

OPENED MONADS: the evolution of a concept

Copyright © 2013
SBPjor / Associação
Brasileira de
Pesquisadores em
Jornalismo

CARLOS PERNISA JÚNIOR
Universidade Federal de Juiz de Fora

ABSTRACT - The contemporary digital narratives are the focus of this paper. The evolution of the concept of "opened monads" - the mainly subject in discussion - will be portrayed since it was still connected to journalistic reporting in the web, arriving to the field of arts. The horizontal structure of the "opened monads" model is an important point to the understanding of its positions in contemporary communications, once it is no longer the one called "mass media", but the one assuming new aspects, even establishing new connections with other areas. In this case, the connection with arts, under the technology bias, is a possible interface. In its methodology, there is a theoretical investigation, but maintaining its link with the applied part, with examples of existing work, work in progress or work that is still on going.

Keywords: Communication. Cyberculture. Digital narratives. Opened monads.

MÔNADAS ABERTAS: a evolução de um conceito

RESUMO - As narrativas digitais contemporâneas são foco destacado deste artigo. A evolução do conceito de "mônadas abertas" - o objeto principal da discussão - vai ser retratada desde quando esse conceito ainda estava ligado à reportagem jornalística na web, chegando ao campo das artes. A estrutura horizontal desse modelo das "mônadas abertas" é um ponto importante para se compreender a sua posição na comunicação contemporânea, que já não é mais somente aquela chamada "de massa" ou "massiva", mas que assume novos aspectos, inclusive abrindo espaços para novas conexões com outras áreas. Nesse caso, a ligação com as artes, sob o viés da tecnologia, é uma interface possível. Em sua metodologia, há uma investigação teórica, mas não se desvinculando da parte prática, com exemplos de trabalhos já criados, em andamento ou que estão sendo ainda gestados.

Palavras-Chave: Comunicação. Cibercultura. Narrativas digitais. Mônadas abertas.

MÓNADAS ABIERTAS: la evolución de un concepto

RESUMEN - Este artículo centra su atención en las narrativas digitales contemporáneas. Se analizará la evolución del concepto de "mónadas abiertas" —objeto principal de la discusión— desde cuando aún estaba ligado al reportaje periodístico en la Red hasta llegar al campo de las artes. La estructura horizontal de este modelo de las "mónadas abiertas" es un punto importante para comprender su posición en la comunicación contemporánea, que ya no es solamente la llamada "de masas" o "masiva", sino que asume nuevos aspectos, incluso abriendo espacios para nuevas conexiones con otras áreas. En este caso, la conexión con las artes, desde el ángulo de la tecnología, es una interfaz posible. En cuanto a la metodología, se trata de una investigación teórica que no se desvincula de la parte práctica, con ejemplos de trabajos ya realizados, aún en curso o que todavía están siendo gestados.

Palabras clave: Comunicación. Cibercultura. Narrativas digitales. Mônadas abiertas.

INTRODUCTION

The work developed by now is more an area exploration, comprising journalism and arts, in attempt to verify the efficiency of a possible model to contemporary digital narratives. Therefore, it is being suggested a concept, already described in previous works¹, but with some actual changes, to begin with the name.

From “opened monad” to its plural “opened monads”, which will be explained throughout the text. In the twentieth century, the composed concept of opened monads appears, proposed by Gabriel Tarde (2003). The French sociologist is aware of the fact that society must be explained from the game of intensities resulting from the action of individuals.

Here, in analogy, opened monads would be autonomous elements - text, videos, graphics etc. - which interrelate to produce a harmonious whole of information, without being obliterated in its entirety individually. There is a difference, then, between monads and the elements of a system, because, in the second case, the individual is definable only in relation to the whole, given his functionality.

Furthermore, it has to be noticed the exploratory character in the concept creation, looking to expand it from a more journalistic leaning for the artistic field. This passage is being done gradually, based on the evolution of the concept and on theoretical and practical developments in these areas.

The idea of “opened monads” arises from a concrete problem related to web journalism. Subsequently, another problem, connected with the audiovisual content production to digital TV, makes the concept extend to digital narratives, which also involves art and its fictional part.

To handle these aspects, which are closer to the practice, it was also necessary a theoretical development of the concept. The survey was conducted to validate what was presented in practice, seeking a theoretical foundation to account what was being built.

At first, it is necessary to understand the original idea of “horizontal”, which opposes the vertical model of conventional journalism. Then the verification of a new paradigm in communication will be set up, in which the relationship so far established between transmitter and receiver is questioned, being treated under a new light, this one also more shaped to a relationship less hierarchical and more horizontal.

