La práctica interdisciplinaria aplicada al estudio de la

comunicación y la información mediada por tecnología digital

Interdisciplinary practice applied to the study of communication and digital

technology-mediated information

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Resumen

¿Cuándo y por qué es necesaria la aplicación de una perspectiva de investigación

interdisciplinaria en el estudio de la comunicación? ¿Cuáles son y en qué consisten los pasos

teóricos esenciales para implementar una perspectiva de investigación de esta naturaleza? Este

artículo aspira a responder estos y otros cuestionamientos a la vez que los lleva a la práctica

abordando problema comunicacional un social complejo. y

Palabras clave: interdisciplina, teoría de la comunicación, investigación de la comunicación.

Abstract

When and why is necessary the application of a perspective of interdisciplinary research in the

study of communication? What are and what are the essential theoretical steps to implement a

perspective of research of this nature? This article aims to answer these and at the same time

leads inquiries to practice addressing a social problem and communication complex.

Key words: iinterdisciplinarity, theory of communication, communication research.

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#### Introduction

A first motivation that usually is also used as justification to implement a perspective of interdisciplinary research in the social sciences is the fact that this may improve the understanding of complex social problems that are possible to explain - and undertake - through the integration of ideas from different epistemological perspectives. While this potential is not always explicit in the literature on interdisciplinarity, it is at least implicit in different definitions of interdisciplinarity. For example, the dictionary of the *Real Academia Española* (DRAE, 2014), defines the term interdisciplinarity as the quality of being interdisciplinary, referring this to the study carried out with the cooperation of several disciplines. In the Dictionary the Research Scientific (Tamayo, 2009), interdisciplinarity denotes a set of interconnected disciplines and have defined relationships, so that their activities do not occur in isolated, separately or in fragmented. Both definitions are related to the perspective of the interdisciplinarity as a methodological framework for the research in which there is an integration of theories, methods and, in general, integration of actions and scientific strategies among different disciplines. From a more general scientific perspective, Szostak (2002), argues that the interdisciplinarity can be understood as openness to the implementation of all the theories and methods to any set of phenomena. In other words, in accordance with Szostak (2002), the interdisciplinary perspective is open to applications from each of the types of ethical and epistemological perspectives. In the Latin-American level, Follari (2001, 2005, 2013), aims to interdisciplinary perspective even though it does not promise results always successful, open the required door for more enlightening answers because it allows the synthesis of certain aspects in the theories, methods and developments discipline, ensuring mutual integration in relation to preset purposes: "By Interdisciplinarity understand that models, laws, categories, techniques, etc., from different scientific disciplines, to mix together to promote a new awareness, a product that is different from what existed in the disciplines that helped set it up" (p.123). Therefore, from the brief epitome of proactive towards interdisciplinary perspective, I think it is appropriate to ask can interdisciplinary practice effectively improve the understanding of complex social problems? If so, when and why it is the application of a perspective of interdisciplinary research in the study of communication

necessary? What are and what are the essential theoretical steps to implement such a perspective of research? This text aims to answer these and other questions, and at the same time tries to implement reflection by addressing a social problem and communication complex: the communication mediated by smart digital technologies that are today the new Interactive Generations (GI).

## WHEN AND WHY IS IT NECESSARY APPLICATION INTERDISCIPLINAR A RESEARCH PERSPECTIVE? SIX KEY POINTS OF DEPARTURE

- 1). The false debate discipline / interdisciplinary. A first element to consider it necessary to point out is the more or less urgent need in the field of communication studies in Latin America a serious epistemological discussion of the interdisciplinary perspective starting to unmask the false debate that involves the confrontation between the conduct and discipline terms interdisciplinarity. In my opinion, a key understanding is that the interdisciplinary perspective exists only to the extent that there are various disciplinary contributions that nourish. That is, can not exist if there are no interdisciplinary disciplines. Therefore, rather than a position of confrontation or conflict between the terms discipline and interdisciplinary, the key question of departure must be what is or what might be the contributions of the field of communication studies at the interdisciplinary perspective? This has recently been addressed by the researcher María del Carmen de la Peza Casares (2012) when disciplining advocates communication and expresses self questioning taken by Professor Roger Craig (2008) as follows: "The question is not if communication remains an interdisciplinary field, it certainly will remain so. The open question is whether the media can also have a theoretical core that allows communication researchers addressing interdisciplinary topics from a special disciplinary hearing, which provide real value to the interdisciplinary enterprise "(2012, p. 16).
- 2). Interdisciplinary and complex social problems. A second key element is understanding that an interdisciplinary study is necessary if we ultimately one or several disciplinary perspectives are limited in explaining the social phenomenon. Or better yet, when our social problem is so complex that definitely goes beyond any limit discipline. Does this mean that the systems, phenomena or complex social problems are a necessary condition to implement an interdisciplinary research perspective? In my opinion, definitely yes. That is, we start to

