Marta Pérez-Escolar
https://orcid.org/0000-0003-2575-7993
martaperez@uloyola.es
Universidad Loyola

Paula Herrero-Diz
https://orcid.org/0000-0002-8708-1004
pherrero@uloyola.es
Universidad Loyola

How to cite this article:
Pérez-Escolar, M. & Herrero-Diz, P. (2022). The role of Wikipedia in the dissemination of new knowledge: Analysis of the entry *desinformación* as a changeable concept. *Communication & Society, 35*(2), 257-268.

The role of Wikipedia in the dissemination of new knowledge: Analysis of the entry *desinformación* as a changeable concept

Abstract

The main goal of Wikipedia's founders, Jimmy Wales and Larry Sanger, was to create a collaborative encyclopaedia driven by the users of the internet who, on a nonprofit basis, would compile and share all human wisdom and knowledge. In times of crisis, such as the coronavirus pandemic, Wikipedia has emerged as a reference point for users around the world. In this vein, Wikipedia once again highlighted its cultural role in the production of available knowledge in the face of new knowledge.

Therefore, the main objective of this study is to analyse the specific entry of *desinformación* –disinformation in English– in the Spanish version of Wikipedia, given the importance that this concept has acquired during the coronavirus crisis and given the need to disseminate a homogeneous definition of this term. For that purpose, we have applied the content analysis method to a textual case, that is, to the disinformation entry in Wikipedia. The main results show that the basic characteristics of the Spanish entry of *desinformación* on Wikipedia are not the suitable ones to inform users or readers of the real meaning of this concept. Furthermore, the content of the Wikipedia disinformation entry is incomplete, disjointed and of dubious reliability. Therefore, this research advocates the creation of a homogeneous definition that permeates the common imaginary and that is the result of a combination of experts' opinions and the definitions proposed by institutions, governments, media and organizations.

Keywords
Open knowledge, credibility, *desinformación*, disinformation, online encyclopaedia, Wikipedia.

1. Introduction

Wikipedia, the world's most visited online encyclopaedia and the seventh most visited website in the world, behind Google, YouTube, Facebook, Twitter, Instagram and Baidu (SimilarWeb, 2021), turned 20 years old in 2021. To celebrate this anniversary, Jimmy Wales, Wikipedia's co-creator, sold the first entry ever published, entitled *Hello, World!* (2001), for a value of 750,000 dollars, through the famous Christie's auction house (Robertson, 2021). The most striking

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

aspect of this purchase was that Jimmy Wales sold this first entry as an NFT –Non Fungible Token–, that is, a unique work or a collector's item, created in the digital world, that represents a real asset of great value.

The main asset of Wikipedia is that it is a collaborative project, i.e., anyone can voluntarily become a contributor or editor of the platform and participate in the creation of this online encyclopaedia. That was the goal of its founders, Jimmy Wales and Larry Sanger, i.e., to create an encyclopaedia driven by the users of the Web who, on a nonprofit basis, would compile and share all human wisdom and knowledge. Today, two decades after the birth of Wikipedia in 2001, this collaborative project has more than 250,000 volunteers worldwide and has more than 55 million articles, with more than three billion editions translated into 315 languages (Martínez, 2021).

However, the real influence of Wikipedia on society is not limited to descriptive figures and statistics but must be approached in a more holistic way by establishing itself as a global, open and collaborative encyclopaedia (Saorín, 2012), an essential piece of the general ecosystem of knowledge (Vandendorpe, 2015); that is a source of consultation and learning (Schmied, 2021) widely used by students in primary education (Cuenca & González, 2018), secondary education (Cuquet & García San Pedro, 2019) and higher education (Obregón & González, 2018; Petiška & Moldan, 2021); that contributes to open knowledge (Ricaurte-Quijano & Carli-Alvarez, 2016); that is the subject of scientific research in numerous disciplines (Tramullas, 2015; Claes & Tramullas, 2021a, 2021b; Schmied, 2021); and, more recently, that plays a role during the pandemic caused by COVID-19 (Ruprechter *et al.*, 2021). This last fact coincides with Quian's (2021) idea that Wikipedia has become a thermometer of the interest generated by a topic on the internet and helps to understand and interpret reality in a synthetic way (Vandendorpe, 2015).

An example of the above is that, in the midst of global confinement, while consultations in digital libraries and the demand for health-related resources and information increased (Herrero-Diz & López-Rufino, 2021), Wikipedia positioned itself as a key space for the discussion of information and key concepts related to the health crisis. In an interview, Jimmy Wales explained that, currently, the most important Wikipedia entry is related to the pandemic; the related article has been translated into 135 languages, received more than 78 million visits in the first months –between January and October 2020– and was cited more than 21,598 times by more than 2,868 editors (Martín, 2020). Although these visits have been growing exponentially, an increased readership of articles of all kinds was also detected in parallel, as demonstrated by Ruprechter *et al.* (2021). These authors conclude that the encyclopaedia was strengthened by mobility restrictions, which not only encouraged the creative activity of its editors but also the incorporation of new volunteers. However, the most significant aspect of this situation was the increase in edits of articles related to the coronavirus, which caused Wikipedia to limit –at the beginning of the pandemic– the public editing of this content "to avoid the spread of disinformation" (Ruprechter *et al.*, 2021, p. 49). This decision by Wikipedia is paradoxical, as it somehow contradicts the basic principles on which its operation is based, i.e., that any volunteer, the so-called *wikipedian* or *wikimedian*, can edit any content freely and openly (Proffitt, 2018), i.e., any user can add entries, and the information can be edited or discussed by whoever has an interest in it (Martínez, 2021).