In parallel to this movement, another research project, involving art, communication and technology, has begun pointing possible paths

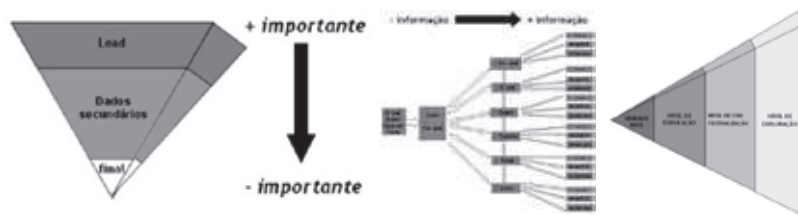
to an investigation involving the concept of "open monads". It is what this present work aims to develop with further detail.

It is important to highlight that all this involves not only the effort of a professor in the communication area, but a large team, that does not act as a single body, homogeneous and with the same objectives – and at the same time – but, at some point, has become involved with this project. They are professors and students of Communication, Computer Science, Arts, and people connected with other educational institutions than the Federal University of Juiz de Fora (UFJF).

1 THE CONCEPT

The concept of "open monads" was first explored – yet as "opened monad" – in a working in partnership with another professor in 2009 (PERNISA JÚNIOR; ALVES, 2009a, 2010). The main idea was to discuss the report on the web. From this perspective, instead of investing in the traditional model of journalism news, which works with the verticality of the lead and sub lead, known as "inverted pyramid"², the proposal was to seek horizontality in the report. Somehow, this was already planned in the way the researcher João Canavilhas (2006) addressed the issue when he had spoken of the "lying pyramid"³ (Fig. 1).

Figure 1 The passage of the "inverted pyramid" to the "lying pyramid" model according to João Canavilhas scheme



Source: CANAVILHAS, 2006, p.5 and 14-15

However, the initial proposal of "opened monads", made in 2009, tried to go further, glancing other possibilities. The "lying pyramid", by Canavilhas, sought to organize "inverted pyramid" of conventional journalism in the web, understanding that the way news are produced changes in the network. It is a possible and valid idea. However, the

proposal of "opened monads" has another design. Firstly, it should be clear that the concern relies on the report.

There is, on the web, a vision shared by authors such as Ferrari Pollyanna (2004), that what matters is the news. The report, in most cases, is set aside. However, it is mandatory that reporting starts to be investigate within the web. This is the proposal made since the beginning of this process. It is not simply to deny the importance of news in the web, but, rather, to verify that the Internet graphic interface is not only for short and fast note.

The research has progressed, then, heading to a new point, which seeks to link journalism and other areas of human knowledge. The most important verification has been on how reporting relays on literature and may go beyond the news as mere passage of information. Here, one can think of various types of reporting, as have emphasized Muniz Sodr e and Helena Maria Ferrari (1986). Furthermore, Jorge Luis Borges' tales (1998, 1999) has come to mind, as well as reporting-tale (SODR E; FERRARI, 1986, p.77-86), as it will be seen later.

Finally, another possibility presents itself, structured the relationship between journalism - communication - art and technology. It also implies the reconfiguration of contemporary communication and its current interdependence with technique - or technology. This point becomes crucial to comprehend how communication is undergoing profound changes that affect not only its most superficial level, but as well as deeper structures (JOHNSON, 2001).

Gathering these points, the idea of creating a concept that addresses, initially, a practical question takes place: how web journalism will deal with the specific characteristics of the digital medium. The first example was on the research done by the so-called "search engines"⁴. The intention was to analyze how a term placed in these "searchers" - which is in any part of a news article in the web - can be located and understood in its context. In practice, what we have seen - and still is seeing - is that the journalistic media in the web do not have an organization of their research to always place the result of a search at a homepage on the subject matter.

In other words, if the research material is a reporting with several web pages with specific subjects⁵, a search term can be in any one of them, and not necessarily in the first one. This can lead to problems in reading and understanding this material, if the site does not have a management that organizes this search to a certain threshold. To prevent this from happening, a programing work can be made to redirect

the research and always respect an order predetermined reading. This, however, is certainly not always something easy to be done, especially for the journalist, who has not mastered the intricacies of the computer.