understand that the interdisciplinary approach can be an effective response when the social problem is addressed profitably from a field and as part of a limited and partial or particular understanding its complex system. Which is to say who is on interdisciplinary studies can help better understand the social problems with the help of various disciplines or fields of study working in an integrated manner.

- 3). Interdisciplinary integration of ideas and equipment. A third element becomes to understand that necessarily involves interdisciplinary work group work or working with a research team composed of different disciplinary and according to the research objectives choices. Which means that each team member is consistently formed within each participating discipline. Therefore, the effort of communication, understanding and openness of its members is permanent. The same goes for the definition and weight distribution and epistemological contribution from each specific disciplinary contribution. What it must be understood as interdisciplinary integration and not the eternal search for "enthrone" or favor the predominance of certain discipline on other (s).
- **4). Interdisciplinary: towards an inclusive and comprehensive vision**. A fourth point is precisely the integration of disciplinary contributions. An effective method to address and explain a complex social problem must provide a deep approach to discipline from the specific contributions as well as their self-organization, complex pattern produced by the overall interaction of such contributions. For example, according to Newell (2001, p. 22), the interdisciplinary approach is logical candidate to develop specific, comprehensive and complex social phenomena disciplinary systems only if contributions have experience or previous developments and contributions can be treated as study through individual facets or sub systems. Coinciding with Garcia (2013: 193), Newell (. 2001, pp 13-25), it means that the interdisciplinary study should draw deep insights from relevant disciplines and should seek to integrate those in a more inclusive and comprehensive understanding model. To justify that approach, Newell (2001) argues that the object of study must be multifaceted, plus its facets must be consistent. If not then multifaceted approach by a single discipline or field of study it is sufficient because it can be studied properly from a reductionist perspective.
- 5). Interdisciplinary: weaknesses, constraints and limits of Latin American realities. A fifth point which I think is perhaps the most unexpected and treaties in the field of communication but certainly the most difficult to incorporate is to assume, in addition to the contributions and

strengths of each discipline, weaknesses, constraints and limits Latin American realities. In this context, to create interdisciplinary perspective must necessarily be connected with a precarious and vulnerable reality. As he noted Jesus Martin Barbero (1984, pp. 17-24) three decades, Latin America scholars in the field theory constructed in the middle of economic, political and institutional blows amid the precariousness of the material, technical and human. The interdisciplinary approach recognizes that most of all social phenomena are interconnected. However imperfectly, it is possible to identify different social phenomena and their causal regularities, although the latter probably be influenced by the achievements of many other phenomena. From this perspective, academic initiative group should cover a much broader set of indicators and conditions as well as relationships and links between social phenomena to be tackled together.

6). The interdisciplinary approach in a particular complex system. Sixth, in the case of Latin American Thought of Communication (León, 2006, pp. 31-60), for at least three decades, its thinkers usually are concerned about analyzing the communication from the sociocultural perspective. And so, as a complex nonlinear system. Indeed, academic research is strongly fincado in the form of the complexity generated by nonlinear relationships between a long and large number of components, and the influence of system components and relationships in general pattern of behavior. In the natural and social sciences it is widely accepted that each discipline focuses on a group of interrelated variables observable from their perspective. These variables can easily be viewed as components of a given system. If there is any consistency for each discipline, then the variables which focuses should be closer and directly interrelated variables studied by other disciplines. If, as most authors accept interdisciplinary (see, for example, Klein, 1990, 1996, 2001, 2013; Newell, 2001, 2013; Repko, 2008; Repko, Szostak and Buchberger, 2013; Szostak, 2002, 2013), the interdisciplinary study is designed in the perspective of more than one discipline to integrate and synthesize a more comprehensive understanding, I think, therefore, it is not necessary to include the direct links between the large group of related variables together. Viewed as a whole, this large group of variables and relationships can be usefully thought of as a complex system. My position is that those interested in performing interdisciplinary research to better understand and take the job remaining in the position to develop specific complex systems and studying their behavior. In particular,

recognizing what is critically trying to identify and make sense out of the pattern of selforganization of the phenomenon presented by a particular complex system.