Research such as that of Bubendorff *et al.* (2021) points out that citizens can organize themselves to participate in decision-making in times of crisis and, in the case of Wikipedia, through the progressive construction of knowledge. Trust in these collective contributions would be guaranteed by the availability of fact-checking mechanisms (Pérez-Escolar *et al.*, 2021). However, several experts and authority figures expressed their reluctance to make this type of contribution during the height of a crisis, since there is a legal vacuum to make citizen assistance effective in this type of situation. Thus, the measure adopted by Wikipedia is understandable, given the infodemic context in which the entry was created, i.e., when the

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

abundance of information was excessive and confusing and users needed credible and reliable information to make accurate decisions about their health and other issues. On the other hand, that measure also reopened the debate about the delegation of Wikipedia knowledge to, exclusively, the hands of scientists and experts (Aibar *et al*., 2016; Konieczny, 2021; Petiška & Moldan, 2021). Likewise, it also evidenced the existence of "noisy" or "contradictory" articles that should be discarded (Hsu *et al*., 2021) and the use of Wikipedia for ideological purposes (Quian, 2021).

Finally, another example of the presence and relevance of this online encyclopaedia is also found during the COVID-19 pandemic: precisely when it seemed that soft content that is easy to elaborate and verify by editors, volunteers and amateurs was limited, that knowledge was somehow exhausted and that Wikipedia was suffering a creative crisis, the coronavirus fostered an environment of "rapidly changing information" because of the amount of unknown knowledge generated by this health crisis every day (Ruprechter *et al*., 2021, p. 25). In this context, Wikipedia's cultural role in the production of available knowledge in the face of new knowledge was once again highlighted (Quian, 2021).

Overall, this work, which is of a descriptive nature (Pinto, 2018), has as its main objective the analysis of the specific entry *desinformación –disinformation* in English– in the Spanish version of Wikipedia, given the importance that this concept has acquired during the coronavirus crisis and given the need to disseminate a homogeneous definition (Pintado, 2021) of this term. In this sense, it should be clarified that the concept of *desinformación* has been selected as a case study to exemplify the real underlying problem, i.e., that equally inaccurate entries to the one analysed in this research could be found in Wikipedia.

Wikipedia is the gateway to the facts –which are decided in community, socially– (Menking & Rosenberg, 2021), a source that everyone uses (Leitch, 2014); therefore, it is necessary to contribute to creating a common corpus that helps public opinion (Pérez, 2019) to properly understand what disinformation is. Moreover, this type of research is currently necessary to counteract disinformation itself (Ramón & Gil, 2021) since, as authors such as Wardle (2018), Wardle and Derakhshan (2017) and Salaverría *et al*. (2020), among others, have pointed out, there are different types of deception, where *disinformation* corresponds to false information that is created or shared to cause harm, while *misinformation* refers to misleading or inaccurate information that is shared but with no intention of causing harm. Therefore, based on the main objective described above, the specific objectives in this study are the following ones:

O[1]. To analyse the set of basic characteristics of the *desinformación* entry in Wikipedia.
O[2]. To evaluate the reliability of the *desinformación* entry in Wikipedia.
O[3]. To assess the need to propose an adequate and homogeneous definition, in Wikipedia, of the term *desinformación* for the general public.
O[4]. To determine whether the Wikipedia *desinformación* entry is a changing concept and how to respond to its update.

2. Method

To meet the objectives proposed in this research, we chose to apply the content analysis method (Salcedo & Delgado, 2021, p. 68) to a textual case, that is, to the *desinformación* entry in Wikipedia under the Wikidata code Q189656. To formulate a descriptive exposition of those characteristics, elements, properties or features of the situation or phenomenon under study (Pinto, 2018), the latest edition of the text –November 2021– of this online encyclopaedia was selected. Despite the fact that some articles are more susceptible to experiencing a continuous number of edits (Petiška & Moldan, 2021), it was observed that, in this sense, the term *desinformación* is a relatively stable concept to date, with an average, according to Wikipedia's own statistics, of 1.3 edits per month since its creation in 2005.

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

3. Results

3.1. Desinformación: *a set of basic characteristics*

To answer O₁ –to analyse the basic feature set of the entry *desinformación* in Wikipedia–, we turned to the research of Wang *et al.* (2021) and Quian (2021), who believe that the best classification methods for encyclopaedia articles are the following components:

3.1.1. Text statistics and editing history

On May 11, 2005, four years after the birth of Wikipedia, a user voluntarily shaped the first lines of the article on *desinformación* in the encyclopaedia. The page, unprotected, as is the case with terms that can change frequently and can only be edited by self-confirmed users, can be modified or enriched by any subject or bot. Thus, from then until the time of writing (2022), the text has been edited 257 times –of which 27 have been reverted– by 140 editors; it has 30 page observers; it has received 37 bot edits; and during the pandemic, between January 2020 and December 2021, it had a monthly average of 2,756 visits (see Figure 1), which increased at the high points of the health crisis.

