

Transmedia storytelling in the social appropriation of knowledge

Narrativas transmediáticas en la apropiación social del conocimiento

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ABSTRACT

The implementation the new Information and Communication Technologies (ICT) have diversified the media, according to the evolution and adaptation of the use of technological devices in human life. With the hybridization of the media, the media ecology arises in which new ways of carrying out the communicative act emerge, with this the media adapts to communicative practices and are condensed in this new ways of communicating. Studying the scope and significant levels of convergent models in digital communication processes not only bring us closer to the media landscape, also glimpse the capabilities of platforms and devices in the social context. In the following document we will discuss how the implementation of digital tools and transmedia narratives can generate a significant contribution to the appropriation of knowledge by users. Recognize the levels of significance of all the actors involved in the community, allows us to understand how participatory and collaborative dynamics bring us closer to the democratization of knowledge. To understand both the process of appropriation of knowledge and the relationship that exists between society and technology, it is necessary to define the process of appropriation in a conceptual way, the media ecosystem in which the media narratives are linked and the relationship that exists between digital technology, transmedia narratives and the processes of appropriation of knowledge in users.

KEYWORDS: digital communication, transmedia narratives, social appropriation of knowledge, ICTs.

RESUMEN

Los medios de comunicación a partir de la implementación de las nuevas Tecnologías de la Información y Comunicación (TIC) se han diversificado conforme a la evolución y adaptación del uso de dispositivos tecnológicos en la vida del hombre. Con la hibridación de los medios surge la ecología mediática en la cual emergen nuevas formas de llevar a cabo el acto comunicativo, los

medios de comunicación se adaptan a la prácticas comunicativas y en ello se condensan las nuevas formas de comunicar. Estudiar el alcance y los niveles significativos de los modelos convergentes en los procesos de comunicación digital no sólo nos acercan al panorama mediático también nos vislumbra las capacidades de las plataformas y los dispositivos en el contexto social. En el siguiente documento discutiremos como a partir de la implementación de herramientas digitales y las narrativas transmedia podemos generar un aporte significativo a la apropiación del conocimiento por parte de los usuarios. Mediante el reconocimiento de los niveles de significación de todos los actores involucrados en la comunidad, entenderemos como las dinámicas participativas y colaborativas nos acercan a la democratización del conocimiento. Para comprender tanto el proceso apropiación del conocimiento como la relación que existe entre la sociedad y la tecnología es necesario definir de manera conceptual el proceso de apropiación, posteriormente el ecosistema mediático en el que se vinculan la narrativas mediáticas, para así abordar la relación que existe entre la tecnología digital, las narrativas transmedia y los procesos de apropiación del conocimiento en los usuarios.

PALABRAS CLAVE: comunicación digital, narrativas transmedia, apropiación social del conocimiento, TIC.

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Translation by **Carlos Javier Rivas Quintero** (University of the Andes, Mérida, Venezuela)

1. Methodology

This study is an exploratory analysis based on the literature and concepts that encompass the communication process of science, specifically within the field of popular science through these definitions: social appropriation of knowledge, transmedia storytelling and interactive digital communication.

Firstly, a dialog between the authors who resume the social appropriation of knowledge as part of human activity and as a tool of democratization of information is intended to be performed, to improve the quality of life in society.

Secondly, an analytical approach of the society-technology relation is carried out, with the purpose of highlighting which the capacities and qualities immersed in it are, and simultaneously the characteristics encompassed by the media ecology in which it is built.

By conceptualizing the social appropriation of knowledge and recognizing the relation that is established between society and technology, this document aims to make a theoretical contribution based upon transmedia storytelling, which can, as tools of signification, permeate into the social appropriation of knowledge in a relevant manner.

1.1. Social appropriation of knowledge as a fundamental part to social development

Social appropriation of knowledge entails the existence of channels that would strengthen the democratization of access and use of knowledge. Its adequate transmission and harnessing between

the different social stakeholders will result in the implementation of strategies that would improve the quality of life of communities and their members.

For strengthening channels of the appropriation of knowledge to exits, it is necessary to recognize the needs of users and the process that is immersed within the activities that motivate the levels of signification from users.

We are going to define the process of social appropriation of knowledge and its approaches according to the development and strengthening within an informed society hereunder.

