bernstein, 2011) or its reliability (McHenry, 2004). The debate on quality or accuracy of articles in Wikipedia or its thematic scope have also been object of research of authors such as Giles (2005), Chesney (2006), Gorman (2007) and Halavais and Lackaff (2008).

The spectrum of disciplines interested in Wikipedia is also varied; this way, for example, we find noticeable contributions from artificial intelligence (2013) and from information and education sciences (Lim, 2009; Head and Eisenberg, 2010; Aibar and Fuster, 2012; Thornton-Verma, 2012, and other) which have contributed to a better contribution of Wikipedia, in its role in society and education, as well as the development of various technologies that exploit its possibilities. From historic studies, Burke (2012) has examined the appearance of Wikipedia as a source of popular knowledge and has analyzed the mechanisms for information retrieval, following Foucault's postulates on the conception of social policy and knowledge.

From social sciences and humanities it is possible to propose quantitative and empirical works, which offer enormous possibilities to research and investigate transdisciplinary phenomena such as Wikipedia. However, we consider that there is also room for theoretical proposals, such as the one here presented, whose nature is qualitative and exploratory and attempts to examine the cultural side of Wikipedia from semiotics and cultural systems.
In the first place, we revise the state of play of Wikipedia as an online encyclopedia and its relation with the free software movement, crowdsourcing and wiki technologies is examined. Later on, the analysis of Wikipedia is approached in the light of semeiotic proposals already consolidated in the sphere of social sciences, such as the Polysystems theory by Even-Zohar (1990), and the social imaginary proposed by Vázquez Medel (1997, 2008/2009). This way, our specific objective is to determine to what extent it is possible to apply both conceptual frameworks to the case of Wikipedia, a fact that, if verified, would contribute to a better understanding of Wikipedia and would be the qualitative base for future research lines in communication, sociology, education and translation spheres, among other.

The state of play of Wikipedia

To contextualize our proposal, we will resort to the reflections on globalization, communication and new humanism formulated by Vázquez Medel in 2002—a date in which, let us remember, Wikipedia had barely been born and was an totally marginal and unknown project—which nonetheless seem to somewhat allude Wikipedia, almost prophetically:

In this new Babel scenario it is more pressing than ever, not that a language annuls the others but instruments of transference, translation, between diverse languages, dialects and idiolects. It is not constructing new territories that suppress or overcome the others, but establishing spaces or deterritorialization, res nullius, no man’s (or everyone’s) land, which can be inhabited with neither prevalence nor impositions, experienced as transit places. We have to rebuild and reconstitute the space of the public in which the deep meaning of community is exercised (Vázquez Medel, 2002: 1).

As exposed below, in spite of the short history of Wikipedia, there are numerous works both academia and the general media, which have already studied it. There is certain consensus as for the consideration of Wikipedia as an online encyclopedia, however, as argued here, there are some characteristics that set it aside from traditional encyclopedias, for instance its scope, updating level and their model of collaborative authorship.

In the following sections, the relationship of Wikipedia with the free software movement is also examined; from this movement it has taken the aforementioned collaborative model, the system of content review, the pattern of culture innovation and the model of open source licenses. Finally, in this section, destined to examine the state of play of Wikipedia, the elements that configure its collaborative dimension are analyzed, namely: wiki technology (as technology that makes
collaboration feasible from a technical viewpoint) and the production model by means of crowdsourcing (that turns the technical possibility into an actual labor force, in virtue of the mobilization of volunteers).

Wikipedia as an online encyclopedia

The categorization of Wikipedia under the banner of encyclopedias (Stvilia et al., 2005: 444) may seem nowadays obvious; partly because we have quickly become accustomed to the conventions of Wikipedia. However, as pointed out by Ayers et al. (2008), Wikipedia differs from other traditional encyclopedias in a number of aspects, as its longer scope, as it includes specialized and generalist articles, its dynamism and fast updating degree, its model of collaborative authorship and the fact of being noncommercial.

Wikipedia’s scope is far greater than previous encyclopedic projects, however. Encyclopedias have traditionally been published as comprehensive guides to some defined area of knowledge. Wikipedia is instead a collection of both specialist and generalist encyclopedias, linked together into an integrated work. Its articles can be updated immediately: Articles are dynamic, and their content can change from day to day or even (in the case of current events) from minute to minute. Wikipedia’s huge scale and rapid updating is possible in part because the authorship model is completely different from earlier projects: The idea of the famous author or expert-written article has been discarded.

Finally, unlike earlier encyclopedias, Wikipedia is a noncommercial project, and its content is deliberately licensed so others can freely use it (Ayers et al., 2008: 37).

