Carlos A. Scolari: Media ecology, transmedia literacy, and redesign of interfaces

Carlos A. Scolari: *ecologia dos meios de comunicação, alfabetização transmídia e redesign das interfaces*

■ Interview with CARLOS A. SCOLARI[a]

Universitat Pompeu Fabra, Communication Department, MEDIUM Research group, Barcelona, Spain.

by FERNANDA PIRES DE SÁ[b]

Universitat Pompeu Fabra, Communication Department, MEDIUM Research group, Barcelona, Spain.

SEVEN YEARS AGO, Professor Carlos A. Scolari, from Pompeu Fabra University- Barcelona, gave an interview to **MATRIZes**. In that time, the focus of the interview was directed to *transmedia storytelling* and interactive digital media from a semiotic perspective. In the period between this interview and the previous one, media ecology has evolved quickly. Because of the growing *plataformization* of our societies (Van Dijck et al., 2018), data is constantly generated and in many circumstances can put our privacy at stake, thus creating anxiety (Pink et al., 2018). Therefore, the need emerges to promote a media education to learn how to move within this social, political, cultural and educational context we are living in.

Since the 2011 interview, Carlos Scolari has published a variety of articles in international journals and more than fifteen books, in which he analyzes media ecology, interfaces, and *transmedia literacy*.

Moreover, Carlos A. Scolari was the principal investigator of projects funded by the European Union program *Horizon 2020* and by the Spanish Ministry of Economy and Competitiveness. Both projects have addressed transmedia teaching-learning processes within informal environments using an ethnographical approach (virtual and traditional). The *Transmedia Literacy* project involved eight countries, while the *Transalfabetismos* project was implemented in five autonomous communities, which corresponds to five federative states in Brazil.

[a] Professor at Universitat Pompeu Fabra – Barcelona. Coordinator of the Program of Doctorate in Communication. Principal Investigator of the project H2020 Transmedia Literacy (2015-2018). E-mail: carlosalberto.scolari@upf.edu. Orcid: https://orcid.org/0000-0002-7792-0345

[b] Investigator Juan de la Cierva for the Department of Communication and group of research MEDIUM at the Universitat Pompeu Fabra. PhD in Society of Information and Knowledge from the Universitat Oberta de Catalunya. E-mail: fernandapiressa@gmail.com. Orcid: https://orcid.org/0000-0001-6172-7594

Carlos A. Scolari

In this new interview to **MATRIZes** in Barcelona, Carlos A. Scolari answered questions about these projects involving transmedia literacy within the new media ecology, and about interfaces, the topic of his latest book.

MATRIZes: In Brazil, you are well-known by working with transmedia storytelling, however, along these past years you have worked on other subjects of inquiry such as transmedia literacy, particularly in the two research projects you have coordinated: *Transmedia Literacy and Transalfabetismos.* Can you describe how was the process that brought you and your research team from transmedia storytelling to transmedia literacy?

Carlos A. Scolari: Having in mind that "transmedia" is an adjective that can be applied in different process and practices (people talk about "transmedia storytelling", "transmedia journalism", "transmedia documentary", etc.), my first reflection was: How should be a transmedia educative process? This crossroad between transmedia logic and educative practices led us to develop other concepts and to get interested in other processes. First, we developed the concept of "transmedia literacy" to be able to refer to a set of skills developed in informal ambits, what are known as "collaborative cultures". Between these transmedia skills, we can mention the ability to retouch a photo on Instagram or to move forward in a video game level, to manage the own identity on social media or to write and share a *fanfiction*. On the other hand, we were interested in knowing how those skills are acquired. Evidently, in the schools, it is not taught how to play a video game or make a meme… From those reflections, both projects were born. The research questions that we made were: What are teens doing with media? How do they learn to do that? After three years of investigation, we have generated a map with 44 transmedia skills from the first level and 190 from the second. We also have identified the main informal strategies of learning that teenagers use (*learning by doing, learning by playing, learning by teaching*, etc.). Beyond the results of this research, we also wanted to contribute to a change in education. Therefore, we have created the Teacher's Kit with more than 80 didactic activities to the teaching staff be able to explore these skills developed by the teens, in informal environments, within the classroom.

MATRIZes: What differentiates transmedia literacy from other kinds of media literacy?