It was thinking about this specific type of problem that the initial idea of "opened monad" was created - still in singular⁶. It was sought a framework for reporting on the web that cared about each element of the set of a big news article. Each "part" - so to speak - would address a topic or subject, in the most in-depth possible way - even using digital resources that are not limited to the text, but include pictures and sound. This division would involve a structure of what could be called "booms"- in journalistic jargon. The name, however, does not seem the most appropriate and, in the concept evolution to be reached now, it has been decided to treat them as "monads" - observing, at this time, the plural, since it works with several "parties", that would be the building blocks of articles, and not just a "part" or a block.

The idea of monad refers to authors like Leibniz (1983). For him it means something unique and indivisible, being understood as an "elementary substance". Generally, it is treated as a closed structure, but is proposed here is the ability of a monad to link with others. As the news report on the web has its own characteristics, it is thought that each "monad" can act as a block, as complete as possible on what we intend to discuss about that particular aspect, comprising a subject within the treated matter. It is even worth here to think about some redundancy, so the user can learn about the general subject without resorting to an article, which, in this particular case, could be called initial. The passage from one topic to another in the report takes place by the structure of web links (see Fig. 2).

Under this sight, you can read the material in the sequence provided by the editing - in a linear mode - or make a non-linear reading through these links, consisting of keywords marked in the text or other connecting form within spaces of images and sound. This makes the "monads" "open" to each other. These openings can also be, occasionally, to other sites on the web, apart from that specific report. This is what, nowadays, consists in here the "opened monads"⁷.

2 THE STRUCTURE

The model of "opened monads" is not proposed as the only one feasible for web journalism and even for the reporting in this kind of medium. Thus, this model is an alternative that would be viable to a

structure that does not work with conventional journalism. This, despite also advocated for web journalism by authors such as Pollyana Ferrari (2004)⁸, lends itself much more to a news structure than to reporting. João Canavilhas (2006), as already seen, realizes this and resort another model, to which he gives the name of "lying pyramid", trying to make the process of building the great news report more horizontal.

The horizontality is also important for the concept of "opened monads", once its structure favors a non-hierarchical construction of blocks of articles that make up the reporting. The vertical model, in its turn, is much more connected to conventional journalism, where time and space are very limited. This implies an emphasis on certain parts of the articles, imposing different degrees of importance for what is being reported. Thus, what is consider as more important goes to places of prominence in the conventional media, leaving the less relevant to the end, where it can be cut out by lack of time or space. It is not about reassembling this type of model in reporting on the web, because is exact the wealth of digital narrative that can be lost when making this choice. The ideal is to think of a horizontal structure so the user could make his/her own particular path in the content presented, focusing on what interests him/her and not on what was given by an editor as the most important.

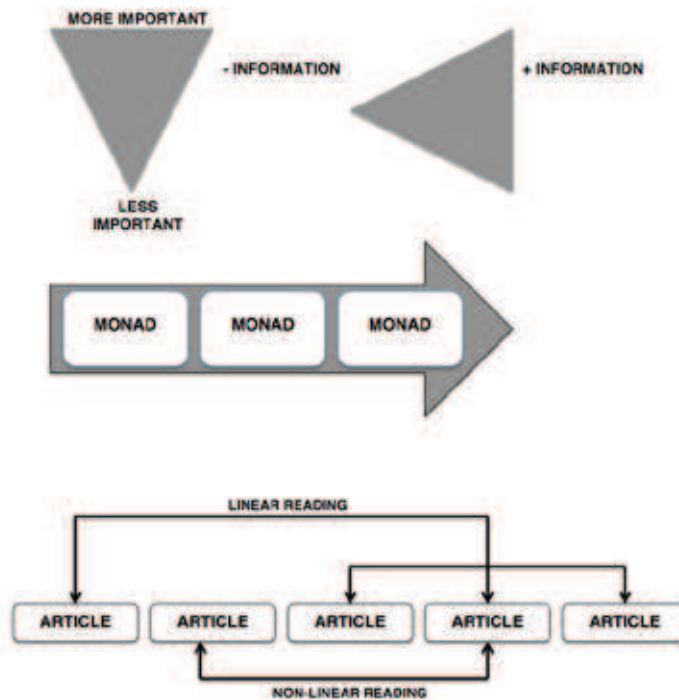
Logically, this horizontality does not work in a complete manner. As there is a reading pattern, in the West, from left to right and from top to bottom, this also interferes in the view of the computer screen, which creates privileged zones of attention and hints to another structure, where certain areas are more attractive than others. Nevertheless, it is believed that the horizontal model may have advantages over vertical, since that leaves a little more space for the user to make choices.