As it is known, Wikipedia essentially is an internet-born encyclopedia, a medium from which it inherits a series of characteristics, as its hypermedia and poly-systemic nature, as well as its ubiquity. It becomes evident that a project born and developed exclusively in the web, such as Wikipedia, cannot be alien to the very nature of the medium in which it lives. In the case of Wikipedia, this affirmation is soundly verified, because, beyond its free and collaborative character, of which not always all its users are aware. What makes it an exceptional project are its universality and ubiquity, characteristics derived from its medium: internet. Despite it can be redundant to say it, we should not forget that in order to consult or edit Wikipedia, it is sufficient to have a computer or a device with internet access.

Its hypermedia nature, build upon wikitext (wiki markup)—a simplification of markup languages that is utilized in wiki technology—confers it a collaborative and multimodal dimension, in which all manner of elements combine: hypertextual discourse, images, video and audio. Therefore, it would not be an isolated encyclopedia, but it would be linked to the rest of the web by means of hyperlinks
and indexations—by the way, very well weighted in the search and retrieval algorithms—in the internet search engines.

Wikipedia and free software

The influence of the free/open source software (FOSS) in Wikipedia is plain to see, as it comes from the affirmations from various works inspired by FOSS. This way, Feller et al. (2005: 486-487) point out: “From the Open Source movement it [Wikipedia] is considered as a successful application of open source methods and its structural elements to creative production”.

Authors such as Benkler (2006: 71) have stated that the incorporation of some of the characteristics of FOSS in Wikipedia—such as its peer production and revision model, and its open character—have contributed to the success of the encyclopedia: “The shift in strategy [of Wikipedia] toward an open, peer-produced model proved enormously successful”. Following this line, we can find numerous elements from FOSS movement that have been incorporated in Wikipedia and which besides are broadly visible. We concretely refer to its collaborative system of content creation, its authorship model and peer revision, hacker culture and finally, open sources to distribute and intellectual property.

As for the first of this elements, the collaborative aspect, wiki technology and the editorial policy allow the creation of content to occur in a certain manner, especially by volunteers who work collaborating. Although any user can edit Wikipedia, there is a group of editors, or admins, who have greater competences than the average user and whose decisions exercise a heavier impact on the community and articles.

In relation to the model of authorship and revisions, Wikipedia incorporates a number of mechanisms to promote difference types of peer review that differ from the traditional and academic approach, and follow the guidelines of FOSS movements. Its best exemplification is to be found in the popular saying formulated by Raymond as Linus’s law, which defends that a product or text revised by many people will have fewer mistakes: “Given enough eyeballs, all bugs are shallow” (Raymond, 2001: 41). This stance has been championed and challenged from the work complicated by Feller et al. (2005), for in the case of free software projects there is no guarantee that the code will be exhaustively revised by the members of the community, not is there evidence that peer review is more efficacious than the usual debugging in the software industry, which normally follow an outlined plan and do not obey a random impulse (Feller et al., 2005: 117, 128, 144, 285). Indeed, peer review in Wikipedia, as in FOSS, does not have to be carried out by an expert or someone experienced, as it can be virtually carried out by anyone and obeys a random pattern to a large extent. In this respect, Feller et al. (2005: 252) point out:
Traditional peer reviews require time for individual study of the code followed by a face-to-face review meeting. These activities must be planned and scheduled, in contrast to the continuous and serendipitous nature of open source peer review.

The conspicuous differences between the traditional peer review and the edition and review of Wikipedia, certainly haphazard, carried out voluntarily by the editors, admins, and also by determinate automated processes or robots, open a space to reflect about the nature of both proposals. Despite such analysis is not the objective of this contribution, as a note, we will sketch the idea that review in Wikipedia might obey not a peer-review model, but a crowd-review, in which a mass composed of human and nonhuman agents would model Wikipedia on the basis of a script neither writer not pre-established.

In addition to the open technologies, described in previous paragraphs, Wikipedia inherited its innovation schema from FOSS; we refer to hacker culture:

Where the general case of applying Open Source methods to other forms of writing has failed, though, there have been some key successes, and there is much to learn from the why and how of such projects. Particularly instructive in this regard is the Wikipedia project (http://wikipedia.org), which brings many of the advantages of modeling culture into a creative enterprise that does not rely on code (Feller et al., 2005: 486).

Hacker culture, represented by programmer Richard Stallman, has as an objective the free distribution of the software source code, something already against the restrictive distribution and license contracts of most of the producers and creators of content. Its inception dates back to the 1980’s decade, when Stallman launched GNU project to create a free operative system, only controlled by voluteers, backed by Free Software Foundation.