1.1.1. The process of social appropriation of knowledge

The social appropriation of knowledge recognizes that social sectors should use the available information and knowledge intensively in order to recognize which the processes of experimentation and learning that relate to the mechanisms of appropriation are. This allows providing the non-specialized audience with means to form an opinion about the practices that affect their daily life, generating a participative opinion with more knowledge and responsibility (Vessuri, 2002)

For a significant appropriation of knowledge to exist, it is necessary to facilitate channels for interaction, generated by the researches carried out by researchers, contents producers and technologists; also, it is necessary to stimulate the very appropriation through the acknowledgement of the capacities of users in a more democratic sense. This will permit the inherent practices that are established in the communication process of science to be diversified, to have greater openness and reach.

Vessuri states that when science appears in the media, it does as a subject destined to mass consumption without any critical context; it occurs as the narration of an accumulation of scientific facts, which provokes the decontextualization of information based upon a reductionism that reflects hidden agendas, which therefore, neither inform nor improve the social comprehension of science (Vessuri, 2002).

In this sense, based on the opportunities that ICTs provide, the transmission of knowledge could be favored as a mean of access and dissemination through digital devices; for that, the barriers that prevent the access and reutilization of information derived from the activity should be visualized (Melero, *et. al.*, 2014).

By having knowledge about the levels of appropriation and signification of the information that users have about scientific researches, a panorama that approaches the perception society has about science can be obtained, subsequently allowing strengthening accessible channels of participation in the formulation of knowledge.

1.1.2. Technology-society relation

The evolution of technological devices has enabled different levels of connectivity, in which new spaces of interaction are created. Within these spaces diverse dynamics of transference as part of human communication and its relation with its daily environment unfold.

The relation society establishes based on the use of technology has an impact on several ambits of the social, cultural and economic life of humans, this transforms the modalities of communication

between people and, simultaneously, promotes the development of specific tools with application on fields such as education, administration, health, work, commerce, etc. (Sánchez, et. al., 2012).

The relation between technology and society, and the transference of information that exists in it, displays a set of possibilities and applications. Currently, we have a very wide range of technological options, but it is only through the relation that is established within the social sphere in which the technological devices have greater importance in the daily life of users.

1.2. The digital media ecosystem

With the emergence of new technologies the discussion that arises between traditional media (printed, radio and television) and the new digital media (online platforms and electronic devices with Internet access) implied the dominance of one over the other, or even the extinction of one of them. The reality is that media are useful as long as society considers them necessary. That is why media convergence has turned out to be a tool with multiple instrumental purposes for the social structure throughout the years.

The technological rise and development promoted the emergence of new daily practices; the media are perceived as instruments, tools and technologies that humans have incorporated into their relation with the environment, making them extensions of their bodies (McLuhan, 1998).

Society does not need to adapt to the characteristic of new technologies, it is far more important the fact that technologies must adapt to the true needs of human beings (Morin, 2000). Media should adapt to this new context through the organization of communicative ecosystems that allow them to integrate more than one platform to diversify their channels, and especially, to amplify the scope of their messages (Calvo, *et. al.*, 2018).

The relation between society and the media is a pretty wide field of study and with multiple contributions to the social studies in communication¹, the importance of the speech and its codification in the social context through the interaction with digital devices, bring us closer to a digital communication model through the reflection on the scope and limitations of it.

Digital technology enables the consumption of audiovisual contents on demand, and additionally, the user can benefit from the diverse forms of contents dissemination, opting for alternative screens. All these new multiscreen audiovisual consumption habits contribute to creating and consolidating the modern digital life style (Scolari, 2012).

The convergence process with the media ecosystem involves those very processes of conventional media (standardized contents, costs for access, individualized passive consumption) and the typical media of social Web (personalized contents and/or generated by the user, environments open to third parties, collaborative work, predominance of the sharing culture) (Aguado & Martínez, 2009).

¹ The development of studies in communication has been marked by events that surpass the very dynamic of the disciplines that integrate it: on the one hand, its recent constitution as an academic field and the strong influence of technological revolution on the conformation and accelerated transformation of its subjects of study, and on the other hand, the constant interaction between the social variations, cultural and political changes, and the modifications that communications in the world and in the country were having in a historical perspective [...] Therefore, the field of communication is formed from the crossed movement of two hegemonies in Latin America: the one from the informational/instrumental paradigm deriving from North American research, and the one from the critical/ideological paradigm in Latin American social sciences (Martín-Barbero and Rey, 1999, pp. 54-70).