The structure of the "opened monads", then, displays itself in a different form from those of the "inverted and lying pyramids" (Fig. 2). Starting from the inverted pyramid, one goes up to the lying pyramid and arises to the structure of the model of "opened monads," in which each subject would be a "monad", a "portion", a block. In the first mode, the large arrow represents the possible links between them, indicating a linear reading, whereas in the second mode, the arrows indicate a non-linear reading. The general idea is that the visualization, in the case of non-linear paths, does not have to start with a particular article, but with any of them.

It is important to notice that this model is being tested in some articles by students of the Communication College of Federal University

of Juiz de Fora⁹. In this case, those who are producing the reports understand that the model provides new ways of reading and viewing content. It induces themselves to improve both in producing their own content and in paying more attention to colleagues' production, and to put into practice the "openness" of their articles to others', besides checking with more details the possibilities of connections with other documents already existing in the web.

Figure 2 The models of the inverted pyramid, lying pyramid and opened monads and their reading modes



Source: Prepared by the author

One of the productions was for the 50th anniversary of Journalism Course of Juiz de Fora, in which was used a map containing directions for articles in a site, in a mash-up structure. It was developed over a year and there was no main subject, but, from the map, any marked point could be clicked and it would shift the user to the specific subject chosen. Part

of the written material is available on the web at: <https://sites.google.com/site/facomufjf/>.

Another work was about the cine-journalist João Gonçalves Carrico, born in Juiz de Fora (MG), showing his biography and his work in a more horizontal structure, with no highlighting to any time or specific issue, available on a website that sought to adopt the "opened monads" form of organization (<https://sites.google.com/site/jgcarrico/>).

The proposal, however, is not only to work with a new way of dealing with the news report on the web, but also to verify that there is more room to explore the model of "opened monads".

3 THE LINK WITH THE ARTISTIC DIMENSION

This vision has born of projects that had as characteristic the close approach of communication and the arts, always by technology bias¹⁰. Thus, the "opened monads" of journalistic reportage were placed alongside with aesthetic possibilities that could carry forward the concept and reached new heights. For that, some cases were pointed to be studied in more detail.

At first, the connection already very close between journalism and literature sprang to the eye and cause the thinking of a possibility of tale-reports, in a way that which each one of them could handle a specific material. In this case, it also would be necessary for the set of reports to have cohesion and work almost as a book-report, but in the web and without the weight of something purely textual. From it also has born an approach with the work of Jorge Luis Borges, Argentine writer, who has in the tale his strongest point.

In a second step, the idea was to work with digital narratives for audiovisual vehicles, especially for interactive digital TV. These narratives can be both journalistic and fictional. The structure of the "opened monads" is what should be in analysis, regardless of any particular content. The point is how to work with blocks of material that interest the user both in its unity and in its relationship with the other blocks. In the same direction, we study the possibility of working with interactive scripts for locative media, using GPS as a way of organizing narratives¹¹.

The first idea, which has not yet become something concrete, has two sides. One aims to reorder Borges' tales, removing them from the various books of the Argentine author and transferring them to a database that would work as follows: entering the virtual space the reader/user would be in a first stage where he/she could choose between

many reading options. It would not be there the names of Borges' books - as Fictions, The Aleph, The Book of Sand - but trails, possible trajectories within the authors' universe. Thus, a subject of interest to the author was what would direct the reader/user. Pathways would appear to be followed, something like "Tigers", "Labyrinth", "Double", "The Thousand and One Nights"¹². Within each of these pathways would be Borges' tales, linked to that particular subject, which would be randomly available to the reader, in an arbitrary process. Thus, in each moment, it would arise a new tale, and it would not be tied to any chronological or launch order.

Furthermore, a process in which these paths could cross each other has been thought of. For example, if a story were about "labyrinths", but also "tigers", a link would exist to leave the order of "labyrinths" and go to the "tigers", making the reader/user to interfere, through his/her choices, in the reading process. This is thought to enhance Borges' narrative and show a characteristic of his work, which are the topics that he most fell in love and often were present in his tales.

Alongside this artistic dimension another one appears, linked to journalism, which is the opposite of this search for Borges. Based on the design of the database of Borges' texts, opens up the possibility of doing news stories that resemble his tales, which would be tale-reports. Each story would run as an independent block - a monad - but might connect with others, by related matters - the connection between them would happen via links. It is not a single article on a general topic, as it has being seen at the beginning of this text, but several reports that have common points, generating diverse possibilities of links and visualizations.