Scolari: The big difference between *transmedia literacy* and other traditional conceptions of *media literacy* is: we do not see nor talk to the

subjects (in this case the teenagers) as ignorant, nor as new media victims. We see them as *prosumers,* subjects who in lesser or greater degree produce and contribute to media content to circulate in social media. Some young people have differentiated transmedia skills and others have fewer. That is to say there are no "digital natives", what really exists is a varied and irregular topography of where these skills are distributed. With the Teachers' Kit, we have compromised to democratize and socialize these skills within the classroom. In other words, we try to pass from the informal to the formal environment, recovering and using in schools this knowledge that is developed almost in a "wild" way within social media and collaborative and digital spaces. It does not mean that we should abandon the traditional forms of *media literacy*. *Transmedia literacy* complements and expands with new techniques and conceptions.

MATRIZes: How did you work with transmedia literacy in your most recent research projects? Were the aspects of security on the Internet taken into consideration? Was it possible to work with the fake news phenomenon?

Scolari: Among the transmedia skills there is a group that is dedicated to risk and prevention. Other skills' typologies are also distributed in an irregular format, which means that not all the teenagers were aware of their existence. For example, it is possible that a teenager is not very conscious about the risks that the use of social networks imply, but has great skills concerning image manipulation. Alternatively, on the other hand, it is possible to meet a teenager that is conscious of all the risks that the sharing of information implies, but does not know well how to produce content in video format … About fake news, this subject was included in some of the didactic activities that are part of the Teacher's Kit. In our YouTube channel, we have an exciting video (https://www.youtube.com/channel/UC7VRuFJd45mH-iO_B5Tz5gg/videos) done in Portugal, in which is presented a didactic activity and very fascinating debate among the students about *fake news.*

MATRIZes: While facing this new media ecology, which skills do you consider more relevant in our current context?

Scolari: As I have said before, we were not interested in getting to know the average level of digital literacy or media literacy of the young population, what we did want was to build a complete map with as many skills as possible. Until recently, Henry Jenkins was the one who developed one of

the most significant works in the area in 2006, in which around ten skills were identified. Our map has expanded and specified this investigation further, which served us as an inspiration. It is not easy to say which are the most relevant skills, it all depends on the role that the subjects assume within social media, in the new contexts of socialization: if it is an active role – I think about teens that manage video channels on YouTube, write fanfiction on Wattpad or are very active on Instagram. Indeed, the skills related to production and content management are fundamental. While the skills linked to risk and prevention should be widely promoted, as they affect all users, including those that do not generate content but are limited to consume and reproduce a content.

MATRIZes: In the Transmedia Literacy White Paper, *Transmedia Literacy in the New Media Ecology* (Scolari, 2018a), you affirm that although the educative institutions have done significant efforts to adapt to the socio-technological changes, it is noticeable that the young population practices related to technology and digital media are in a marginalized position within educative processes. Based on your experience, what do you believe could be done to reduce the gap and connect the techno-media practices of the teens in formal and informal spaces?

Scolari: It is necessary to stop stigmatizing these practices and stop considering them as a waste of time. In new platforms, from video games to social media, teens are learning to do multiple things. Instead of forbidding the usage, I believe the mobile devices should be part of educative processes. The school is very resistant to technology… the classrooms were always filled with technology, from book to boards and maps! With the arrival of "new technology", the school closes itself and takes too much time to adopt them. It has happened with the video, with the calculator and now it is happening with digital networks and mobile devices. However, one thing is certain; it is an illusion to think that the problems in education will be resolved by only introducing "new technology" in the classroom. As Paulo Freire used to say, it is necessary to change the relationships between the actors involved in the educative processes to go from monolog to dialog. I believe when certain technologies are well used they can facilitate dialog. Nonetheless, they can also end up reproducing the same "square" and "authoritarian" classic education that Freire criticized.