Beyond the impact of FOSS movement in the industry of software development and information technologies, as pointed out by Castells (2003), the production mode of hacker industry establishes a new innovation model that finds its raison d’être in the personal satisfaction of those who contribute to the project, this is to say:

[...] a great techno-economic satisfaction needs a breeding ground in a new system of values that motivates people to do what they do. [...] In the era of information, the matrix of every development (technological, economic, social) is in innovation, in the supreme value of innovation, which potentiated by technological information revolution exponentially increases the capacity to generate wealth and power accumulation. However, innovating is not an obvious value; it should be associated to personal satisfaction, of any kind, linked to the act of innovation. This is hacker culture, according to Himanen (Castells, 2003: 11-12).
Elisa Alonso-Jiménez. An approach to Wikipedia as a cultural polysystem

Finally, another of the characteristics inherited by Wikipedia from this movement is in the models of distribution and intellectual property which rule it, namely: GNU Free Documentation License and Creative Commons, both inspired in the basic liberties of FOSS movement; freedom to use the software with any end, modify it so that everyone adapts it to their needs, share software and its modifications, as well as securing it will remain free for all users (Free Software Foundation and Smith, 2007/2010).

Wikipedia: wikis and crowdsourcing

The concurrence of elements that produce Wikipedia, this is to say internet as a medium, information society as a context and software as structure and ethical model generate what Wikipedia ultimately is: a collaborative encyclopedia. In this affirmation we verify that the differentiating and novel element will be the new way of working and generating content. Once more the validity of the words by McLuhan is verified, when going ahead of the impact internet would generate as a new medium or technological extension of our lives and society stated: “the medium is the message” (McLuhan, 1964/1994: 7).

The wiki platform is the one that enables this collaborative dimension. Wiki technology was developed by Ward Cunningham in 1995 and adopted by Wikipedia ever since its inception. As a matter of fact, wiki technology is one of the differentiating elements of Wikipedia in relation Wales’ encyclopedic project, Nupedia (Rodríguez Herrera, 2011: 205-206). Unlike Nupedia, in which the articles, once written, underwent peer revision by university professors and experts, the implementation of wiki technology into Wikipedia configured a platform for a process to create and review content collaboratively and simultaneously. However, wiki technology only provides the technical possibility to collaborate online. From this comes what turned Wikipedia into the popular encyclopedia it is nowadays was the will expressed by Wales and (Wikimedia Foundation) under the sign of a public call, in which they asked for the participation of people in a common project. This is to say, despite Wikipedia does not define itself as a crowdsourcing project, we consider that it exhibits many of the characteristics of this way of recruiting personnel.

In words by Howe (2006/2012), who was the first to use the term “crowdsourcing is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call”. It is worth mentioning that this author very early was aware of the relation between crowdsourcing and open source software, and also of the fact that both elements concurred in Wikipedia:
The open source software movement proved that network of passionate, geeky volunteers could write code just as well as the highly paid developers at Microsoft of Sun Microsystems. [...] Wikipedia showed that the model could be used to create a sprawling and surprisingly comprehensive online encyclopedia (Howe, 2006/2012).

It seems clear that the crowdsourcing model is present in Wikipedia, aver since there is a call, in this case, released by Wikimedia Foundation, to ask volunteers to collaborate in the production of articles for Wikipedia. Nevertheless, Wikimedia Foundation was not the only initiator of articles for Wikipedia as communicational acts, as its main function is to provide the project with technological and economic support. The content fosterers of Wikipedia are in reality any person that decides to create, modify, translate any given article, or simply to ask that other people do so.

The collaborative aspect of Wikipedia refers to the material possibility that several people collaborate in a common project, to the capability of editing, reviewing or translating articles in a joint manner. The wiki technology that underlies Wikipedia, as well as the fact that the articles can be manipulated by anyone, literally, i.e., its open nature, would become the two defining elements of the implicit collaborative aspect of Wikipedia.

**Wikipedia as a cultural system**

At a first approach, considering Wikipedia as a polysystem is partly given by its hypermedia nature and also by its multilingualism. Each of the versions in Wikipedia in a determinate language is a system that, far from being isolated and fixed, articulates on an encyclopedic and multilingual macrostructure, a dynamic and open sociocultural project. As pointed out by Saorín (2012: 11), Wikipedia cannot be considered a single encyclopedia, but a network of encyclopedias, one per language, linked among them.

Consistent with this perception, there are some works in which the existence of cultural asymmetries in the content and differentiated behaviors of the Wikipedia communities of each language have been examined. This way, for instance, the empirical work by Hara et al. (2010) detected the existence of typical behaviors in the discussions that take place in Wikipedia in various languages. In the same line, the research by Rinser et al. (2013) intended to design an efficient system to identify groups of articles of Wikipedia that describe the same entities in the real world. On their own, applying visualization techniques, Biuk-Aghai et al. (2013) have represented maps of the most collaborative categories and themes in Wikipedia in English, German, Chinese, Swedish and Danish.