Media diversity implies understanding the relations that emerge upon the use users make of devices when interacting with other users, for Islas-Carmona (2015) studying the media ecosystem involves addressing this complexity from an analysis of its systematic organization; this, from the changes that occur with the incorporation of new technologies and the media in societies throughout history.

By recognizing the role the media play in the construction of a media ecosystem, it brings us closer to understanding their characteristics within the digital communication process, being the users the only ones capable of carrying out the socialization through these media ecosystems.

The cyber media are part of the emergence of the ICTs linked by the cybernetic digitalization. For Cebrián Herreros the conception of cyber media is understood as follows:

...part of a process in which the producer/addresser of informative contents and services, through specific and adequate journalistic strategies and techniques for the requirements of the Internet platform and with the potential provided by it, as well as the integrated use of several expressive systems: written, graphic, iconic, aural, audiovisual and multimedia, until reaching some users that can track, manage or produce other information and start a dialog or swap roles with the addresser. Therefore, we start from the conception of cyber media as processes different from the ones of traditional media. However, they are not presented as radically opposed; instead, several linkages between each other are proposed. (Cebrián Herreros, 2009, p. 16)

The diversification of the elements that form the communication process through multimediality² of devices suggests the study of the implementation capacity of new technologies in the process of dissemination and production through social structures in digital communication.

Based upon the study of ICTs, new knowledge that leads us to discover which their importance in daily file is and what they mean for users is generated. Yepes states that communicative language, from a digital point of view, organizes and restructures information through a networks system that controls the interaction of users; by studying the communication digital systems a new society of information is recognized, this allows understanding the role of technologies and their applicability in different social ambits (Yepes, 2011).

The studies about digital communication are grounded in the study of ICTs in society. They have contributed a significant value to the study of the codification of the message, from the use of technological devices, from the diversification of platforms until the emergence of new interactive spaces such as cyberspace. A message can have several formulations deriving from the devices. For these participants devices become extensions as long as their use facilitates interaction and the connection with other parties, in this case, digital devices are a form of extension of human interaction. Virtual platforms are, per se, spaces of social interaction. Users are no longer the

² Multimedia development is defined as a new form of creating applications in which concepts like sound, video, music, interactivity, graphic design, etc. can be included [...] Multimedia is the combination of texts, graphics, sound, animation and video to achieve a presentation (Iznaola, 2005).

receivers of information, sedentary consumers of traditional media, and adopt an active role in the face of a complete and heterogeneous contents offer from which they can choose themselves according to their needs (Jordár, 2010).

Digital revolution possesses a greater intensity; this is capable of moving the cultural universe of a society towards new forms of production, dissemination and communication, mediated by technological devices. Digital communication has general characteristics inherent in its process of language codification; Manovich categorizes these characteristics based upon the new production processes of information:

- A. Numerical representation or digitalization: it consists on codification upon numerical algorithms of information in order to be stored and transmitted through digital devices. In this category the information term has ambiguous capacities depending on the analysis of the computing or communicative factors.
- B. Modularity: it is part of a bigger structure, which is presented discretely and it fractures in accordance with how the media are diversified.
- C. Variability: the message, as well as the media, is presented in a fragmented and particularized vision due to the characteristics of the interaction and use of technology.
- D. Automation: from the creation, manipulation and access to information.
- E. Transcoding: non-human agents intervene in the communication processes; these have their own structures but are mediated upon human conventions. (Manovich, 2005, pp. 64-72)

Manovich acknowledges that digital devices are part of new transcoding processes of the message, generating new contexts and spaces of interaction from the very communicative process. The fragmentation of the message is mediated by the characteristics of technological devices, which implies understanding what the elements of digital communication really are.

The discussion on the social contributions technological devices have made in the lives of users regarding communication is quite broad and complex, it is important to take into account that analyzing digital communication as part of a bigger process needs to specify the characteristic elements and factors that determine its functioning.