Figure 1: Statistics regarding the *desinformación* entry on Wikipedia.
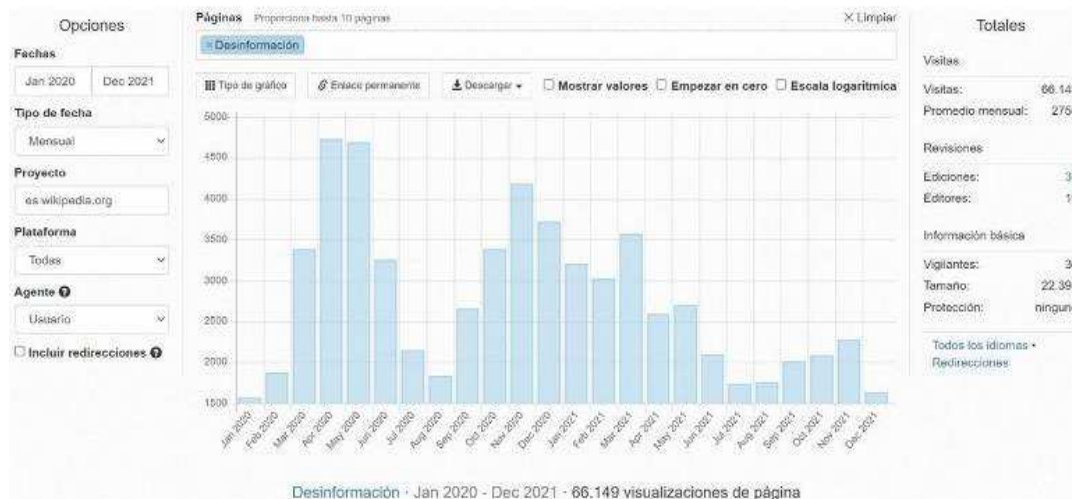
Source: Screenshot from Wikipedia (January 2022).

3.1.2. Writing style

Taking into account Quian's criteria (2021), the text is apparently well written, although, at times, the information is disjointed, something that can be appreciated in some paragraphs without threading. The clearest example is found in the section entitled "Mysticism," which is one of the procedures that is typical of disinformation, according to the editors of the entry; the first paragraph speaks of mysticism, the second of esotericism, and the third and fourth, in an abrupt and disjointed manner, refer to how politicians use the lexicon to their advantage, as the following quote from the article demonstrates: "It is common among politicians to talk about the rules of the game, but no one says what they are; they also talk about the institutional framework although no one has described that framework; nor is there anyone who keeps the family tree of the so-called political families."

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

Focusing on other aspects, the summary –the first lines of a Wikipedia article that establish its definition and situate the reader– lacks clarity, conciseness and conviction, which are essential features according to the author. We can see this in the statement in the first paragraph that "This is a subset of erroneous information [...]" since, as stated in the RAE, erroneous is that which contains an error. Furthermore, it contradicts the first statement of the article that "Disinformation is false or misleading information that is disseminated intentionally," since error is not equivalent to falsehood or deception, nor is it produced deliberately. The generalization that it "[...] is closely related to propaganda and fake news" is also unclear and reductionist, as the phenomenon is much more complex, as will be shown below. Similarly, the use of the adverb "'Normally' is [...]" is unconvincing because it does not offer certainty nor is it a firm expression, as is expected from the definition of a concept.

Likewise, in the second paragraph, disinformation is referred to as "one of the tricks of agnotology," a term still under discussion by the scientific community that is not included in the RAE dictionary, although the concept "agnosis" is, which generates confusion because agnotology is limited to scientific data of a misleading nature according to Sánchez (2019). Nor is it accurate to assert, then, that "it is usually present in the media" because it points to the traditional media and legitimizes that disinformation circulates through them. In addition, he then confuses media with actors in the following statement: "[...] but these are not the only means by which disinformation can manifest itself. It can occur in countries, religious sects, governments that do not abide by opposition or foreign media (dictatorships or tyrannies), nations at war that conceal information, etc." The editing of this part is again simplifying and inaccurate.
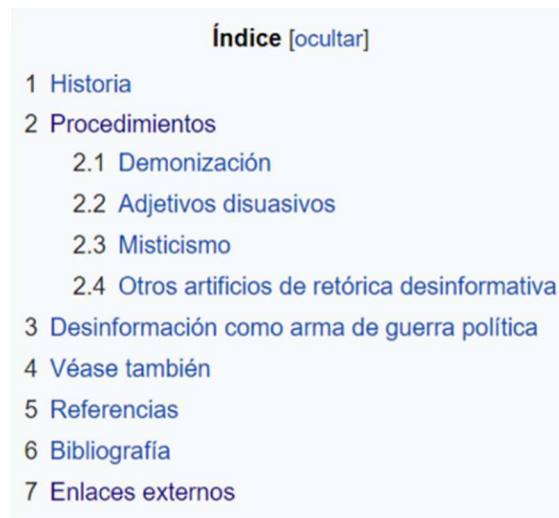
3.1.3. Structural features