# The theoretical contributions of communication. How understand, design, organize and implement an interdisciplinary perspective?

The interdisciplinary and multi-disciplinary trend in the social sciences has existed from the very moment the disciplines emerged. Sometimes these have become the source of new disciplines, including some that are not crystallized and eventually disappeared. This dynamic of internal cooperation and cross-fertilization between disciplines not only between the various fields of study that make up the social sciences. It is also a feature of the interactions between the social sciences and other fields of knowledge, especially in the humanities and natural sciences (Silbereisen, Ritchie and Overmier, 2009). For example, in recent years technological innovation studies seem to gain attention, not only in science and technology studies, which have been relatively segmented separate fields and disciplines that traditionally make up the social and human sciences, but also studies legislative or law, public policy, economics, among others (Craig and Tracy, 2014). In the natural and social sciences, it is widely accepted that each discipline focuses on a group of interrelated variables observable from their perspective. Those variables can be easily seen as components of a system. If there is any consistency for each discipline, then the variables which focuses should be closer and more directly related (or linearly related) between the variables studied by other disciplines. For example, if the object of study is multifaceted but not consistent, then the design of an interdisciplinary approach will, as there is no need for an actual integration. As we noted above, if not multifaceted, surely the study from a single discipline or field of study enough, because it can be adequately addressed from a monodisciplinary perspective. To justify both, the subject matter of the interdisciplinary approach must be represented by a system trace perceptions from both disciplines and integrates. If the connections between the different facets are predominantly nonlinear, the system will develop more complex features.

For example, when we approach studies such as Internet and interactive relationships of children and young minors with digital technologies in general, we can adopt various points of view on the phenomenon, different positions that allow closer to understanding. Therefore, we started to

integrate the debate the need to consider the disciplinary and interdisciplinary from different dimensions that allow qualify the real possibilities to analyze and explain a complex and multidimensional social phenomenon. A complex and multidimensional social problems such as communication and information mediated intelligent digital technology can not be addressed if not taken into account, for example, psychological, sociological, communicational and educational variables (among some others). This requires a degree of dialogue between different disciplines.

Thus, in the case of field studies of communication theoretical models usually moving within a system of thought that lies between two poles. On the one hand, a system that links simple combinations of components and systems. Consider, for example, in the historical development of basic communication model where its subject, object and media analyzed problem has even multiple levels of components, relationships, connections and categorized in hierarchical or command structure based on certain scenarios. However, a central identification seal are the relationships between these components and their connections that are predominantly linear. Structuring a single system integration and interconnection in studies of global communication arise with Shannon since 1947, by mathematical theory (model) applied to the relations of production and distribution of the communicative act (Shannon, 1948). In terms of defining the object of study from this perspective, communication has been historically defined as the exchange of feelings, opinions, or any other information by speech, writing or other signals. Usually forms of communication require linear relationships between a sender, a message and a recipient receiver, including the context in which the recipient is present or not conscious (or not) the communicative intent by the issuer for the act communication is performed. From this model, the linear communication process ends when the receiver decodes the message and provides a response. In the case of systems approach more complicated relationship (ie, based on more complex relationships under a linear relationship) shows the theoretical pattern of emotions in communication and theoretical models of intercultural communication (Rodrigo Alsina, 1999) 2001). For more complicated relationship systems and even systems of complex relationships and coming to establish nonlinear relationships, I think it can be located from the inclusive array of different theoretical models of communication that can interact seamlessly (Craig, 1999, 2007). That is, what correctly Vidales (2015, p. 26) called a metamodel or second order model while integrating the seven theoretical traditions in the study of communication in terms of the practical

implications these may have for social life and to improve communication processes. In the Latin American level, the analysis model of communication from the mediations and subjects, that is, from the articulation between communication practices and social movements (Martín Barbero, 1987, p. 11).