1.2.1. Conceptual elements that define transmedia storytelling

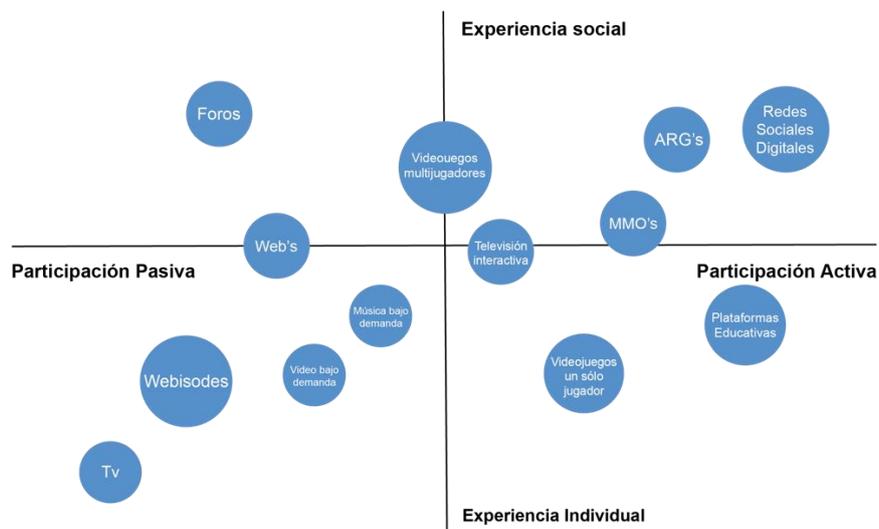
In the process of communicating a story there is a significant thinking structuring effort and it is reflected in the speech through the stories. We, individuals, constantly narrate an event as an activity that sustains the transcendence of it. For that, it is necessary to provide the story with continuity, a succession of events which provides feedback to the sense of the story and allows individuals to connect to the root of the meaning.

Said continuity can be initially planned by the addresser, but it can also be the outcome of the reorganization resulting from the appropriation of individuals who interact with the story, this

implies a reframing of the story, providing a new signifying value to it for all the participants immersed in it (Carrera, 2013).

With the emergence of new devices and platforms to perform the process of human communication, the story adopted features that allow it to increase the levels of interaction and, at the same time, the contextualization of the message. These features are attributed to the use of senses, the permanence of users regarding the communicative act and the temporality in which the story is told.

Pratten describes that there is a level of agreement between the capacity of participation that users have and the levels of interaction that are performed during their experience on each platform; the greater the participation on a platform through social experiences, the higher the levels of signification of the message:



Graphic 1: levels of participation and experience of digital users.

Source: (Pratten; 2011).

Digital technology³ currently has an important role in the transmission of information and the storytelling construction of daily events. Its implementation has opened new channels of communication. Freitas and Castro affirm that technological development has a key role in the generation of new contents:

Moving from the analog world to a digital one has favored the opportunity of developing contents with multiple narratives, with interactive parallel stories that are interconnected. A storytelling that western men have been seeking for quite some time in the elaboration of an introspective look, in the construction of a personalized vision of the story. (Freitas y Castro, 2010, p. 22)

³ Techniques implemented during the digital era in which a set of technologies are built and whose applications open a wide range of possibilities to human communication. Telecommunications are losing their autonomous and independent nature in order to be flexible, and the old autonomous technological fragmentations are being dissolved, making contacts and multidisciplinary collaborations mandatory (Jórdar, 2010).

The concept of digital storytelling has several guidelines that are grounded in both technological development of the media and the appropriation users make of new techniques and digital languages. Phillippi and Avedaño (2011) consider digital storytelling as a new form of narrating a story, in which the aesthetic value is configured through digital technologies of communication thanks to the use of hypertexts, by which words, images, sound and videos are adopted aiming to promote multi-line and multi-sequential reading, thus allowing both producers and users to interact on diverse digital spaces.

Digital narratives are not distant from the previous forms of telling a story, instead, they are based upon them to formulate the new norms and criteria in the audiovisual language to establish the pragmatic sense of the message. This entails the use of iconic representations of the message by which users resume these representations and recognize them in a significant manner which, simultaneously, allows the reconfiguration of the message:

The online and offline convergence has changed the way the media was being consumed and now the contents creators and web developers can work together to achieve a comprehensive approach, interconnected and with a new interpretative experience. The audience follows many informative or entertainment spaces using second screens (the mobile, a computer, an Ipad or any other kind of tablet) and they do so visualizing the program, sending tweets to their followers or participating directly directing the story. (Saíz, 2016, p. 14)

The construction of the speech on digital narratives depends on both the production of the message and the participation of the audience, which provides it with the capacity of disseminating through different digital platforms. With digital communication, the linkage between the content and the recipient comes through alternative transmission channels, meaning that image, audio and the literary expressions are visualized electronically.