One thinks of the idea of "transmedia narratives", of Jenkins (2008, p.132-179), in which it is created a fictional universe from which many stories can be told, in multiple different media. The example of Jenkins is Matrix, which was a trilogy of feature films, but also games, comics, cartoons, among others. From this example, we worked with the possibility of a "transmedia journalism" (PERNISA JÚNIOR, 2010a; FORD, 2008; GOMEZ, 2010; SCOLARI, 2009; 2011), in which a report could be made and related to others, using different media. This way, an article in the radio could relate to a report in a printed magazine and to a documentary film, for example. In this new context, we would have many possibilities of visualization and understanding for the user/reader/listener of what he/she would be getting out of such diverse material. At the same time this material is presented with connections - links - between themselves, generating a context of facts that may not be possible if he/she only had access to a printed or audiovisual or radio material.

It might be necessary to remember that "transmedia newspapers" would be understood in the context of Geane Alzamora and Lorraine Tárzia (2012, p. 31), which goes beyond the connection between the material of various means e "would constitute the interstices of the network intermedia, not being possible to characterize it as particular of any environment alone." At the same time, one might think, from of what is proposed by them, in other possibilities, as those posed by Scolari, when comes to users participation and collaboration (SCOLARI *apud* ALZAMORA; TÁRCIA, 2012).

The second moment of reflection on the "opened monads" and its use in a context closer to the art refers to narratives made for audiovisual vehicles, especially for digital TV and, more recently, locative media¹³. These stories are initially viewed as interactive scripts, in which there is also independent blocks of various materials, but that may contain links with each other. As the material is, in principle, fictional, these links are not necessarily logical, formal, but it could be from several orders, including affective, sensory, among others.

For this audiovisual material to be seen by the user/spectator, it was thought at first of interactive digital TV, the one that has a return channel, where the public can interfere, somehow, in that he/she wants to see. As the "opened monads" function in autonomous blocks - modules - each block tells a story - as in Borges' tales - and account for itself. However, by different motivations, these stories might intersect and build other structures, going beyond that initial story.

With the possibility of making films to locative media, the idea has come to be also the use of GPS points to mark the entry in the history. These points could also interfere with the routes that would be less interactive, on one side, but would have a strong spatial element, on the other¹⁴. These stories may or may not indicate a specific route. Currently, however, the motivation is that the stories do not necessarily have this planned route.

4 THE CONTEMPORARY COMMUNICATION

Focusing more on the discussion of communication theory, one can see that the idea of horizontality is also present in the relationship between transmitter and receiver, where the first, before a prominent figure and with great powers over the second, is being placed as an additional element of the relationship and not the principal.

The horizontality becomes visible if, in some specific cases of

broadcast content, the transmitter is no longer placed as the only one that can function as announcer. The relationship, in instances where the "mass communication"¹⁵ is not the only one possible, shows that there is a flatten process between transmitters and receivers, from where it also takes the idea of horizontality, facing a vertical form from earlier times. This can easily be seen if one of the elements of communication - in this case, the transmitter, as the owner of the media, of the vehicles - is in a prominent position and occupies the top of another pyramid, the social, as the holder of powers that are also economic and political.

The table would look like this (Fig. 3), with few transmitters and many receivers of mass communication, where the passage of information carries more weight than the dialogue or the attempt to establish an understanding between the elements of the relationship. The Pyramid of mass media communication, which also reflects the economic, political and social, where those who have the power - and the media - are located on the top of the pyramid while the majority is in the lowest part, without much chance to be heard in society.

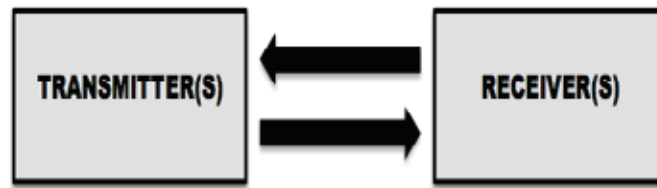
Figure 3 The Pyramid of mass media communication



Source: Elaborated by the author

With the possibility today of a more horizontal structure (Fig. 4), this pyramid is not the only way to see the communication. This way, where there were the device "one-all", now makes room for devices like "one-one" and "all-all"¹⁶. The model of "opened monads" works, therefore, as a reinforcement of this idea, so that transmitters and receivers have to, constantly, review their roles in the game of communication¹⁷.

Figure 4 The relationship between transmitter (s) and receiver (s) becomes horizontal, especially when it comes to devices "one-one" or "all-all"



Source: Elaborated by the author

One last point must be emphasized: the relationship between communication and other knowledge fields. With the model of mass media, there is a restriction of the communication to the sphere of information. However, its dimension is much larger, without debunking its informative character, which keeps appearing at the base of its constitution. Thus, its connection to the arts, for example, stays in a gray area, upon which Lucia Santaella has brought light through a small book in 2005 - *Why are arts and communications converging?* - showing that it is necessary to do this regressive way, showing areas of connection between them. Thus, this gathering amid communication and the arts (BENJAMIN, 1985; 1990) is also an important reflection of the current moment contemporary society is passing by.