In the context of the role of the communication process mediated by digital technologies as a core element of globalization, Repko (2008) and Patry (2013) state that the education should be seen as a process to resolve conflicts, communicate, collate and assess contributions while disciplinary suggests integrating data on previous integrative epistemological frameworks. For this reason, and from a wide position, I suggest, resuming studies Klein and Newell (1996), that interdisciplinarity is understood by scholars in the field of communication as the process and organizational philosophy applied to scientific academic research. Particularly, as a process of design and research to answer a question, solve a problem, or deal with an issue that is too large or complex to be adequately addressed by a single discipline or profession. The interdisciplinary study therefore would draw on their own disciplinary perspectives and seek to integrate their knowledge through building a broader perspective (Klein and Newell, 1996). I believe, therefore, that the design process and interdisciplinary research is a way of thinking and proceeding to address the knowledge of the complexity of the current situation and aspire to solve any of the complex problems that arise and become apparent, both within the structure of each discipline and the validity of the options that define the positions, strategies and scientific and academic practices, treated here as a historical process of knowledge and recognition of its agents and institutions (Leon, 2014 p. 15).

The American professor WR Shadish (1986, 1993) was the first theorist in contemporary social sciences to suggest, through specific initiative multiplism Critical (MC), the use of multiple theories, hypotheses, methods, researchers, disciplines and synthesis Knowledge, in an attempt to explain reality more effectively. He said that the combination of multiple strategies and visions eliminates the bias that presents each of them separately, as well as intellectual favoritism for their own ideas. In any case, the question that we propose here is if you can apply the approach of the MC or, where appropriate, the implementation of the perspective of interdisciplinary research in the better understanding of mediated communication digital technologies that perform new Interactive Generations (GI) Mexican and Latin American. We understand GI to new generations who are born immersed in a globalized society, characterized mainly by its interaction with ICT

and the knowledge society: the new generations of children and youth whose interactivity and informational and communicational exchange with intelligent digital technology is intended to develop through at least five key areas in the production of meaning: to communicate, learn, share, enjoy and consume (for more information see: Leon et al., 2013, 2014.). In Figure 1, we seek to express what might be the contexts and basic theoretical constructs in the study of the Interactive Generation (GI). Applying the perspective of interdisciplinary research may also lead to consider the explanation of everything from a unique perspective. That risk is reduced if the focus of the research is multiplistic, since science can be regarded as unique, but with multiple facets and edges (Shadish, 1993). In Figure 2, we aim to express the treatment of emotions, habits, socialization, skills and traits and behaviors of the GI and their respective models (restricted) disciplinary nested. What we try to generate, from the characteristics that vary between individuals under study are variables associated mainly linked with the opportunities and risks of minor to communicate and produce meaning through intelligent technological devices with an Internet connection in their daily lives: to learn, participate, play, work and socialize (among other activities). That is, we start to understand that the Internet can definitely aggravate the risks of the minor to be online and also develop negative experiences on children, for example, behaviors and actions to potentiate harassment, harassment and exposure to pornography, including common shares. On the other hand, our study focuses its analysis on the generation of useful answers to public sector policy and the level of implementation programs on how to support and promote online opportunities for more and more minors will benefit from technologies digital and Internet. This inclusive model, with which we have worked on several studies between 2012 and 2014 (Leon et al., 2013, 2014), not only provides the special relationship that are studied within each discipline, but also the interactions between objects and disciplinary inputs and specific potential of different fields. In this case, it is possible to contrasts between the disciplinary models, estimating their particular explanatory power and testing the explanatory power of interdisciplinary inclusive model. This is what is meant in Figure 3. The strategies of development and implementation of the proposed model is MC nested models to contemplate the application of interdisciplinary models. We have also added a review of theories and integrating them. It includes, as was already mentioned, a methodological design and mixed cut using a research hypothesis based on theoretical approaches and disciplinary fields of study that share at least one or more elements in common. Additionally it was desirable to have

theoretical approaches that start, thought the integration and contrast as basic constituents, giving, therefore accommodate the commensurability of the models.