MATRIZes: Last year, in your blog *Hipermediaciones.com*, you wrote about the presentation "*Transmedia is dead. Long live transmedia*!" carried

on the *Transmedia Earth Conference: Global Convergence Cultures*, in Medellín (Colombia). In this post, you were reflecting about the fact that transmedia has been used more and more, and often in a wrong way…

Scolari: Concepts have a life cycle. In the nineties, with the digital revolution, a lot of concepts got popular, such as "hypertext", "virtual reality" or "multimedia". Let's see the case of "multimedia". At the beginning of this decade, it sounded like a very modern and cool concept; very few companies produced "multimedia" communication. This concept was a factor of differentiation in the professional market. When looking at the 2000s, almost all the companies offered "multimedia" to their clients, and the concept started to sound old … It is probable that the "transmedia" concept follows the same path in the professional world, though some pioneer companies already started to differentiate themselves by producing transmedia communication. Soon, I am afraid, all companies and professionals will end up offering the same, and a new concept will arrive in the professional world. From this moment onwards, it will be understood that all kinds of production will be transmedia, that means, they would tell storytelling in multiple media and platforms with the complicity of users. In the academic ambit, the life cycle is slower, Even though there are fashionable theoretical waves, the concept of "transmedia" will continue to be used, and it is possible that in forty or fifty years, Ph.D. dissertations that research the forms of transmedia communication will still be around.

MATRIZes: In the same post you also alerted about a problematic issue: great part of the communicators, from both academic and professional ambits, are trained in a monomediatic manner, making difficult the generation of projects with innovation, and which are in fact transmedia (Scolari, 2017).

Scolari: In the Media and Communication faculties there are editorial, radio, or video courses, but in many cases they do not conjoin, they are isolated from each other. The ideal would be to create integrative spaces – that could be called "workshops of transmedia communication" – where all these knowledge and experience were united in a unique strategy. At Pompeu Fabra University, we have an integrated workshop of journalism with an "integrated editorial and newsroom", in which the students generate content to different media and platforms. It somehow works as a workshop of transmedia communication. On the other hand, it is also necessary to learn how to mobilize the users and to manage content. It is not enough to "open a Facebook page": a media professional needs to know how to

design a strategy, to promote participation, to manage a community and to evaluate results. To carry on all these processes it is necessary to dominate a wide spectrum of skills; obviously, in big projects, all those aspects are the responsibility of various professionals. In that case, the communicator needs to know how to coordinate to take the best of it.

MATRIZes: In your last book, *Las Leyes de la Interfaz* (The Laws of Interfaces), you use an analogy of natural sciences to be able to discuss techno-social phenomena that are occurring because of the evolution of technology and its uses by society. The book is organized in ten laws of interfaces. It got my attention that in the Ninth Law " the design and use of an interface are political practices," you affirm that political parties, markets, and syndicates are interfaces, and their interfaces should be redesigned, which also included the school and the university (Scolari, 2018b:139). Can you tell us about these interfaces, how to redesign them, particularly the educative and political interfaces?

Scolari: This book somehow is the continuation of another one that I published in 2004: *Hacer Clic.* Whereas in the first volume I analyzed the digital from a micro perspective where semiotic and cognitive sciences crossed, in *Las leyes de la interfaz*, I propose a macro viewpoint inspired by authors such as Bruno Latour, Kevin Kelly, Stuart Kauffman, Brian Arthur, Marshall McLuhan or George Basalla. All of them were interested in the technological evolution and the mutations within the design processes, production and use of technological devices. In this volume, I intend to go beyond the classic "user interface" and bring the concept to another level. If the interface, as I defend, is a network with technological and human actors – individuals and institutions – which interact and maintain relations", then we can consider the school, the university, the syndicates, the markets, gastronomy or political parties as interfaces. These interfaces are in crisis in almost all societies, and it is enough to think about the school or the political parties… Both cases are interfaces created during Modernity, the school and the representative democracy are from the 18th century. From my perspective, these interfaces are obsolete, they were created for industrial societies that are about to be extinct. Therefore, we need to re-design educative and political interfaces. How is an interface redesigned? In the first place, it should be analyzed who are the actors that are part of those interfaces and map their relationships. Afterwards, the process consists of introducing changes in the actors (substituting actors, including new actors, etc..) and in the relationships. This is how the socio-technical

innovation works: from trial/error. This means to think about new political or educative models on a micro level, and if they work, expand them and implement at a macro level. In any of the cases, it is clear that it is not enough to introduce new technology to change the political or educative interface. It means that it is not enough to adopt an electronic voting system or a laptop in the classroom to change the interface. Technology is only one more actor! It is necessary to have a global overview of the interface, including all the actors and their relationships, and work to obtain a result.