In previous work (PERNISA JÚNIOR, 2009a; 2009b; 2010b) the interfaces between communication and arts were also explored, by technological bias, showing that there is room to understand the reconfiguration of the role of journalism, when, for example, the weight of an informative picture of the first page of a newspaper is also qualified by their plasticity, aesthetically. This should not be seen as a reduction in journalism, but as a new aspect of it, once the artistic dimension can also make a difference to the receiver. The example of literary journalism, given earlier, also appears as a way to put this relationship between art and communication in a different level. It is about time to verify how this happens, in examples like the new journalism, North-American, and Brazilian magazine articles from the 1960s and 70s, like *Realidade*, but as happens today, when the web appears as a new bet in this approach, which should be the objective of a new work on the subject.

FINAL THOUGHTS

Thus, this route has reached an end, which looks long and complex, since it is the result of a few years of study, and has become more organized and, of course, as one realizes that the communication is in a mutation moment, it points to new ways to trace. These are new challenges that must be faced, seeking not for a restatement of a previous model or a return to an even more remote past, when communication was made in a straightforward manner, between two people conversing, and it ends up being seen as the better representation of the communication process.

Unlike that view, it is expected that researchers' attention turn to something that is still in its conception moment, which must be gestated with care and devotion, expanding itself beyond what is already known and structured. This new way of observing the communication is not easy and is already given. To gaze the future was not what we wanted from this work. Instead, to see that the present brings more than certainties of the past and that what we still do not totally understand is not, beforehand, something better or worse than what used to happen. It only has to be differentiated.

It is noticeable that working with interfaces can be useful for research in the area of communication, once they relate directly to possible connections between different fields. To detect these approaches and to see how they get along may indicate more about the new configuration communication is taking. One can refer to interfaces such as places where communication connects with other areas and, thus, the structure of the "opened monads" function as an example to be seen related to these links. Not that it is a unique model and it is the only one to be considered valid, but it demonstrates quite well how these connections can operate in spaces worked, for example, in journalism, literature, photography, as seen in this work.

Finally, we need to add the importance of new studies from what has been exposed here, with the purpose of taking forward what was presented here, both those more practical and more theoretical. We believe that the experiments with the model of "opened monads" may assist in the mapping of contemporary communication, indicating new directions for research, both in practice and in theory.

NOTES

- 1 We have been working in the concept since 2009 in conference papers and in texts for books.
- 2 "The inverted pyramid technique can be summed up in a few words: the writing of a news starts with the most important data - the answer to the questions what, who, where, how, when and why - followed by additional information arranged in decreasing blocks of interest" (CANAVILHAS, 2006, p. 5).
- 3 "On approach to the graphical representation of the inverted pyramid technique, we have verified that this architecture suggests a lying pyramid. [...]
 "It proposes a lying pyramid with four levels of reading:
 "The Base Unit - the lead - will answer the essential: What, When, Where and Who. This initial text can be a breaking news story that, depending on the developments, may or may not progress to a more elaborated format.
 "The Level of Explanation responds to Why and How, completing the essential information about the event.
 "At the beginning of the contextualization more information is given - in textual format, video, sound or animated infographics - about each of the W's.
 "The Exploration Level, the last one, connects the news to the publication file or to external files" (CANAVILHAS, 2006, p. 14-15).
- 4 Sites like Google, Yahoo!, among others. They may be called "searchers".
- 5 One can say, based on a more journalistic vocabulary, that they would be the headline booms.
- 6 The term has been used in other fields, such as philosophy, but its use in digital journalism is thought in a strict sense.
- 7 In the twentieth century, the composed concept of opened monads appears, proposed by Gabriel Tarde (2003). The French sociologist is aware of the fact that society must be explained from the game of intensities resulting from the action of individuals. Here, in analogy, opened monads would be autonomous elements - text, videos, graphics etc. -, which interrelate to produce a harmonious whole of information, without being, in function of the whole, obliterated in its individual integrity. There is a difference, however, between the monads and the elements of a system, because, in the second case, the individual is definable only in view of its functionality in the whole.