Therefore, digital narratives are a virtual object; this is constructed with aesthetic techniques and it is signified upon the interaction dynamics through the use of senses and the convergence of multiple platforms. Users have the possibilities of receiving and generating meaning proposals on them, based upon the use of diverse devices which enables them to generate stories that link them to the themes improving their own and others' experience (Phillippi and Avedaño, 2011).

Digital narratives have as objective to promote creative collaboration from users; this practice was not particularly inherent in the analog logic. In the multi-line logic the purpose is for users to be proactive on the generation and transmission of contents which reframes the function of messages from the very organization of authors, and from producers and users as well (Freitas and Castro, 2010).

By basing on a collaborative model, digital narratives seek authors (those intellectually responsible of the piece of work) through producers (those responsible of linking the content through platforms) and users (those who consume the content) to have the capacity of establishing an interactive logic by which the roles could be swapped according to the dynamic of the platforms, the devices and the channels of communication.

In this sense, audiovisual language permits building the representations of reality, by which the significance value postulates, this favors connectivity, thereby promoting interaction. Audiovisual language, the use of multiple platforms, the new forms of digital interaction and the use of multiple narratives permit the appropriation of the message to express in significant forms and increase the levels of connectivity between authors, producers and users.

With the hybridization of the storytelling genres⁴ and the diverse digital formats⁵, an approach to the changes that enable new aesthetic, semiotic and pragmatic values can be achieved.

Hereunder we are going to break down two concepts that address the construction of the message based on the use of digital narratives, in which the audiovisual language plays an important role in the valuing and signification from both users and producers.

The narrative use of the audiovisual language permits the construction of speech regarding the characteristics of the explicit context in which the recipient is. The construction of the message in audiovisual language bears the consideration of a speech that allows putting in touch the participants from different origins; simultaneously, it also recognizes the generation of a space by which the codes can be shared, through a consensual universality (Heras, *et. al.*, 2004).

The construction of the speech through audiovisual narratives implies the use of different factors for the message construction, and based on its implementation in the audiovisual media, it leads us to delve into the semiotic elements and their structuring. Audiovisual media are descriptive due to iconic and aural elements. The use of senses blend in them; on the one hand the visual elements are formed based upon the use of images and written texts, and on the other, the aural ones are projected through the elaboration of a soundscape in which oral enunciation, music or environmental elements can flow.

Betancur (2006) defines the viewer as the participant who, by interacting with the message, rebuilds the image and gives a sense to it, that is, a meaning, which has a denotative sense provided by the addresser and the communicative intention is immersed in it. Even if the viewer builds the image adding his/her linguistic context to the object, it is based upon the proposition of the addresser who represents reality from his/her perspective, rebuilt in an audiovisual story.

Therefore, the audiovisual story works as a cognitive structure that provides sense to the linguistic context, which is produced and interpreted through devices and, hence, promotes communicative interaction (Herman, 2009). The audiovisual story has denotative qualities; through the narrative description of the events, users interact at different levels of appreciation giving an intrinsic value to the particularities of the implicit audiovisual language.

Reis and Lopes (2002) affirm that storytelling speech is situated according to its function and communicational context, which entails its materialization in different expressive mediums. Discursive image, giving birth to the concept of audiovisual storytelling of Jiménez-García (1993), is conceptualized as the capacity that audiovisual language acquires to tell stories; therefore, the addresser designs a communicative strategy to transmit the story and the succession of events.

The study of audiovisual language permits reformulating the capacities and scope that devices have as mediators of the speech. It introduces the description of its implementation in the new communication contexts through digital platforms.