Likewise, it is necessary to refer to the work by van der Velden (2013), who explores the possibilities of decentralizing the design of Wikipedia, in views of
Elisa Alonso-Jíménez. An approach to Wikipedia as a cultural polysystem

adapting it to the production of indigenous content. Finally, in the sphere of translation there are also works that focus on the study of the cultural face of Wikipedia; this way, McDonough (2012) by means of an online survey carried out with voluntary translators of Wikipedia, researched the perception they have in relation to the translation produced in a crowdsourcing environment, she concluded that the main motivation is to make information available for other people. With a different approach, centered on exploiting the possibilities of Wikipedia as a multilingual corpus, with the intention of creating, for instance, lexicographic material, there exist numerous initiatives as well (Adafre and de Rijke, 2006; Potthast et al., 2008; Jones et al., 2008; Schönhofen et al., 2008; Adar et al., 2009; Nguyen et al., 2009; Yen et al., 2012; Oliver and Climent, 2012). These proposals demonstrate that Wikipedia is perceived as a cultural phenomenon and product, as well as the various possibilities that studying it offers in the field of social sciences and humanities.

As indicated in the introduction, in this work we recognize the value of previous studies and we attempt to contribute to deepen into the knowledge on the nature of Wikipedia. In an exercise that tries the elasticity of Wikipedia, we explore the hypothesis of considering Wikipedia as a cultural system, applying a dual prism of the already consolidated theorizations by Even-Zohar (1990) and by Vázquez Medel (1997, 2008/2009). The fact of resorting to these authors for the analysis does not mean a rejection to other approximations whatsoever. As previously stated, our proposal shall be considered a starting point and, in fact, it claims the pertinence of rethinking Wikipedia not only from pragmatic approximations, but from theoretical as well.

Hence, for example in future works it would be convenient to incorporate the revision of the conception of culture proposed by Luhmann (1997/2007) in his social systems theory, following the postulates recently produced by Farías (2014: 86), which contemplate, in addition to the effects of the media in culture, the importance of material mediators in the performative processes of the world. Indubitably, this way will allow looking at Wikipedia as an encyclopedic product, cybernetic discourse and cultural polysystem, and also looking at the interaction of creators and consumers, gadgets and the social dynamic they articulate.

Wikipedia from Vázquez Medel’s social imaginary

In 2004, the founder of Wikipedia, Jimmy Wales, tried to explain during an interview what his project consisted in: “Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge. That’s what we’re doing” (Slashdot, 2004). The fact that Wales summoned the metaphor that
Wikipedia is the “sum of all human knowledge”, as a system to store information, takes us to Lotman’s theory of culture, as well as to the postulates of the social imaginary enunciated by Vázquez Medel.

Our hypothesis states that Wikipedia can be considered a repository of human knowledge and therefore, a cultural system, as one of the elements that in the opinion of Vázquez Medel dominates in Lotman’s theory is the notion of memory or faculty that determine system have to preserve and accumulate information.

Lotman (1996: 24) describes the semiosphere in his homonym work as a great system, “the semiotic space outside which the existence of semiosis is impossible”. In a study on the aforementioned author, Cáceres (cit. Lotman, 1996: 261) verifies that “Iuri Lotman’s work represents, as a whole, the ceaseless search, from coherence, for an explanation of the set of cultural phenomena and each of the languages that are part of the culture, of the semiosphere”. As the very Lotman states (1996: 78), the semiotics of culture is the “discipline that examines the interaction of semiotic systems diversity structured, the internal non-uniformity of semiotic space, the need for cultural and semiotic polyglotism”; and more concretely, he exposes on these issues:

From the standpoint of semiotics, culture is collective intelligence and collective memory, this is, a supra-individual mechanism to preserve and transmit certain communication (texts) and the production of new ones. This way, the space of culture can be defined as a space of certain common memory, i.e., a space within whose limits some common texts can be preserved and updated (Lotman, 1996: 157).

The notions of language, culture and memory are closely related in the theorization of the founder of the Tartu School (Tartu–Moscow Semiotic School):

Every functioning of a communicational system supposes the existence of a common memory of collectivity. With no common memory it is impossible to have a common language. However, diverse languages suppose a diverse memory character. Here, not only is it the difference in its synchronic volume, but also in its diachronic depth. We can produce the thesis: the more complex the language, the more suitable for the transmission and production of more complex information, and the deeper its memory is (Lotman, 1998: 155).