- 8 Some of the projects are still in development and they might also be placed soon in circulation on the internet itself.
- 9 They are projects still in development and that should be published shortly on the Internet itself.
- 10 The projects were "Communication and Art: the digital in languages interface" (2008-2010) and "Communication, Art and Technology: contemporary narratives", started in 2010 and ongoing.
- 11 It is not ruled out yet the possibility of working with games and even with hybrid spaces, where art, games, and journalism may be acting simultaneously in the context of "opened monads".
- 12 Note here, clearly, the relationship that Borges had with this particular book, which appears in short stories, essays and poems by the Argentine writer and not the book itself.
- 13 "We can define locative media as a set of technologies and info-communicational processes whose informational content is linked to a specific place. Locative is a grammatical category that expresses place, as 'in', 'beside', indicating the final location or the time of an action. Locative media are digital informational devices whose content of information is directly linked to a site. It is a processes of emission and reception of information from a particular location. This implies a relationship between places and digital mobile devices hitherto unheard" (Lemos, 2008, p.207).
- 14 Here we think also of working with temporal elements, as well as stories that might address the past, present and future, in one or several places marked by GPS.
- 15 Mass communication is directly related to the mathematical theory of communication, of Shannon and Weaver (1962), where the interest was to pass the information as quickly and clearly as possible, without noise or loss. Thus, it seems that this is a mathematical theory of information and not so much of communication, based on the transmission made by telephone lines.
- 16 "We can distinguish three broad categories of communication devices: one-all, one-one and all-all" (LÉVY, 1999, p. 63). However, what is being advocated here is a little bit different than Lévy's approach. He believes that the current model of cyberspace is the all-all, but it is believed here that the three categories are present today in the panorama of communication and that the device one-all still has strength, even in a society in which it is checkmated.

- 17 "The communication game consists of, through messages, determine, adjust, transform the context shared by the partners. Saying that the meaning of a message is a 'function' of context does not define anything, as the context, far from being a stable datum, is something that is at stake, an object perpetually reconstructed and negotiated. Words, phrases, letters, signs or faces interpret, each in its own way, the network of the previous messages and try to influence the meaning of future messages" (LÉVY, 1993, p. 22).

REFERENCES

- ALZAMORA, Geane; TÁRCIA, Lorena. Convergência e transmídia: galáxias semânticas e narrativas emergentes em jornalismo. **Brazilian Journalism Research**, v.8, n.1, p. 22-35, 2012. Available at: <http://bjr.sbpjor.org.br/bjr/article/view/401>. Accessed on: 17 jul. 2013.
- BENJAMIN, Walter. **Magia e técnica, arte e política**. Obras escolhidas. Tradução: Sérgio Paulo Roaunet. São Paulo: Brasiliense, 1985.
- BENJAMIN, Walter. A obra de arte na época de sua reprodutibilidade técnica. In: ADORNO, Theodor, et al. **Teoria da cultura de massa**. Introdução, comentários e seleção de Luiz Costa Lima. 4 ed. Rio de Janeiro: Paz e Terra, 1990. p. 205-240.
- BORGES, Jorge Luis. **Obras completas de Jorge Luis Borges** (4 volumes). São Paulo: Globo, 1998-1999.
- CANAVILHAS, João. **Webjornalismo: da pirâmide invertida à pirâmide deitada**. Covilhã, Portugal: Biblioteca On-line de Ciências da Comunicação. Labcom/Universidade da Beira Interior, 2006. Available at: <http://bocc.ubi.pt/pag/canavilhas-joao-webjornalismo-piramide-invertida.pdf>. Accessed on: 20 jun. 2009.
- FERRARI, Pollyana. **Jornalismo digital**. 2 ed. São Paulo: Contexto, 2004.
- FORD, Sam. Transmedia Journalism: A Story-Based Approach to Convergence. In: **Convergence Culture Consortium**, 2007. Available at: http://www.convergenceculture.org/weblog/2007/04/transmedia_journalism_a_storyb.php. Accessed on: 04 jun. 2010.
- GOMEZ, JEFF. Pergunta: Esse modelo de narrativa transmídia storytelling pode ser aplicado ao jornalismo? Você conhece algum caso? In: **Tá Rolando**, 2010. Available at: <http://blogs.redeglobo.globo.com/tarolando/2010/02/05/pergunta-pergunta-esse-modelo-de-narrativa-transmidia-storytelling-poder-ser-aplicado-ao-jornalismo-voce-conhece-algum-caso/>. Accessed on: 04 jun. 2010.
- JENKINS, Henry. **Cultura da convergência**. Tradução: Susana Alexandria. São Paulo: Aleph, 2008.
- JOHNSON, Steven. **Cultura da interface: como o computador transforma nossa maneira de criar e comunicar**. Tradução: Maria Luísa X. de A. Borges. Rio de Janeiro: Jorge Zahar Ed., 2001.
- LEIBNIZ, G. W. Von. **Monadologia**. Col. Os pensadores. São Paulo: Abril Cultural. 1983.