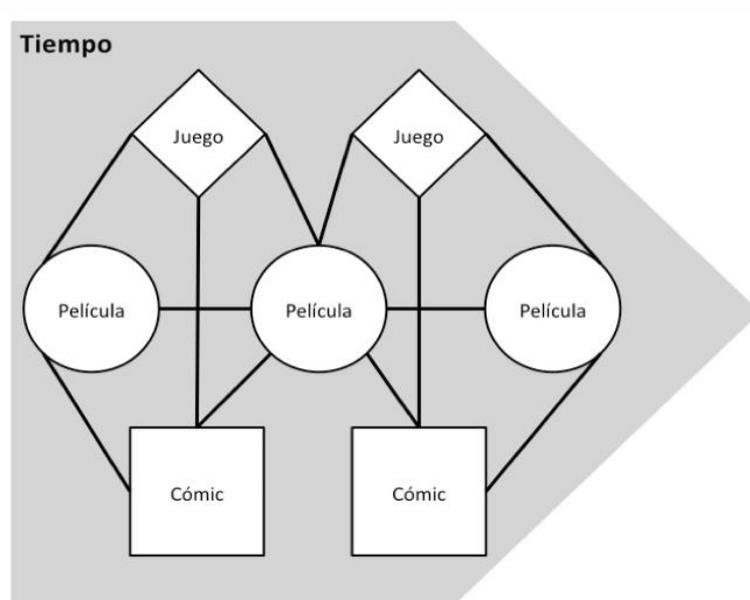
⁴ These are those texts that possess a discursive quality, that is determined by their structure and themes, which have the intention of narrating or telling a set of events, with real or fictional qualities (Valles, 2008:, pp. 31-32).

⁵ It is the design of interfaces and platforms for digital interaction between users through electronic devices.

The concept of transmedia storytelling comes from the study of the media ecosystem and the acknowledgement of the digital needs of users. It allows us to analyze the social practices that emerge around the interaction dynamics immersed in their construction and to define what the role of users regarding the platforms and their interaction with the story is.

Saíz (2016) affirms that in transmedia storytelling, the story or message is the main core, which narrates and expands through many multimedia formats. By using multiple channels the participation of the audience increases, and their comprehension; transmedia storytelling uses digital tools for the narration of the story, including television, digital and analog mediums, videos, social media, mobiles, alternate reality games and a whole set of new platforms that are constantly evolving.

This transmedial approach alludes to an especial narrative form that expands into diverse systems of verbal, iconic, audiovisual or interactive type of signification, as well as into different mediums such as cinema, television, videogames, comics and theatre. Long (2007) proposes a diagram to exemplify how transmedia storytelling is built:



Graphic 4: transmedia Storytelling.
Source: (Long, 2007).

The transmedia model proposed by Long shows us the reticularity with which the structure of the story is built, being timelessness a determining factor in the contents production, in other words, it is not necessary to visualize or interact in a temporal linearity to understand the narrative context. Each one of the contents has the autonomy to tell a story that adapts to the characteristic of the platforms and seeks to boost the capacity of users to contribute to the construction or reconstruction of the same story.

Based upon the fragmentation of screens, users experience a narrative hybridization and they are the ones who decide mediating their experience with one or several of these fragments, allowing them to explore the transmedia story as a whole in order to complete a global experience (Jenkins, 2010). For Scolari's part, he conceptualizes the transmedia term as the opportunity of exploring new paths that expand the communicational ecosystem through the implementation of multimedia content in the

different fields of multi-sensorial consumption of humans; mainly to redefine the consumption space of society and to provide solutions to the audiovisual needs of users (Scolari, 2014).

By constructing diverse environments and contexts that are generated through the interaction of users on the platforms, which rely on different languages and mediums, new possibilities of signification emerge; these are based upon the plot, characters and multiple denouements, but without losing the common themes of an original matrix.

In transmedia storytelling, the expansion into multiple platforms needs autonomous contents designed for users to have an autonomous experience. This autonomy of contents must be linked to every platform, which turns the knowledge of contents into an access point (Jenkins, 2010).

Pratten exemplifies how storytelling construction, based upon a multiplatform design that favors individual stories but belonging to one single context, can increase the levels of interaction of users regarding the contents and the story:



Graphic 5: storytelling construction in the transmedia model.

Source: (Pratten, 2011).

Not only does this network delve into the context of producers, but it is also directly related to the immersion of prosumers⁶ into the media ecology, which assume an active role by promoting the generation of creative contents.

That is, each piece of content has its own storytelling autonomy which is inherent in the story and diversifies it through the platform. Users can surf in the narrative universe, from some contents to others, without temporality, but he/she is still going to identify the main pillars on which the story is built.

The transmedia model is planned from the storytelling fragmentation, which is formed by a cognitive core upon which the signifying value is acquired through the practice and connectivity user have with the contents and platforms, given its adaptability to different devices and languages. The

⁶ We need to remember that the term “prosumer” is an acronym resulting from combining the words *producer* and *consumer* (Carmona, 2008).

possibility of adapting the contents for different audiences favors users to have access to transmedia storytelling.