Vázquez Medel (2008/2009: 8) starts from Lotman (1979: 41) to set the bases for his “semiotics of culture” and “the construction of the social imaginary”. In his analysis he observes the repetition of denominations existing in Lotman’s work to refer to “culture”, “communicational systems”, the set of non-genetic information, “common memory of humanity or of more restricted national or social collectives”. Moreover, Vázquez Medel (2008/2009: 8) adds:
Culture as nonhereditary demands, for its own existence, other two characteristics of extraordinary importance: a) its systemic organization (this memory is a system: every culture needs, besides, systemic boundaries, it is defined mainly, on the background of no-culture; b) its communicational dimension (every culture has to establish a communication system). A culture is, therefore, memory, system, communication. The varied constructive dimensions of its systematicness and the various systems of intra- and inter cultural communication will be then two of the pillars from which a cultural typology is established.

Wikipedia, in addition to adjust the category of “techno-communicational, electronic, virtualized cultures” identified by Vázquez Medel (2008/2009: 10), has communicational and organizational mechanisms, fundamentally executed through debate and consensus among the community. As an illustration, we will mention three of these mechanisms: collaborative authorship, debates registered in the history of each article, and the procedure to eliminate articles (articles for deletion).

As for the model of collaborative authorship, which so many and so passionate debates has generated, we have to distinguish there is one technology: wiki technology, developed in 1995 by Ward Cunningham and adopted by Wikipedia in 2001, de facto allows the collective authorship of Wikipedia content. However, as already pointed out in Ayers et al. (2008), the fact that the content of Wikipedia can be modified by anyone does not mean that the community of editors which supports Wikipedia does not adopt, as it occurs, numerous guidelines to secure, among other issues, the verifiability of the articles, which are not a product of original research (this is to say, they are based on published sources) and that adopt a neutral viewpoint:

When people find out that anyone is allowed to add content to Wikipedia, they often assume that any type of content can be added and in any fashion. But in reality, editing and writing on Wikipedia is constrained by a kaleidoscopic array of rules, or policies [...]. Like a traditional encyclopedia, Wikipedia doesn’t accept just anything, although its inclusion policies are clearly much broader that those of most encyclopedias. [...] No one in particular has the job of deciding whether an article is suitable for Wikipedia. Rather, contributors submit new pages to the site directly, and they go live immediately without intermediaries. Other contributors then review these articles. Large numbers of new articles are deleted every day, but the new content that conforms to the content policies is kept. [...] These core policies are Verifiability (V), Non Original Research (NOR), and Neutral Point of View (NPOV) (Ayers et al., 2008: 11-12).
In addition to wiki technology, Wikipedia possesses an authorship and review model utilized in the academic sphere and also in the open source software which we have previously referred to. We speak of peer review, even though as stated, to be rigorous, the term should be crowd review, in views of making it clear that, in principle, a number of human and nonhuman agents can review a determinate content in Wikipedia.

The other mechanism mentioned in the organization and communication of Wikipedia as a cultural system, Articles for deletion, has as an objective to guarantee the fulfillment of directives of Wikipedia and articulates on the possibility that an article is proposed for deletion and that ultimately the community shall reach consensus on the deletion or preservation.

To show this, there is a reference to the works by researchers Stefaner et al. (2011), who analyzed and visualized the longest 100 discussions on articles proposed for deletion, which ended in the elimination of the article. In their research they use the metaphor of Wikipedia as a garden that needs to be weeded, a work undertaken by many gardeners:

Like a garden, an online encyclopedia needs constant weeding. Unlike a garden, an online encyclopedia has thousands of potential gardeners. Over years Wikipedia has developed guidelines and policies to help editors collectively decide whether topics are suitable for inclusion or not. All articles, especially new ones, are reviewed by the community to determine if they meet Wikipedia’s notability guidelines. Any editor can nominate an article for deletion and, if this nomination is legitimate, a community discussion takes place where any fellow gardeners editors have the opportunity to make their voices heard. The usual process is to have a week-long discussion during which community members can discuss in favor or against keeping the article. At the end of this period an administrator reviews the discussion and speaks the final verdict (Stefaner et al., 2011).