MATRIZes: When we talk about interfaces the topic of transparency becomes essential, even more, when it concerns design as well as usability experience. In the Second Law "The interfaces are not transparent", you affirm that designers are chasing the ideal of developing completely transparent interfaces. On the other hand, you explain that behind this transparency there are hidden machine processes and operations. It is well known that big corporations behind the concept of transparency hide algorithmic processes and user's data mining (Araújo; Pires de Sá, 2016; Bucher, 2012), which creates a black box (Pasquale, 2015). Can you tell us more about the tension between transparency and opacity in the development and interfaces usage?

Scolari: Interfaces transparency was the main topic of my Ph.D. thesis and my book, *Hacer Clic* (2004). In 2006, when Jeff Han presented, in a TED conference, the revolutionary multi-touch interface (that in some years we all end up finding in our mobile devices) at some point he explains to the public that the "interface" has disappeared, "the interface has disappeared, it is transparent". This "transparency" is no more than a sense effect: interface languages are never transparent! This "natural" and fluid interaction is no other thing rather than the result of a set of devices, algorithms, and sensors that generate the sensation of transparency. If we apply this logic beyond this context, the most popular social networks made the interactions even easier, until they were converted in almost transparent. While they are extracting and processing millions of personal data. It means that what looks like "transparent" is, in reality, nothing less than an opaque device, mining machines of social and personal information that feed the business model of plenty of corporations.

MATRIZes: In the Seventh Law, "If an interface does not know how to do something, it will simulate it," examples are given of various interfaces that have imitated other ones in determined historical moments. As it is

the case of television with cinema, the *World Wide Web* with television, and, now television is imitating the logic of social media and digital platforms. However, some interfaces imitate news in a fake format (*fake news*) and influence the way the young population gets information (Marchi, 2012), the political processes and even public health issues. Also, there are *chatbots* in social media that are made by designers and engineers who work with artificial intelligence, and these same bots can behave imitating the worst of the human beings, as was the case of the Tay *chatbot* developed by Microsoft (Vincent, 2016), which in a couple of hours started to post racist and misogynist tweets. How do you think we could fight in an efficient way so those interfaces do not become a model to be followed and to avoid their consolidation as legit spaces of interaction?

Scolari: We should learn how to move in this new media ecosystem, as the mentioned phenomena are the first wave of a set of technologies that are already getting into the market, from Artificial Intelligence to Internet of Things and Voice Interfaces. In this regard, (trans)media literacy continues to be central: we should include, in all levels of education, spaces dedicated to training with media and around media. The best way to operate is not by forbidding the use of these devices, on the contrary, we should learn with its use, about their risks and advantages.

MATRIZes: Nowadays we cannot deny that interfaces are part of an ecosystem (law number three of your book), nor that we see this every day in our mobile devices and apps, in social media that dialogue between them and even reinvent themselves through their interaction with other interfaces and with the use that society makes of it. In this scenario, we see names of big American corporations that are part of our every day from Facebook to Google, Apple, Amazon, and Microsoft. How do you see the role of oriental corporations like the Chinese Huawei, Xiaomi, or of the Korean company, Samsung, in this ecosystem?

Scolari: A few weeks ago I had the luck to be invited by the Huawei company to visit the city of Shenzhen. Three decades ago this city was a small fishermen village. Today Shenzhen has almost 15 million inhabitants. It is considered the Silicon Valley of China and attracts millions of professionals from different regions of China and the rest of the world. As I have written in my blog, it is not necessary to be an expert in the global economy or history of civilizations to discover that the ax of our planet is moving from West to East. Although the occidental hegemony, its technological primacy and the expansion of European capitalism marked the

rhythm of global change, it is now changing. In the second half of the 20th century, a process started, and this is what is moving from the Occident to the Orient: while China was starting to open up, Japan was recovering from the war wounds, and India was dealing with its independence.

I consider that beyond new national or corporative hegemonies, we should pay attention to the new urban hubs (Singapore, Gurgaon, Hong Kong, Shangai, Shenzhen, Beijing, Guangzhou, etc.). It is in these kinds of megalopolis, which grow in an accelerated rhythm, that the turbocapitalism gets noticeable. It is from their companies and universities that talents from all around the globe are attracted, generating very sophisticated infrastructures capable of managing capital flow, data, goods, and people.