Piñero and Costa state that the adaptation of new storytelling, such as the transmedia one, entails a transition and a mediamorphing⁷, which happens thanks to the convergence between traditional media and ICTs; the roles within the audiovisual production ambit are played by both producers and users since they are no longer just viewers, now they actively produce with the creative projects (Costa and Piñero, 2013).

Narration, in the process of digital communication, provides elements with sociocultural bases to digital platforms; the transmedia story confirms the permanence of the speech in users through their interaction with the audiovisual language and the use of devices.

Contents adaptability in multiple platforms defines the rhizomatic capacity contents have when being constructed in different fields and audiovisual media, which leads contents to lose their space-time linearity, therefore playing with the virtuality of their narrative (Gordillo, *et. al.*, 2011).

By linking transmedia contents within the audiovisual digital ecosystem, diverse media environments can be encompassed, through the promotion of connectivity and interactivity of users linking daily activities, along with the consumption of digital contents, the significance capacity of the message could be increased.

1.2.2. Transmedia storytelling as tools to strengthen the social appropriation of knowledge

The social appropriation of knowledge through digital tools and technological devices can provide substantial contributions to the analysis of the digital communication processes performed by users; this, in order to approach an analysis of the signifying processes that are established in the communicative act.

Transmedia storytelling, through the fragmentation of the story, can break down the barriers that are established between diverse speeches since these are based upon the idea of generating contents not only for diverse platforms, but also for diverse audiences.

The purpose of narrating through technological devices allows users to see themselves represented and to represent reality from their interaction. These kinds of narrations, which lack linearity, allow providing the story with diverse elements, in which users, through participation, can contribute with a different perspective of the facts and generate knowledge at the same time.

Chomon and Busto affirm that the communicative process has changed; both the addresser and the addressee now have the capacity of swapping roles. The result of this is a complex and continuous process (Chomon and Busto, 2017). Transmedia storytelling is focused on strategies aiming at the dissemination of the contents in an equitable manner, by which users and creators innovate in the sense of sharing the information and contents.

⁷ It is the transformation of the media generally resulting from the complex interaction between the needs perceived, the political pressure and competitors, and from the social and technological innovations. Mediamorphing is not just limited to the transformation of one thing into another. The technological progress and the fast acceptance these phenomena get from people does not mean we should ignore the habits, roots and time users need in order to adopt new propositions from the media (Filder, 1998, pp. 21-22).

2. Conclusión

Transmedia storytelling, as a tool for the social appropriation of knowledge, links users to democratic spaces of interaction, in which information plays a fundamental role in knowledge transference, but it is not until interaction happens, based upon reciprocation from all the participants, that the democratic space is built and knowledge is reflected in a practical way, improving the quality of life of users.

Social appropriation of knowledge entails a high level of signification for users, and it should be the common goal of every communication process that allows users to have windows of opportunity for development. The use of technology as a mediator of knowledge can open new spaces for socialization from different ambits, in which the equitable sense in the use of information and technological devices prevails.

3. References

- Aguado-Terrón, J. M., y Martínez-Martínez, I. J. (2009). De la Web social al Móvil 2.0: el paradigma 2.0 en el proceso de convergencia mediática de la comunicación móvil. *El profesional de la información*, 18(2).
- Betancur, J. L. R. (2006). Mesa 11: Narrativas Audiovisuales. *Razón y Palabra*, 11(49).
- Calvo, S., Oliva, M., y Villa, S. (2018). Web 2.0 y tratamiento informativo en las principales revistas españolas de divulgación científica y de la pseudociencia. *Revista Latina de Comunicación Social*, (73), 293-316.
- Carmona, O. I. (2008). El prosumidor. El actor comunicativo de la sociedad de la ubicuidad. *Palabra clave*, 11(1), 2.
- Carrera, P. (2013). Transmedialidad y ecosistema digital/Transmediality in Digital Environments. *Historia y comunicación social*, (18), 535-545.
- Cebrián Herreros, M. (2009). Nuevas formas de comunicación: cibermedios y medios móviles. *Comunicar*, 17(33).
- Chomón-Serna, J. M., y Busto-Salinas, L. (2018). Ciencia y transmedia: Binomio para la divulgación científica. El caso de atapuerca. *El profesional de la información*, 27(4).
- Costa-Sánchez, C. Piñeiro-Otero, T. (2013). *Estrategias de comunicación multimedia*.
- Fidler, R. (1998). *Mediamorfosis: comprender los nuevos medios*. Granica.
- Freitas, C., y Castro, C. (2010). Narrativas audiovisuales y tecnologías interactivas. *Revista Estudios Culturales*, (5), 19-42.
- Gordillo, I., Guarinos, V., Checa, A., Ramírez Alvarado, M., Jiménez-Varea, J., López Rodríguez, F., y Pérez Gómez, M. A. (2011). Hibridaciones de la hipertelevisión: información y entretenimiento en los modelos de infoentertainment. *Revista comunicación*, 1(9), 93-106.