Following Quian (2021) and Wang *et al.* (2021), structural features correspond to the inclusion of images, tables, graphs, and/or multimedia elements included to illustrate the topic or add information or data. In the case of the *desinformación* entry, the text includes only one image, which is that of "Exalted Romanian secret police officer Ion Mihai Pacepa exposed the history of disinformation in his book Disinformation," as the caption reads. This way of illustrating the concept is inadequate, as it reflects only a part of the phenomenon it describes; one of the authors who addressed the history of the term "disinformation," when, for example, this same word in English includes an explanatory diagram to visually represent the concept. Its completeness should also be valued, a property that, according to a study by Meseguer-Artola (2014) of young student users of Wikipedia, is what the latter value as the worst property, in general, of the encyclopaedia. Here, this peculiarity invites debate, as it is an encyclopaedia in constant growth (Konieczny, 2021). However, it cannot be considered a complete text if we take into consideration, for example, that in the History section, it briefly addresses the origins of the term but does not develop its evolution over time or place it in the current historical context.

Another particular element is the length of the text itself, which is 1,642 words. In this regard, the Wikipedia Manual in Spanish only warns volunteers that an article should not exceed the 6,000-10,000 word limit "so as not to tire users." It is therefore recommended not to exceed 32 kB of prose. This entry has a size of 22.39 kB. According to the assessment of the content of the text, the length is not synonymous with depth; the latter attribute is also valued by the authors (Quian, 2021; Wang *et al.*, 2021).

Finally, whether it complies with the structure of a Wikipedia article is observed, that is, a summary that offers a synthesis of the concept we are dealing with, something that is fulfilled, although the content, as mentioned above, is questionable, and a series of subsequent sections, in a hierarchical manner, in headings (Figure 2), and a substantial, but not excessively large, table of contents (Quian, 2021; Wang *et al.*, 2021).

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

Figure 2: Table of contents, Wikipedia *desinformación* entry.

Índice [ocultar]
1 Historia
2 Procedimientos
    2.1 Demonización
    2.2 Adjetivos disuasivos
    2.3 Misticismo
    2.4 Otros artificios de retórica desinformativa
3 Desinformación como arma de guerra política
4 Véase también
5 Referencias
6 Bibliografía
7 Enlaces externos

Source: Screenshot from Wikipedia (January 2022).

As Figure 2 shows, the table of contents is limited, disordered and disjointed. Section 5, which is the references section, refers to a dictionary of fallacies, in which the links contained are mostly broken. If, as Quian (2021) points out, the content of a Wikipedia entry is verified through the list of references, which clearly show both the attribution of the assertion and its location within the sources, in this article, it would be a handicap. Regarding the bibliography, Section 6 of the table, we find the RAE dictionary, the Oxford dictionary, and accredited books.

3.2. *Credibility, confidence and quality*

To address O_2 –to evaluate the reliability of the "misinformation" entry in Wikipedia–, we compiled theoretical studies on the issue, among which we highlight, due to their deep knowledge of the history and operation of Wikipedia and publications on the web, those of Claes and Tramullas (2021a, 2021b). Despite the existence of minimum editing criteria, such as a neutral point of view, verifiability or the use of reliable sources, these authors recognize that "the main workhorse of Wikipedia has been the quality and reliability of its contents" (Claes & Tramullas, 2021a, p. 119) and conclude that credibility is an individual matter; each user, depending on his expectations and the result obtained when searching in the encyclopaedia, his experience and knowledge, and his digital skills, factors that the content may be different at each moment, applies his own criteria. In addition, the appearance of the text, the ease of access, the interface, a quick response in the first lines, an inverted pyramid structure, or recognizing, for example, a source among the references, would also influence the trust they place in a piece of content. In the case of young people, for example, peers and an authority such as a teacher would also have an impact on their assessment of Wikipedia. Therefore, these researchers argue that Wikipedia cannot be judged as a standard encyclopaedia under classic parameters, although many apply them, as in the case of a paper source, for example, because it offers them security. In this sense, a basic indicator such as authorship does seem to be important to establish the credibility of a Wikipedia entry (Ogushi *et al.*, 2021). In the case under analysis, the article on *desinformación*, its creator, has been expelled from Wikipedia in Spanish, and its last editor, who took the reins for the improvement of the term in November 2021, defines himself as an itinerant 'wikipedian' of the project "Improvement of scientific content in Wikipedia," an initiative jointly promoted by Wikimedia Spain and the Madrimasd Foundation and is the coordinator of the editing of a hundred entries, chosen by professors from Madrid universities, in collaboration with students.

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

Despite all the above, Konieczny (2021) assures that this crisis of confidence is progressively diminishing. Other experts emphasize the encyclopaedia's efforts to reinforce its trustworthiness, such as the fight against vandalism to avoid article editing wars by varied interests (Zazo *et al.*, 2015; Sant, 2021); the composition of the Arbitration Committee (ArbCom) that watches over defending the truth on the platform (Armstrong, 2018); the creation of a register of hoaxes, false information, hoaxes that are published on Wikipedia, a decalogue to combat disinformation (Martínez, 2021); or the peer reviews that some of its most read articles have undergone to demonstrate that they do not contain more errors than those found, for example, in scientific journals (Quian, 2021).