We have already stated that, generally, in social sciences each discipline focuses on the study of a particular aspect of reality. While discipline aims to define solutions from a sub particular system, problem definition is often permeated by the context and scale of that sub monkey discipline system. The task of the interdisciplinary research group is to focus more on the overall general pattern based on each of the disciplinary inputs and modeling the complex system as a whole, according to redefine the objectives sought, research questions and even the specific starting hypothesis. Following Newell (2001, 2013), and in order to begin to define the steps of designing and implementing the process of interdisciplinary research (which are understood and abstracted further as a procedure for solving complex and conflicting issues involved in the work itself organization and understanding of the research team), we define the disciplinary contributions: models, perspectives, traditions and literature that nourishes itself and embodies the interdisciplinary approach throughout the latter part of the text have remained as an example: GI study. That is, we define the disciplinary contributions to the construction of the Model Interdisciplinary Inclusive in the study of GI:

## INCLUSIVE MODEL INTERDISCIPLINAR. CONTRIBUTION FROM THE THEORETICAL STUDIES OF COMMUNICATION

Communication studies contribute to our study some variables that are central to give the epistemological model and particularly our interdisciplinary research perspective, the key integration with the theoretical contributions made sociology, psychology and education, particularly, educational technology. By strict and conditioned by the editorial space reasons, only here the theoretical contributions of communication are developed: a). Communication as a production of sense of emotions in the minor; b). The communication of emotions, building trust and relationships of the child; and finally c). Intercultural communication as a production of meaning for understanding and emotions in the minor.

Today, emotions have become one of the cornerstones for understanding our society. Historically in the field of communication studies it has been several theoretical specialists who have worked

this line of research. In our opinion have highlighted the contributions of Rodrigo (1995, 1999, 2001), Lits (1994) and Martin Barbero and Muñoz (1992). According to the first (2001), the study of communication of emotions we face two dominant paradigms. On the one hand, there is a universalist, positivist and organismic conception of emotions whose authors refer to Darwin or William James. On the other hand, is the relativist and constructionist interpretation model is based, among others, studies of symbolic interaction Blumer and Goffman (Rodrigo, 2001). In the study of the interactive relations of youth and from the contributions of communication theory, what matters are communicated emotions from social interactions of secondary students. We agree with Miquel Rodrigo (2001: 64), expressing in this context that we are not as interested in the ontological character of emotions, but rather the phenomenological nature of them. Therefore, if the communication theory is interested in the event, interpretation and communication of emotions, you should be based, as the author says, from the interactionist paradigm. Therefore, it is necessary to clarify certain principles on which it could base a communicative perspective of emotions in the study in question. To do this, Rodrigo presents a number of assumptions and features from the constructivist conception of emotions (Rodrigo, 2001, pp 63-68.) A). Emotions are characterized in that its contents are not natural but systems determined by cultural and moral beliefs of a particular community. In this sense, emotions are linked, says the author, a specific moral order. From this perspective it becomes clear that emotions are set by a moral order and, consequently, with its manifestation establish and perpetuate a social status quo. Emotions are linked to the social order (must-be / must-do) of a given community. For the purpose of building the interdisciplinary model of this study, the importance of emotions lies precisely in establishing a latent moral order that has been internalized / learned, as described more fully from the contributions of psychology and sociology. B). Moreover, in the act of communication, emotions are learned by the individual to incorporate the beliefs, values, norms and expectations of their culture. Thus, as stated by Berger and Luckman (2006, pp. 162-172), the primary socialization process involves more than a purely cognitive learning. It is conducted under conditions of great emotional charge. There are certainly good reasons to believe that without the emotional attachment to significant others, the learning process would be difficult, though not impossible. With regard to study the interactive relationships minor, emotions are important for the role from primary to secondary socialization and identity formation of the young. We are aware that, as embedded in a social system

individual, one is subject to a permanent socialization. C). Meanwhile, Rodrigo (2001) says that emotions are socially accepted patterns in certain situations. In both socially and culturally accepted and incorporated patterns are determined by experience and become manifest in specific social situations. Therefore, emotions have their own rules and do not comply can lead to conflict. Conflicts, specifically, may be closely related in the case of our study variables risks in the use of internet in young secondary, as is the low self-esteem, impulsivity, excessive use of smart device, etc. . Emotions there is a cognitive component because all emotion first requires an understanding and evaluation of what excites us or what excites others. Which produces an emotion is a socially shared meaning and justified. For example, a student may be afraid of being suspended from a subject, but can not be afraid that the sky will fall on your head, unless in their community a fear socially accepted.