Beyond the directives and mechanisms we have just mentioned, it is worth wondering if actually anyone can write in Wikipedia. As we have verified it, it is technically possible, so it would be necessary to ask what the profile of those who contribute with the encyclopedia is. Against what might be thought, Wattenberg and Viégas (2010: 186-187) discovered that commonly they are not anonymous people, but registered users whose actions are recorded in their profiles, thereby they take up resposiblity of their actions. The existence of active and very active editors, who greatly contribute to Wikipedia, has also been documented. These users are highly respected in the community and, on occasion, they become admins, this is to say, users with capacity to intervene more directly in Wikipedia.
In views of concreting the pertinence of reclaiming the denomination of cultural system for Wikipedia, we will resort to the consideration of “dynamical reality”, so complex that it seems irreducible, being this one of the three principles of every cultural system mentioned by Vázquez Medel (2008/2009: 15). However, we understand that Wikipedia, as a semantic universe where natural languages and natural world come together, might be one of the ways to reach the ultimate goal of cultural semiotics postulated by Greimas and Courtés (1979: 100):

The project of a semiotics of culture (the one by J. Lotman, for instance) is, therefore, destined to summon the semantic universe —and mainly, its two macro-semantic components that are natural language and natural world— and to treat it like an object-semiotics in views of building a meta-semiotics called ‘culture’. […] A task of this kind seems exorbitant because it would correspond to a description of the set of axiologies, ideologies, and significant social practices.

Having reached this point, perhaps the consideration of Wikipedia as a cultural and semiotic system would concur with the researches that explore the possibilities of the semantic web (Berners-Lee, 1998), a movement that aims to overcome the current state of the web —nowadays composed of unstructured or semi-structured data—, configuring an actual data web, characterized by the possibility of interchanging data between every sort of system and by the capacity that such data are understood and processed by machines. The potentiality of Wikipedia as a system of open cultural systems, techno-communicational and virtualized, capable of preserving information and keeping a record of the interactions and communications between the agents, of the decisions based on consensus in its core, appears as a resource that might be catalyzer of that new socio-communicational dimension of the web.

Wikipedia and Even-Zohar’s polysystems theory

In the face of the observations we have already stated on the nature of Wikipedia and its cultural characteristics, it is difficult to resist the idea of using the metaphor of the polysystem applied to Wikipedia. Because of this, it is one of our hypotheses. Following, we analyze the polysystems theory is analyzed and we examine to which extent we can sustain or reject our hypotheses.

From semiotics, Even-Zohar is recognized as the “author of one of the most programmatically systemic literaturological and culturological theories and in like manner, an author deeply influenced by Slavic semiotics (and naturally by the Tartu-Moscow Semiotic School) (Lampis, 2009/2010: 36).
Even-Zohar developed his Polysystems theory from 1969 to 2011. Nevertheless, we can consider that he set the bases for his theory in 1990, in a special edition of Poetic Today (Even-Zohar 1990), in which he recognizes the great contribution from modern functionalism, as he introduced the notion of system, thus overcoming the consideration of semiotic phenomena as mere conglomerates of disparate elements (Even-Zohar, 2007/2011: 1).

Because of this he considers that “functionalism has profoundly altered both the structures and methods, the questions and answers of all disciplines in which it has introduced” (ibidem). Even-Zohar laments that the two existing programs inside the functional approach, namely, the static (from the Geneva School) and the dynamic one (championed by Russian Formalists and Czech Structuralists, and which he adopts), had not been able to conjugate in a better manner and that the static approach —specially in linguistics and in the theory of literature— had prevailed (Even-Zohar, 2007/2011: 2). His stance when coining the polysystem term is more than a mere terminological convention:

Its purpose is to make a conception of the systems as something dynamical and heterogeneous explicit, opposed to the synchronistic approach. This way, it emphasizes the multiplicity of intersections and, from here, the greater complexity in the structuring this implies. Moreover, it underscores that in order for a system to function, it is not necessary to postulate its uniformity (Even-Zohar, 2007/2011: 3-4).

Even-Zohar (2007/2010: 3) considers that both synchrony and diachrony are historic. However, he understands that synchrony neither can nor must identify itself with the static, since, at a certain moment, there can be more than a diachronic on an axis:

This way, on the one side, a synchronic system is composed of synchrony and diachrony; on the other, each of them separately is obviously a system. In the second place, if the ideas of structuring and systematicity do not need to identify with homogeneity, a semiotic system can be conceived as a heterogeneous and open structure. It is seldom, therefore, a monosystem, but it necessarily is a polysystem: a multiple system, a system of various systems with intersections and mutual overlapping, which uses a different concurring options, but which works as a single structured whole, whose members are interdependent.

From our standpoint, the dynamical nature of Wikipedia fits this characteristic of the polysystem, being an information repository that changes over time, but at the same time keeps a record of each of the synchronic states as a snapshot, a growth ring in the tree of human knowledge. Also, its heterogeneous and diverse nature, which comes from its collaborative and plurisubjective, allows
sustaining the initial thesis. Even-Zohar (2007/2010: 4) stresses that the polysystem comprehends the notions of closed system and open system, this is to say, “both the idea that a closed set-of-relations, in which the members receive their value from their respective positions, and the idea that an open structure consists of various networks-of-relations of this sort that concur”.