3.3. *Homogeneity*

The existence of multiple definitions depending on the authors who have addressed the term "disinformation," are almost personalistic, and a clear interpretation of the term depending on the time and place, as seen in the definitions that Rodríguez (2018) has compiled from prestigious dictionaries such as the Russian Language, the first to include the word, the French Larousse, that of the Royal Spanish Academy, and others more discussed, such as The Great Soviet Encyclopaedia, make necessary, according to the author, its semantic delimitation and its differentiation with other processes $-O_3-$. However, beyond these issues that occur almost daily in the scientific community in regard to defining variable concepts that evolve over time with their own characteristics, there is also a growing concern for the literacy of users on the knowledge of the term because, as Ramón and Gil (2021) argue, in the end, each individual is responsible for understanding and identifying disinformation.

For all of the above, governments and institutions are trying to involve the social platforms and websites with the greatest influence on internet users to resolve the confusion that the random use and disparate conceptualization of the term "disinformation" is generating in these spaces (European Regulators Group for Audiovisual Media Services, 2020). This was denounced by the European Commission in 2021 after analysing the results of the Eurobarometer and detecting the difficulty citizens are having in identifying disinformation, for which it proposed "to clarify the terms used in this area, since their homogeneity is essential for the measures adopted to go in the same direction" (Pintado, 2021, p. 554). This invitation by the Commission has been echoed among experts, as reflected in the research of Guallar *et al.* (2020), who reveal that there is a high consensus to define the phenomenon we are witnessing and confirm as commonly accepted the proposal of the European Commission itself in 2018 to refer to disinformation as that content that is "false, inaccurate or misleading [...] intentionally designed, presented and promoted to cause public harm or private gain" (European Commission, 2018). These authors therefore identify three main types of content that produce disinformation, i.e., false, inaccurate and misleading content, and go further, identifying manifestations of disinformation in terms of types, themes, formats and channels, as Betancur (2004) and Pérez (2019) have also pointed out. In this sense, Wardle (2018), and Wardle and Derakhshan (2017), also insist on differentiating between *disinformation*, which is false information that is created or shared to cause harm, *misinformation*, which refers to misleading or inaccurate information that is shared but with no intention of causing harm, and *malinformation*, which is original content that is shared to harm someone or something as, for example, is the case with hate speech, leaks or online harassment.

3.4. *A changing concept*

The work of Tavares (2021) analysing the Wikipedia entry "COVID-19" confirms that, indeed, responding to $-O_4-$ of this research, it is natural for encyclopaedia articles to undergo editing and editorial changes because they evolve, address emerging and changing topics, and sources emerge that yield new data over time. Furthermore, Saorín *et al.* (2020) are even trying to automate the enrichment of controlled vocabularies "that need to be responsive to new

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

topics, which is characteristic of the media field, where current affairs are continually regenerating and new topics, entities and points of view emerge" (p. 17). As discussed in the previous section, the idea of "disinformation" fulfils these conditions.

Gómez-Rodríguez and González (2022) demonstrate the growing interest of science in the term and the variety of approaches it presents, although they recognize that it has been approached to date, according to their hemerographic review, mostly from the field of psychology ahead of communication. However, we find increasing contributions from the communication field, from the collaboration of experts with companies, governments and civil society, to homogenize the term and update its relationship with new facets. This is the case of the research of the think-tank Elcano (Olmo, 2019), which, in addition to coinciding with the definition advocated by the European Commission, adds the following new fact about disinformation: its interference in democracies and the –derisory– cost of manufacturing false, inaccurate or misleading content. For their part, Magallón-Rosa *et al.* (2021), in their report for the Global Disinformation Index (GDI), refresh the definition of the concept by bringing it into mainstream culture; they refer to disinformation as "antagonistic narratives."

These alliances favour the debate on how knowledge is elaborated in the encyclopaedia and who can participate in the editing of Wikipedia articles, i.e., laymen or experts (Aibar *et al.*, 2016). For Menking and Rosenberg (2021), this is essential given the immediacy with which users access intellectual knowledge through Google searches or increasingly present intelligent assistants.

4. Conclusions

The power that Wikipedia has achieved as a source of knowledge has far surpassed that of Diderot and D'Alembert's Encyclopédie, the French Encyclopédie –the *Encyclopédie*–, as an instrument that brought freedom of thought in the 18th century (Quian, 2021). It is clear that the digital nature of Wikipedia has been an advantage for its success, since, daily, more than 400 articles are created and it receives approximately 31 million visits, according to Wikipedia's own Statistics Portal (2022). In addition, Wikipedia operates without censorship, without having to respond to the traditional mediation of gatekeepers in the construction of knowledge, since this encyclopaedia has its own content control procedures.

In Wikipedia, authority is a matter of trust in the amateurs and experts who compose its staff of volunteer editors (Menking & Rosenberg, 2021). The credibility of this encyclopaedia depends, as the authors Claes and Tramullas (2021a) stated, on a combination of the user's background, their expectations and the results returned by the encyclopaedia. However, the pandemic caused by COVID-19 has shown that when information is also a matter of public health, the content must be rigorous and unambiguous because individuals' decisions will depend on their interpretations of the information they receive and read. Some studies, for example, have focused on analysing the Wikipedia entry related to the coronavirus itself; interestingly, language was found to be a factor that creates a knowledge gap among users, since the highest quality information on COVID-19, that is, the most complete entry, was published on Wikipedia in specific languages (Tavares, 2021).