One of the emotions that come together in the present study and that is approached from a communicative perspective and directly affects the relationship of minors with their parents, siblings and their peers, is trust. Rodrigo (2001) has referred to this emotion as a trust contract pragmatic. Trust becomes a variable to be analyzed in this study; through related interpersonal communication within the family and the face-off between parents and children, brothers and children, between children and their peers, other relationships between communication indicators. On the other hand, in the act of communication usually the issuer has to consider their target and who wants to establish rapport with them. Likewise, the communicative relationship a number of pragmatic contracts with the recipient or recipients, so that these make proper use, from the standpoint of communicator speech (Rodrigo, 2001, p. 66) states. Thus, the recipient in the present study, high school students, to be aware and know the purpose of the message. How can use and even what effects may make a particular receptor. It is in this sense, the text is pronounced in the identification of variables associated with the uses, socialization skills, risks and mediation of parents for the effect they produce information which are issued by the minors in the various technological devices with Internet connectivity through different social networks and applications. Following Rodrigo (1999), intercultural communication can understand the process of interaction, cooperation, exchange of information between cognitive and emotional individuals who hold different cultures, is a game that refers to understanding. Intercultural communication is a prime area to highlight the interrelationships between interpersonal communication. According Rodrigo (1999), intercultural communication, on the one hand, on the

principle of the difficulty or impossibility of communication between those involved. It notes that the basic process begins with the perception of differences suggesting that participants often do not share norms, beliefs, values, and not even thinking patterns and behavior. Rodrigo (2000), multiculturalism is emerging as one of the key issues of the century, both for its transdisciplinarity as the many research problems arising from this object of study. For example, one of the most interesting topics is currently identities. Therefore, one of the variables analyzed in this study is the identity construct that will be addressed in detail below and that by its vicissitudes, often shared between the various fields of knowledge in its different dimensions. As noted above, we are interested in the present study is to analyze how it is that young secondary are transforming their identities from a series of associated variables that become the use of smart technology devices and departing, in turn, a series of emotional and affective behaviors that have a negative and positive way in which young people develop applications with smart technology devices. So the first key intersection between the various disciplinary fields that come together and theoretically provide the model of interdisciplinary research perspective in our study are the social interactions by intelligent digital devices. As discussed and argued below, the concept of social interaction interactive relationships applied to young minors can be worked from education, psychology, sociology and communication. While Rodrigo (1997, p. 13), intercultural communication is a process of interaction, cooperation, exchange of information between cognitive and emotional individuals who hold different cultures or subsystems that aims to understanding, Berger and Luckman (1997, pp. 44-50) social interactions are conceived as an ongoing relationship and communication with others, as a source of information that provides the emotional nourishment that is needed to maintain social relationship and the identity of the individual. Therefore, and due to the inescapable importance of emotions in the personal development of young adolescents in the different contexts and assuming that the minor particularly selects those social interactions that can provide positive emotional experiences, which continue (and here for reasons of editorial space not shown) it is to account for how the contribution of communication theory is integrated into the interdisciplinary inclusive model with other deep disciplinary inputs such as sociology, psychology and studies of educational technology.

#### FINAL THOUGHTS ON INTEGRATION INTERDISCIPLINARY PERSPECTIVE

So far I think it has become clear that the application of an interdisciplinary research perspective is needed when ultimately have one or more disciplinary perspectives are limited in explaining the object of study. This happens when our social problem is so complex that it can definitely have a limited perspective on one or more specific disciplinary fields, which is to say that the systems, or complex social phenomena are necessary to implement an interdisciplinary research perspective condition. We also affirm that the interdisciplinary perspective can be an effective response when the social problem is addressed profitably from a field and as part of a limited and partial understanding of its complex system. Particularly interested in this text to emphasize that the academic and research team that designs and interdisciplinary studies can help better understand the social problems with the help of various disciplines or fields of study working in an integrated manner. Particularly when the academic team implements an effective way to explain this phenomenon and be in a position to provide a deep approach to every aspect or discipline specific theoretical question. Precisely for this reason, it is essential that the interdisciplinary team to develop a sense from the perspective of disciplines and always be alert and updated as possible potential contributions to incorporate into this study.