Following our argumentation, Wikipedia, as a discourse that can be read and written, flaunts a certainly open nature; so much that at times it has been considered subversive. However, the very directives of Wikipedia (neutral point of view, NPOV; verifiability; no original research, articles for deletion, etc.) allow the community to exercise an iron grip on the encyclopedia. Moreover, this community of individuals established varied relations that not always are from peer to peer, but we may consider that there is an oligarchy that comprises the admins, who inn virtue of their especial capabilities and prestige can hold a dominant position in the system.

Another of the innovative characteristics of the Polysystems theory is its integration of heterogeneous elements inside the polysystem and the incorporation of a dynamical vision of it, boosted by the tensions existing between the strata, as well as the movements between centers and peripheries:

Heterogeneity can reconcile with functionality if we assume that the units (elements or functions) that are apparently irreconcilable, more than relate with one another as individual units (elements or functions), are partly alternative systems of concurring options. These systems are not the equal, but hierarchized in the core of the polysystem. What constitutes the synchronic (dynamical) state of the system — Tynjanov has suggested— is the permanent struggle between several strata. What constitutes the change on the diachronic axis is the victory of one stratum over another. In this movement in an opposing manner centrifugal and centripetal, the phenomena are dragged from the core to the periphery, while, in a contrary direction, certain phenomena can move toward the center and occupy it (Even-Zohar, 2007/2010: 5-6).

This notion of a polysystem in which there are tensions between centers and peripheries has made room for the application of Even-Zohar’s theory to the sphere of literary translation. Indeed, it is one of the most fertile proposals in recent decades in this field. It is not surprising, if we bear in mind that it perfectly reflects the existence of literary systems in various languages subject to tensions (intra-relations, relations inside the system, or inter-relations, relations between various systems).
The very phenomenon of Wikipedia can probably be considered peripheral, at least at its inception, as little by little, because of the contributions by many people, it moves toward the center of the macrosystem. Assuming the paradox of the peripheral origin of Wikipedia, as a polysystem, it also has its own centers and peripheries. In the center of the polysystem, nowadays there would be the English language version of Wikipedia, while in the periphery there would be the other-language versions of Wikipedia. It is undeniable that there are tensions between the center and periphery, which are likely stated in translations, adaptations or mutual enrichment between the systems and the individuals in the community. It is very versatile to apply the metaphor of the polysystem in Wikipedia, as it summons in a suggesting manner the idea of different systems (one Wikipedia per each language) which are intra- and inter-related. Each one of the Wikipedias can have its own gnoseological morphology, so that the structure of their categories would not be symmetrical nor equal in any of them.

At a second level of analysis, the applicability of the concepts build by Even-Zohar (2007/2010: 7 and 10) to the study of national literatures, as it is the case of “canon” in the sense of norms and literary works accepted as legitimate by the dominant circles and “repertoire” as the aggregate of laws and elements that rule the production of texts, has also contributed to the popularity of the Polysystems theory in the sphere of literary translation. This way, the articles in Wikipedia would not be a repertoire in themselves, but partial manifestations of the polysystem. In like manner, in the Wikipedia system, the articles would not perform a role in the canonization processes, but would be the result of these processes.

Conclusions

We consider that a system as complez as Wikipedia requires a trans-disciplinary vision to be analyzed in a cultural and semiotic manner, to which we have tried to contribute from these lines, with the additional objective to stir new approaches and research lines from a plethora of approximations, among which one finds information technologies, communication, sociology and translation.

In our interest to examine the cultural scope of Wikipedia, we notice that in its relatively short trajectory and because of its exceptionality, it has received attention from the media and various disciplines, such as artificial intelligence, information sciences, education and translation studies. Likewise, the up-to-now descriptive works on Wikipedia were revised; these define it as online encyclopedia, akin to the open source philosophy and as a collaborative project.
As for the first of the approximations, Wikipedia shares a common base with other traditional encyclopedias, however it differs on other aspects: it possesses a broader scope, includes specialized and generalist articles, is more dynamical, it frequently updates, articulates on a collaborative authorship model and is nonprofit endeavor. Moreover, as it is an internet-born encyclopedia, it has taken a series of characteristics proper to that medium (hypermedia, polysystemic and ubiquitous). Thus, wiki technology that works as a support contributes to its collaborative and multimodal dimension.

In relation to the second approximation, as noted, among the elements that link Wikipedia with the open source movement, one finds its collaborative system to create content, its authorship model and peer-review, hacker culture and finally, free distribution licenses of the content in Wikipedia would follow not a peer-review system, but a crowd-review model, in which a mass composed of human and nonhuman agents would take part.