As in the early stages of the pandemic, the urgency for experts to control the information disseminated about the virus was perceived so that quality in messages and contents was guaranteed (Ruprechter *et al.*, 2021), now, in the midst of international concern about the excess amount of information available –infodemic–, it has an obligation to raise the present research from which various conclusions are drawn.

This work, on the content of the article on *desinformación* in Wikipedia in Spanish, responds to all the stated objectives. In relation to the first specific objective –O1–, it is concluded that the basic characteristics (Wang *et al.*, 2021; Quian, 2021) of the *disinformation* entry in Wikipedia are not suitable for informing any user or reader about the real meaning of this concept. Furthermore, in relation to the second specific objective –O2–, it is inferred

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

that the content of the Wikipedia *disinformation* entry is incomplete, disjointed and of dubious reliability. Therefore, following what was proposed in the third specific objective of this study –O3, which is to– a homogeneous definition that permeates the common imaginary (Pintado, 2021) and is the result of a combination of expert opinions and definitions proposed by institutions, governments, companies, media and organizations should be created (Olmo, 2019; Guallar *et al.*, 2020; Magallón-Rosa *et al.*, 2021; Pintado, 2021). This homogeneous definition of the concept of *disinformation* would be a good way to teach literacy to the thousands of users who consult, on a daily basis, this Wikipedia entry.

Finally, in relation to the fourth specific objective –O4– it is found that the concept *disinformation* is changeable because disinformation is subject to the social and political context (Rodríguez, 2018) and has nothing to do with the sense or meaning it acquired in other historical times. Today, false, inaccurate or misleading messages are forms that disinformation can take because disinformation has new appearances that range from classic clickbait or hate speech to more sophisticated forms, such as deepfake manipulation of a video, among many other faces (Wardle, 2018; Tandoc *et al.*, 2018). Likewise, *disinformation* also presents renewed intentions (Olmo, 2019; Magallón-Rosa *et al.*, 2021), and therefore, it is necessary for academics and experts to monitor the permanent evolution of this term to update its meaning, impact, transcendence and implications in today's society. In the same way, it is recommended that this update also takes place in the Wikipedia entry, since it is precisely this feature of immediacy and constant updating that is most valued by active Wikipedia users (Meseguer-Artola, 2014).

References

Aibar, E., Dunajcsik, P., Lerga, M., Lladós, J., Meseguer, A. & Minguillón, J. (2016). Análisis del contenido científico de la Wikipedia española. FECYT UOC. Retrieved from http://openaccess.uoc.edu/webapps/o2/bitstream/10609/51461/1/Informe_proyecto_Wikipedia_Ciencia.pdf

Armstrong, S. (2018). Inside Wikipedia's Volunteer-run Battle against Fake News. Wired UK, August 21. Retrieved from https://www.wired.co.u k/article/fake-news-wikipedia-arbitration-committee

Betancur, J. G. (2004). La delgada línea entre la información, la desinformación y la propaganda. *Reflexión Política, 6*(12), 80-93. Retrieved from https://www.redalyc.org/articulo.oa?id=11061208

Bubendorff, S., Rizza, C. & Prieur, C. (2021). Construction and dissemination of information veracity on French social media during crises: Comparison of Twitter and Wikipedia. *Journal of Contingencies and Crisis Management, 29*(2), 204-216 . https://www.doi.org/10.1111/1468-5973.12351

Claes, F. & Tramullas, J. (2021a). Wikipedia y comunicación: perspectivas del conocimiento libre. Área Abierta. *Revista de comunicación audiovisual y publicitaria, 21*(2), 115-122. https://www.doi.org/10.5209/arab.75693

Claes, F. & Tramullas, J. (2021b). Estudios sobre la credibilidad de Wikipedia: una revisión. Área Abierta. *Revista de comunicación audiovisual y publicitaria, 21*(2), 187-204. https://www.doi.org/10.5209/arab.74050

Cuenca, M. V. G. & González, L. S. (2018). El uso de Wikipedia en educación primaria: complejidades y retos. *Aula de innovación educativa*, 275, 33-38.