- Heras, A. I., Bergesio, L. y Burin, D. (25-27 de Agosto de 2004). Trabajo etnográfico sociolingüístico interaccional y comunicación visual en la generación y análisis de datos en lenguajes diversos. *IV Jornadas de Etnografía, CAS, IDES*. Buenos Aires, Argentina.
- Herman, D. (2009). The Third Element; or, How to Build a Storyworld, en John Willey y Sons Ltd., Malden, *Basic Elements of Narrative*, (pp. 105-136).
- Islas-Carmona, O. (2015). La ecología de los medios: metadisciplina compleja y sistémica. *Palabra clave*, 18(4), 1057-1083. <https://www.doi.org/10.5294/pacla.2015.18.4.5>
- Iznaola, R. (2005). *¿Qué significa multimedia? Reflexión Académica en Diseño y Comunicación*, 6(VI). Facultad de Diseño y Comunicación - Universidad de Palermo.
- Jódar, J. (2010). La era digital: nuevos medios, nuevos usuarios y nuevos profesionales. *Razón y Palabra*, (71).
- Jenkins, H. (2010). Transmedia storytelling and entertainment: An annotated syllabus. *Continuum*, 24(6), 943-958.
- Jiménez, J. G. (1993). *Narrativa audiovisual* (Vol. 33). Anaya-Spain.
- Long, G. A. (2007). *Transmedia Storytelling. Bussines, aesthetics and prodyuction at the Jim Henson Company* (Trabajo final de máster en Science in comparative media Studies). Massachusetts Institute of Techonology.
- Manovich, L. (2005). *El lenguaje de los nuevos medios de comunicación: la imagen en la era digital*. Paidós.
- Martín-Barbero, J., & Rey, G. (1999). *Los ejercicios del ver: hegemonía audiovisual y ficción televisiva* (Vol. 2). Gedisa.
- McLuhan, M. (1998). *La galaxia gutenberg*. Círculo de Lectores.
- Melero, R., San Miguel, H., y Javier, F. (2014). Acceso abierto a los datos de investigación, una vía hacia la colaboración científica. *Revista española de documentación científica*, 37(4).
- Morin, E. (2000). *Introducción al pensamiento complejo*. Gedisa.
- Phillippi, M., y Avendaño, C. (2011). Empoderamiento comunicacional: competencias narrativas de los sujetos. *Comunicar*, (36), 61-68. <https://www.doi.org/10.3916/C36-2011-02-06>
- Pratten, R. (2011). Getting started with transmedia storytelling.
- Reis, C., & Lopes, A. C. M. (1996). *Diccionario de narratología*. Ediciones colegio de España.
- Sáiz, C. (2016). Reinención del periodismo en el ecosistema digital y narrativas transmedia. *adComunica*, (12), 163-182.

- Sánchez-Torres, J. M., González-Zabala, M. P., & Muñoz, M. P. S. (2012). La sociedad de la información: génesis, iniciativas, concepto y su relación con las TIC. *Revista UIS Ingenierías*, 11(1), 113-128.
- Scolari, C. (2012). Comunicación digital: recuerdos del futuro. *El Profesional de la Información*, 21(4), 337-340.
- Scolari, C. (2014). Narrativas transmedia: nuevas formas de comunicar en la era digital. *Anuario AC/E de cultura digital*, 2014, 71-81.
- Valles, J. (2008). *Teoría de la narrativa. Una perspectiva sistemática*. Iberoamericana.
- Yepes, J. (2011). Apuntes sobre comunicación digital. *Revista Virtual Universidad Católica del Norte*, 1(19).
- Vessuri, H. (2002). Ciencia, tecnología y desarrollo: una experiencia de apropiación social del conocimiento. *Interciencia*, 27(2), 88-92.

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