In the third place, Wikipedia, as a collaborative project, was the first encyclopedia in which a new way to work and generate content was imposed as a differencing element; as previously stated, wiki technology is the one that allows the technical possibility to work (write, review, translate and agree on directives) in a collaborative manner, while crowdsourcing would be the mechanism to gather the participation of numerous people.

To sum up, we consider that the bases of Wikipedia rest upon the same foundations as information society and become an amalgam of ethical assumptions, innovation models, collaborative reading-writing technologies and new cultural paradigms. The consequence of all this is a solid and open project, a multilingual repository of knowledge and human relations.

As for the main hypothesis on the possibility that Wikipedia is considered a cultural system in the way proposed by semiotics of Lotman, Vázquez Medel and Even-Zohar, we have tried to pinpoint a series of considerations. In particular, the selection of these authors does not intend to exclude or restrict and we thus expressed in our intention to continue exploring this line, by means of including authors such as Luhmann, as well as other semiotic studies, something that would provide valuable points of view.

In this analysis, we verified the existence of previous works, fundamentally empirical, which approach Wikipedia scrutinizing its cultural dimension and possibilities as multilingual corpus. However, we found certain tendency to pragmatism in some studies focused on Wikipedia, which we deem can be completed or even supported with consolidated theoretical works, such those by Lotman, Vázquez Medel and Even-Zohar.
The social imaginary of Vázquez Medel, which fits into Lotman’s theory of culture, was utilized in this work to explore the possibility of considering Wikipedia as a cultural system, as nonhereditary, systemic and communicational memory. As we have wielded, Wikipedia responds to the canons described by semiotics for cultural systems, as it possesses communicational mechanisms executed by means of the debate and consensus of the community, for instance, collaborative authorship (supported on wiki technology and the review we have called crowdreview), the debates and procedure to delete articles.

In this analysis we also outlined a future way to research from the concept of “semiotics of culture” which we consider brings together the possibility of summoning the semantic universe (composed of natural language and natural world), which is the object of the study of semantics, with the possibilities that research in semantic web produces.

The Polysystems theory by Even-Zohar defines a series of characteristics that every polysystems needs to have, as the synchronistic approach and the multiplicity of intersections, comprehending the notions of open and closed systems. Other peculiarity that, according to Even-Zohar, polysystems possess is the integration of non-uniform or heterogeneous elements, as well as a dynamic vision fostered by tensions of between strata, and between centers and peripheries. According to our exposition, Wikipedia is an open and dynamic system, as it profiles as a repository of information that changes over time, but I believe that in virtue of wiki technology, it keeps a record of each of its states. Its collaborative and plurisubjective side de facto enables the existence of heterogeneous elements, but at the same time, the directives that have developed from consensus guarantee to a large extent control from the community and editors with the most expertise.

Wikipedia, as a discourse, has the components of a diverse trans-modernity, diverse and plurisubjective and articulates a number of systems (one Wikipedia per language) with their own centers and peripheries, both in their topics and the use or preference for a language. This way, the multilingual dimension of Wikipedia generates a macrosystem at whose center the English-language Wikipedia is nowadays, surrounded by the rest of languages that spread to a different extent toward the periphery, in function of circumstances such as demographic weight, linguistic policies or the activism of the communities. Finally, we notice that Wikipedia, which originally was born as a peripheral project, has moved little by little to a central position and at present it receives a lot of attention from the media and academia.
From the analysis, comparison and interpretation of qualitative nature this contribution aims to be—and retaking our initial hypothesis, i.e., if it is possible to analyze Wikipedia from the semiotic proposals by Lotman, Vázquez Medel and Even-Zohar—, it is plausible to consider Wikipedia as a social and cultural polysystem, multilingual and multimodal, whose consensual and collaborative discourses are at the same time reflection and creation of reality, and it offers us the key, somewhat as a Rosetta Stone, for a possible rediscovery of the human and its discourses and meanings.

Bibliography

Ayers, Phoebe, Charles Matthews and Ben Yates (2008), How Wikipedia works: And how you can be a part of it, San Francisco: No Starch Press.


Saorín, Tomás (2012), *Wikipedia de la A a la W*, Barcelona: UOC.

**Electronic resources**


Vázquez Medel, Manuel Ángel (2002), “Mundialización, comunicación y nuevo humanismo Implicaciones educativas”, in Agor@ Digit@l, no. 3. Available at: http://www.uhu.es/agora/version01/digital/numeros/03/03-articulos/monografico/pdf3/medel.PDF [January 25th 2013].


Reception: February 28th, 2014
Approval: December 9th, 2014