Cuquet, M. & García San Pedro, M. J. (2019). Percepciones y uso de la Wikipedia en alumnos de Educación Secundaria. *Education in the Knowledge Society* (EKS), *20(1)*, 15. https://www.doi.org/10.14201/eks2019_20_a8

European Regulators Group for Audiovisual Media Services (2020). Notions of disinformation and related concepts (ERGA report). Retrieved from https://erga-online.eu/wp-

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

content/uploads/2021/03/ERGA-SG2-Report-2020-Notions-of-disinformation-and-related-concepts-final.pdf

Gómez-Rodríguez, G. & González, R. (2022). La construcción de un estado de la cuestión hemerográfico. Un ejemplo a partir de los conceptos *fake news*, posverdad y desinformación en el entorno de Web of Science (WoS). Vivat Academia. *Revista de Comunicación*, *155*, 69-90. https://www.doi.org/10.15178/va.2022.155.e1335

Guallar, J., Codina, L., Freixa, P. & Pérez-Montoro, M. (2020). Desinformación, bulos, curación y verificación. Revisión de estudios en Iberoamérica 2017-2020. *Telos: revista de Estudios Interdisciplinarios en Ciencias Sociales*, *22*(3), 595-613. www.doi.org/10.36390/telos223.09

Herrero-Diz, P. & López-Rufino, C. (2021). Libraries Fight Disinformation: An Analysis of Online Practices to Help Users' Generations in Spotting Fake News. *Societies*, *11*(4), 133. https://www.doi.org/10.3390/soc11040133

Hsu, C., Li, C. T., Saez-Trumper, D. & Hsu, Y. Z. (2021). WikiContradiction: Detecting Self-Contradiction Articles on Wikipedia. *arXiv preprint arXiv:2111.08543*.

Konieczny, P. (2021). From Adversaries to Allies? The Uneasy Relationship between Experts and the Wikipedia Community, *She Ji*: *The Journal of Design, Economics, and Innovation*, *7*(2), 151-170. https://www.doi.org/10.1016/j.sheji.2020.12.003.

Leitch, T. (2014). *Wikipedia U: Knowledge, Authority, and Liberal Education in the Digital Age*. Baltimore: Johns Hopkins University Press.

Magallón-Rosa, R., Nachawati, L. & Seoane, F. (2021). Evaluación del riesgo de desinformación: el mercado de noticias *online* en España. *Global Disinformation Index*. Retrieved from http://hdl.handle.net/10016/33587

Martínez, G. (2021). Wikipedia cumple 20 años: un día en el mayor centro de conocimiento mundial. *El confidencial*. January 14. Retrieved from https://www.elconfidencial.com/cultura/2021-01-14/wikipedia-veinte-anos_2904732/

Menking, A. & Rosenberg, J. (2021). WP:NOT, WP:NPOV, and Other Stories Wikipedia Tells Us: A Feminist Critique of Wikipedia's Epistemology. *Science, Technology, & Human Values, 46*(3), 455-479. https://www.doi.org/10.1177/0162243920924783

Meseguer-Artola, A. (2014). Aprendiendo mediante la comparación con Wikipedia: su importancia en el aprendizaje de los estudiantes. *RUSC. Universities and Knowledge Society Journal, 11*(2). 57-69. https://www.doi.org/10.7238/rusc.v11i2.2042

Obregón Sierra, Á. & González Fernández, N. (2018). La Wikipedia en las facultades de educación españolas. Diseño y validación de herramientas diagnósticas cuantitativas y cualitativas. *Revista Iberoamericana de Educación*, *77*(2), 55-76.

Ogushi, F., Kertész, J., Kaski, K. & Shimada, T. (2021). Ecology in the digital world of Wikipedia. *Sci Rep*, *11*, 18371. https://www.doi.org/10.1038/s41598-021-97755-w

Olmo, J. A. (2019). Desinformación: concepto y perspectivas. *Análisis del Real Instituto Elcano (ARI)*, *43*, 1. Retrieved from https://bit.ly/32BLV5V

Pérez, C. R. (2019). No diga *fake news*, di desinformación: una revisión sobre el fenómeno de las noticias falsas y sus implicaciones. *Comunicación*, *40*, 65-74. https://www.doi.org/10.18566/comunica.n40.a05

Pérez-Escolar, P., Ordóñez-Olmedo, E. & Alcaide-Pulido, P. (2021). Fact-Checking Skills And Project-Based Learning About Infodemic And Disinformation. *Thinking Skills and Creativity, 41*, e100887. https://www.doi.org/10.1016/j.tsc.2021.100887

Petiška, E. & Moldan, B. (2021). Indicator of quality for environmental articles on Wikipedia at the higher education level. *Journal of Information Science, 47*(2), 269-280. https://www.doi.org/10.1177/0165551519888607

Pintado, J. M. E. (2021). La Unión Europea y la desinformación. *Revista general de marina*, *281*(8), 543-562.

Pinto, J. E. M. (2018). *Metodología de la investigación social: Paradigmas: cuantitativo, sociocrítico, cualitativo, complementario*. Bogotá: Ediciones de la U.

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

Prior, H. (2021). Populismo digital y desinformación en tiempos de posverdad. *Communication & Society*, *34*(4), 49-64. https://www.doi.org/10.15581/003.34.4.49-64

Proffitt, M. (2018). *Leveraging Wikipedia: Connecting Communities of Knowledge*. Chicago: ALA Editions.