Carlos Pernisa Júnior

LEMOS, André. Mídia Locativa e Territórios Informativos. In: ARANTES, Priscila; SANTAELLA, Lucia (Org.). **Estéticas Tecnológicas**. Novos Modos de Sentir. São Paulo: EDUC/SP, 2008. p. 207-230.

LÉVY, Pierre. **Cibercultura**. Tradução: Carlos Irineu da Costa. São Paulo: Ed. 34, 1999.

LÉVY, Pierre. **As tecnologias da inteligência: o futuro do pensamento na era da informática**. Tradução: Carlos Irineu da Costa. Rio de Janeiro: Ed. 34, 1993.

MANOVICH, Lev. **The language of new media**. Cambridge, Massachusetts: MIT Press, 2001.

PERNISA JÚNIOR, Carlos; ALVES, Wedencley. **Comunicação digital: jornalismo, narrativas, estética**. Rio de Janeiro: Mauad X, 2010.

PERNISA JÚNIOR, Carlos; ALVES, Wedencley. Mônada aberta: verticalidade e horizontalidade no jornalismo na web. In: **Anais - Intercom - Sociedade Brasileira de Estudos Interdisciplinares da Comunicação - XXXII Congresso Brasileiro de Ciências da Comunicação - Curitiba, PR - 4 a 7 de setembro de 2009**. CD-ROM. 2009.

PERNISA JÚNIOR, Carlos. Artes e comunicações em convergência: a questão das narrativas na era digital. In: **Anais - Intercom - Sociedade Brasileira de Estudos Interdisciplinares da Comunicação - XIV Congresso de Ciências da Comunicação na Região Sudeste - Rio de Janeiro - 7 a 9 de maio de 2009**. CD-ROM. 2009a.

PERNISA JÚNIOR, Carlos. Jornalismo Transmídia ou Multimídia? In: **Anais - Intercom - Sociedade Brasileira de Estudos Interdisciplinares da Comunicação - XXXIII Congresso Brasileiro de Ciências da Comunicação - Caxias do Sul, RS - 2 a 6 de setembro de 2010**. CD-ROM. 2010a.

PERNISA JÚNIOR, Carlos. A mônada aberta nas narrativas contemporâneas: uma investigação. In: **Anais - IV Simpósio Nacional ABCiber - Associação Brasileira de Pesquisadores em Cibercultura - Rio de Janeiro, RJ - 1, 2 e 3 de novembro de 2010**. CD-ROM. 2010b.

PERNISA JÚNIOR, Carlos. Narrativas contemporâneas: comunicação e arte em tempo de convergência. In: **Anais - Intercom - Sociedade Brasileira de Estudos Interdisciplinares da Comunicação - XXXII Congresso Brasileiro de Ciências da Comunicação - Curitiba, PR - 4 a 7 de setembro de 2009**. CD-ROM. 2009b.

SANTAELLA, Lucia. **Por que as comunicações e as artes estão convergindo?** São Paulo: Paulus, 2005.

SCOLARI, Carlos Alberto. **Transmedia storytelling: más allá de la ficción**. 2011. Available at: <http://hipermediaciones.com/2011/04/10/transmedia-storytelling-mas-alla-de-la-ficcion/>. Accessed on: 17 jul. 2013.

SCOLARI, Carlos Alberto. **Transmedia Storytelling: Implicit Consumers, Narrative Worlds, and Branding in Contemporary Media Production**. International Journal of Communication 3, 2009. p. 586-606.

SHANNON, C; WEAVER, W. **The mathematical theory of communication**. Urbana: University of Illinois Press, 1962.



OPENED MONADS

SODRÉ, Muniz; FERRARI, Maria Helena. **Técnica de reportagem**: notas sobre a narrativa jornalística. São Paulo: Summus, 1986.

TARDE, Gabriel. **Monadologia e Sociologia**. Petrópolis: Vozes, 2003.

Carlos Pernisa Júnior Doctor in Communication and Culture by the Communication School of the Federal University of Rio de Janeiro (ECO/UFRJ). Associated professor at the Communication College of Juiz de Fora. E-mail: carlos.pernisa@ufjf.edu.br



RECEIVED ON: 29/04/2012 | APPROVED ON: 13/07/2013