### **Bibliography**

- Berger, P. L., Luckmann, T. (1997) Modernidad, pluralismo y crisis de sentido. Barcelona: Paidós.
- Berger, P. L., Luckmann, T. (2006) La construcción social de la realidad. Buenos Aires: Amorrortu. (20a reimp.).
- Cobo, J. (1986). Interdisciplinariedad y universidad. Madrid: UPCM.
- Craig, R. (1999). Communication theory as a field. Communication theory, 9(2): 119-161.

- Craig, R. (2007). Pragmatism in the field of communication theory. Communication Theory, 17(2): 125-145.
- Craig, R. (2008). Communication as a field and discipline. En W. Donsbach (Ed.), The International Encyclopedia of Communication. Tomo II. pp. 675-688. Nueva York: Blackwell.
- Craig, R. y Tracy, K. (2014). "Building Grounded Practical Theory in Applied Communication Research: Introduction to the Special Issue." Journal of Applied Communication Research 42.3 (2014): 229-243.
- De la Peza, M. (2012). Retos de los estudios de comunicación para el nuevo milenio: ¿disciplina o transdisciplina? Ponencia presentada en el XI Congreso ALAIC, 2012. GT9: Teoría y Metodología de la Investigación en Comunicación, 1-20.
- Diccionario de la Real Academia Española (DRAE) (2014). Espasa-Calpe. Madrid, España.
- Follari, R. (2001). Estudios culturales, transdisciplinariedad e interdisciplinariedad (¿hegemonismo en las ciencias sociales latinoamericanas?). Utopía y praxis Latinoamericana, 6(14): 40-47.
- Follari, R. (2005). La interdisciplina revisitada. Andamios, 1(2), 7-17.
- Follari, R. (2013). Acerca de la interdisciplina: posibilidades y límites. Interdisciplina, I (1): 111-130.
- García, R. (2013). Investigación interdisciplinaria de sistemas complejos: lecciones del cambio climático. Interdisciplina. 194(1): 193-206.
- Klein, J. (1990). Interdisciplinarity: History, theory, and practice. Detroit: Wayne State University Press.
- Klein, J. (1996). Crossing boundaries: Knowledge, disciplinarities, and interdisciplinarities. Charlottesville: University Press of Virginia.
- Klein, J. (2001). Interdisciplinarity and the prospect of complexity: The tests of theory. Issues in Integrative Studies, 19, 43-57.
- Klein, J. (2013). The State of the Field: Institutionalization of Interdisciplinarity. Issues in Integrative Studies, 31, 76-74.
- Klein, J. y Newell, W. (1996). Interdisciplinary studies. Handbook on the Undergraduate Curriculum. San Francisco: Jossey-Bass.

- León, G. (2006). Sobre la investigación de la comunicación en América Latina: estrategias y prácticas de la comunicación hoy (Vol. 67). Hermosillo. Universidad de Sonora.
- León, G. (2014). Comunicación y Sociedad en América Latina. Verlag: Editorial Académica Científica.
- León, G. (2015). Interdisciplinarity and Mexican Interactive Generation. Variables Associated with Communication and the Risk of Mexican Youth to Use Smart Portables Devices with Internet. British Journal of Education, Society & Behavioural Science 9(2): 146-152.
- León, G. y Abril, J. (2013). Interactive Digital Communication and New Analysis Approaches in Cultural Practises: The interdisciplinary perspective on the study of Audiovisual Production. Revista Mediterránea de Comunicación. Vol. 4, Nº 1, 85-98.
- León, G. y Moreno, D. (2014). Problems and Challenges of Secondary Education in Mexico. An Approximation to the Variables Associated of the Interactive Relationships of Young People. Global journal for research analysis. 4(2): 62-68.
- León, G; Castillo, E; Montes, M; Caudillo, D. (2013). Relaciones interactivas, Internet y jóvenes de secundaria en México. Primera oleada sobre usos, consumos, competencias, y navegación segura de Internet en Sonora. Hermosillo: SEP-Gobierno del Estado de Sonora-Qartuppi-Universidad de Sonora.
- León, G; Caudillo, D; Contreras, R; Moreno, D. (2014). Jóvenes de Secundaria e Internet Seguro en México. Hermosillo: SEP-Gobierno del Estado de Sonora-Qartuppi-Universidad de Sonora.
- León, G; Caudillo, D; Contreras, R; Moreno, D. y González, L. (2015). Jóvenes y medios digitales móviles en México. Variables asociadas a la comunicación, la sociabilidad y los derechos del menor de edad. Hermosillo: Universidad de Sonora (en prensa).
- Lits, M. (coord.) (1994). Le Roi es mort... Emotion et medias. Bruselas: Vie Ouvriere.
- Livingstone, S. y Bulger, M. (2013). A global agenda for children's rights in the digital age. Recommendations for developing UNICEF strategy. London. LSE-UNICEF.
- Livingstone, S. (2014). "¿In their own words: What bothers children online?" European Journal of Communication 29.3 (2014): 271-288.
- Martín, J. (1984). De la Comunicación a la Cultura. Perder el "objeto" para ganar el proceso. Signo y pensamiento, 3(5), 17-24.
- Martín, J. (1987). De los medios a las mediaciones. Ediciones Gili, Barcelona.