Quian, A. (2021). Wikipedia como campo de batalla ideológico e intelectual. En C. Elías & D. Teira (Coords.), *Manual de periodismo y verificación de noticias en la era de las* fake news (pp. 173-206). Madrid: UNED.
https://www.doi.org/10.5944/m.periodismo.verificacion.2021.07

Ramón, E. & Gil, A. (2021). Desinformación e infoxicación, dos "falsos sinónimos" frente a la estrategia de información de la Comisión Europea. *Comunicación y Hombre, 17*, 103-118. https://www.doi.org/10.32466/eufv-cyh.2021.17.659.103-118

Ricaurte-Quijano, P. & Carli-Álvarez, A. (2016). El proyecto Wiki Learning: Wikipedia como entorno de aprendizaje abierto= The Wiki Learning Project: Wikipedia as an Open Learning Environment. *El proyecto Wiki Learning: Wikipedia como entorno de aprendizaje abierto= The Wiki Learning Project: Wikipedia as an Open Learning Environment*, 61-69. https://www.doi.org/10.3916/C49-2016-06

Robertson, A. (2021, December 3). Jimmy Wales is selling his first Wikipedia edit as an NFT. *The Verge*. Retrieved from https://bit.ly/3q4SyqD

Rodríguez, R. (2018). Fundamentos del concepto de desinformación como práctica manipuladora en la comunicación política y las relaciones internacionales. *Historia y Comunicación Social, 23*(1), 231-244. https://www.doi.org/10.5209/HICS.59843

Ruprechter, T., Horta Ribeiro, M., Santos, T., Lemmerich, F., Strohmaier, M., West, R. & Helic, D. (2021). Volunteer contributions to Wikipedia increased during COVID-19 mobility restrictions. *Scientific Reports, 11*(1), 1-12. https://www.doi.org/10.1038/s41598-021-00789-3

Salaverría, R., Buslón, N., López-Pan, F., León, B., López-Goñi, I. & Erviti, M.C. (2020). Desinformación en tiempos de pandemia: tipología de los bulos sobre la Covid-19. *El profesional de la información, 29*(3), e290315. https://www.doi.org/10.3145/epi.2020.may.15

Salcedo, R. A. S. & Delgado, E. C. (2021). *Selección de lecturas de metodología de la investigación educativa*. La Habana: Editorial Pueblo y Educación.

Sánchez, M. (2019). Agnotología: El estudio de la ignorancia y la educación médica. *Investigación en educación médica*, *8*(31), 5-8.

Sant, T. (2021). How Can Wikipedia Save Us all?: Assuming Good Faith from all Points of View in the Age of Fake News and Post-truth. In A. Grech (Ed.), *Media, Technology and Education in a Post-Truth Society (Digital Activism and Society: Politics, Economy And Culture In Network Communication)* (pp. 133-143). Bingley, UK: Emerald Publishing Limited. https://www.doi.org/10.1108/978-1-80043-906-120211010

Saorín, T. (2012). *Wikipedia de la A a la W* (Vol. 8). Barcelona: UOC.

Saorín, T., Pastor-Sánchez, J.A. &Baños-Moreno, M. J. (2020). Uso de Wikidata y Wikipedia para la generación asistida de un vocabulario estructurado multilingüe sobre la pandemia de Covid-19. El *Profesional de la Información*, *29(5)*.
https://www.doi.org/10.3145/epi.2020.sep.09

Schmied, J. (2021). Popular digital knowledge dissemination platforms: Evaluating the pragmatic professional credibility from Wikipedia to Academia.edu and ResearchGate, *Journal of Pragmatics*, *180*, 187-202. https://www.doi.org/10.1016/j.pragma.2021.04.027

SimilarWeb (2021, December). *Wikipedia.org*. Retrieved from
https://www.similarweb.com/website/wikipedia.org/

Tandoc Jr., E. C., Lim, Z. W. & Ling, R. (2018). Defining "fake news" A typology of scholarly definitions. *Digital journalism, 6*(2), 137-153.

Pérez-Escolar, M. & Herrero-Diz, P.
The role of Wikipedia in the dissemination of new knowledge:
Analysis of the entry *desinformación* as a changeable concept

Tavares, R. (2021). Un año de edición en Wikipedia: el caso del artículo "COVID-19" en diez lenguas. *Revista Internacional de Lenguas Extranjeras*, *15*. https://www.doi.org/10.17345/rile15.3114

Tramullas, J. (2015). Wikipedia como objeto de investigación. *Anuario ThinkEPI*, *9*, 223-226. https://www.doi.org/10.3145/thinkepi.2015.50

Vandendorpe, C. (2015). Wikipedia and the ecosystem of knowledge. *Scholarly and Research Communication*, *6*(3), e0301201. https://www.doi.org/10.22230/src.2015v6n3a201

Wang P., Li X. & Wu, R. (2021). A deep learning-based quality assessment model of collaboratively edited documents: A case study of Wikipedia. *Journal of Information Science, 47(2)*, 176-191. https://www.doi.org/10.1177/0165551519877646

Wardle, C. (2018). *Information disorder: The essential glossary*. Harvard, MA: Harvard Kennedy School.

Wardle, C. & Derakhshan, H. (2017). *Information disorder toward an interdisciplinary framework for research and policymaking*. Strasbourg: European Council.

Wikipedia (2022). Portal de Estadísticas de Wikipedia (January). Retrieved from https://es.wikipedia.org/wiki/Portal:Estad%C3%ADsticas_de_Wikipedia

Zazo, Á. F., Figuerola, C. G. & Alonso, J. L. (2015). Edición de contenidos en un entorno colaborativo: el caso de la Wikipedia en español. *Scire*. *21*(2), 57-67.