Regarding the big corporations that you have mentioned, in the specific case of the Chinese companies, there are lots of comparative advantages. On the one hand, the distance between management unity and production is inexistent. On the other hand, these companies are situated in the most significant internal market in the world. Although the Chinese industry until recently was known for copying products "designed in California", now this image, of a "copycat nation", is part of the past. Many companies learned how to change from imitation to innovation, and today they are at the vanguard of technologies, such as 5G, Artificial Intelligence, and the Internet of Things. All these national, urban and corporative hegemonies are not isolated, and they can cooperate or compete between them.

MATRIZes: How is Europe situated in this context? And Latin America?

Scolari: Although I am not an expert in geopolitics, after visiting cities like Shenzhen and Hong Kong I have the feeling that Europe is concentrated on looking towards its past, worrying that its most destructive phantoms would resurrect, instead of moving towards the future. Maybe after 500 years, the "European parenthesis" is being closed with consequences that are not hard to imagine: a new global hegemony grounded in economic, ethical, political and social models generated in other parts of the world, which are not always in sync with the imposed that is valued by the occidental modernity.

Regarding Latin America, especially the Argentinian case that is the one I know best, it looks like that it is losing the digital revolution in the same way it saw the industrial revolution pass by from afar. Not visualizing changes nor making decisions based on them do not mean to be out of these processes. On the contrary, it means to be part of them without

any capacity of decision-making, it means to be in the tail end. Argentina joined the industrial revolution as a raw material provider, and was never able to develop its production conglomerate following its own capacities. Something that Brazil could do.

We are living in a key-moment of our history, and we should make an effort to reflect and take decisions thinking in a long-term.

REFERENCES

ARAÚJO, W.; PIRES DE SÁ, F. Facebook's algorithms and its opaque design of transparency: how followers of the most popular Brazilian tv show perceive their news feed. In: FIGUEROLA, T. M.; MARZO, J. L. (Org.). *Interface politics*. Barcelona: Gredits, 2016. p. 609-623. Available at: <https://bit.ly/2Eg0Zsw>. Access on: : Oct. 10, 2018.

BUCHER, T. Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. *New Media and Society,* 2012, v.9, n.5, p.827-847. DOI: https://doi.org/10.1177/1461444812440159

MARCHI, R. With Facebook, Blogs, and Fake News, Teens Reject Journalistic "Objectivity". *Journal of Communication Inquiry,* v. 36, n. 3, p. 246 – 262, 2012. DOI: https://doi.org/10.1177/0196859912458700

PASQUALE, Frank. *Black box society: The secret algorithms that control money and information.* Cambridge, Massachusetts: Harvard University Press, 2015.

PINK, S.; LANZENI, D.; HORST, H. Data anxieties: finding trust in everyday digital mess. *Big Data & Society,* online, v. January-June, p. 1-14, *2018.* DOI: https://doi.org/10.1177/2053951718756685

SCOLARI, C.A. Transmedia Literacy in the New Media Ecology. White Paper of the project Literacy. 2018a Available at: <https://bit.ly/2u8m6qB>. Access on: Oct. 10 2018.

SCOLARI, C. A. *Las leyes de la Interfaz: Diseño, Evolución, Tecnología*. Barcelona: Gedisa, 2018b.

SCOLARI, C. A. TRANSMEDIA IS DEAD. LONG LIVE TRANSMEDIA! *Hipermediacciones.com*, 2017 Available at: <https://bit.ly/2QdtBc8>. Access on: Oct. 10 2018.

SCOLARI, C. A. *Hacer Clic: Hacia una sociosemiótica de las integraciones digitales.* Barcelona: Gedisa, 2004.

VAN DIJCK, J.; POELL, T.; DE WAAL, M.C. *The Platform Society: Public Values in a Connected World.* Nueva York: Oxford University Press, 2018.

VINCENT, J. Twitter taught Microsoft's AI chatbot to be a racist asshole in less than a day. *The Verge*. 2016. Available at: <https://bit.ly/2u8m6qB>. Access on: Oct. 10 2018.