- Martín, J. y Muñoz, S. (coords.) (1992): Televisión y melodrama. Bogotá: Tercer mundo editores.
- Meek, J. (2001). The practice of interdisciplinarity: Complex conditions and the potential of interdisciplinary theory. Issues in Integrative Studies, 19, 123-132.
- Newell, W. (2001). A theory of interdisciplinary studies. Issues in Integrative Studies, 19, 1-26.
- Newell, W. (2013). The State of the Field: Interdisciplinary Theory. Issues in Integrative Studies, 31, 22-43.
- Oliver, L. (2011). La interdisciplinariedad en los estudios latinoamericanos. En: Ruedas de la Serna, Jorge (Coord.) (2011). Anuario del Colegio de Estudios Latinoamericanos. México: UNAM. pp. 129-138.
- Patry, J. (2013). Beyond multiple methods: Critical multiplism on all levels. International Journal of Multiple Research Approaches 7.1 (2013): 50-65.
- Repko, A. (2008). Interdisciplinary Research. Process and Theory. Sage: California.
- Repko, A; Newell, W. y Szostak, R. (2011). Case studies in interdisciplinary research. Sage.
- Repko, A; Szostak, R., & Buchberger, M. (2013). Introduction to interdisciplinary studies. Sage.
- Rodrigo, A. M. (1999). La comunicación intercultural. Barcelona: Anthropos.
- Rodrigo, M. (1995). Los modelos de la comunicación. Madrid: Tecnos.
- Rodrigo, A. M. (2001). Teorías de la Comunicación. Ámbitos, Métodos y Perspectivas. Barcelona: Aldea global.
- Shadish, W. (1986). "The person- situation debate: A critical multiplist perspective." Journal of Personality, 54.1 (1986): 52-105.
- Shadish, W. (1993). "Critical multiplism: A research strategy and its attendant tactics." New directions for program evaluation, 1993.60 (1993): 13-57.
- Shadish, W. (1995). Philosophy of science and the quantitative-qualitative debates: Thirteen common errors. Evaluation and Program Planning, 18(1), 63-75.
- Shannon, C. (1948). A mathematical theory of communication. Bell System Technical Journal 27 (379-423 and 623-656).
- Silbereisen, R; Ritchie, P; Overmier, B. (2010). Psychology at the vortex of convergence and divergence: The case of social change. ISSC and UNESCO, World Social Science Report, 213-217.
- Szostak, R. (2002). How to do interdisciplinarity: Integrating the debate. Issues in Integrative Studies, 20, 103–122.

- Szostak, R. (2013). The State of the Field: Interdisciplinary Research. Issues in Integrative Studies, 31, 44–65.
- Tamayo y Tamayo, M. (2009). Diccionario de la investigación científica. LIMUSA. México. UNESCO (2010). Informe sobre las Ciencias Sociales en el mundo. Las brechas del conocimiento. París: UNESCO
- UNESCO (2011). Alfabetización mediática e informacional. Currículum para profesores. Paris: Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura.
- UNESCO (2013). Media and Information Literacy. Policy and Strategy Guidelines. Paris: United Nations Educational, Scientific and Cultural Organization.
- UNESCO UNICEF (2015). Fixing the Broken Promise of Education for All: Findings from the Global Initiative on Out-of-School Children. Montreal: UNESCO.
- Vidales, C. (2015). Historia, teoría e investigación de la comunicación. Comunicación y sociedad, (23), 11-43.