ORIGINAL ARTICLE

Opening the black box of citations: a qualitative analysis on the basis of the taxonomy of Erikson and Erlandson

Víctor M. Marí Sáez, Gonzalo Ceballos Castro

Over the past few years, citation practice has become progressively more pertinent to academic production, with important consequences. The aim of this paper is to contribute to communication theory through a critical analysis of literature on Communication, Development and Social Change (CDSC) published in Spain. This analysis was performed on the basis of the citation categories suggested by Erikson and Erlandson (2014). The conclusions of this paper point to the dominance of citations that, in many cases, reveal a disturbing disregard for the cited works and a general lack of scholarly debate between authors and conflicting paradigms.

Opening the black box of citations: a qualitative analysis on the basis of the taxonomy of Erikson and Erlandson

Walter Benjamin (1999) confessed that his dream in life was to write a book composed entirely of quotations. In this regard, we could also say that, as noted by Michael Löwy (2005), Benjamin was a *fire alarm*, a person ahead of his time. Citation practice has been an art historically, becoming more currently a remarkably mainstream practice. The preponderance of citations and their implications contribute to current trends in the field of scientific production and knowledge dissemination, raising concerns over the direction of communication theory.

Benjamin was a multifaceted thinker whose oeuvre, albeit not an easy read, is highly suggestive, a point illustrated here by his reference to quotations. In his notion of the role of quotations, it is possible to find allusions to issues that are leitmotivs running through his thinking and scientific work, such as the theories of language, history and art, and techniques of montage. In this article, we focus on aspects noted by him in this regard, which will help us to unravel the profound meaning of citations and their connection to the rationales currently prevailing in the production of scientific knowledge. At the end of this work, when analyzing the data and drawing appropriate conclusions, we will return to this connection with Benjamin.

We point to several factors that have led to the current dominance of citations: the ease with which vast quantities of text can be cut and pasted in the digital era, which was formerly unimaginable; the gradual McDonaldization (Ritzer, 1993) of scholarly production, as a result of which the Fordist production model is frequently embraced by authors caught up in the spiral of high production demands; and the pressure brought to bear on scholars by their universities to increase academic output, embodied in the famous phrase "publish or perish." These factors hinder the slow rhythms of production that have historically been associated with intellectual work, reflection, and the elaboration of knowledge.

Opening the black box of citations

The overall intention of this paper, which forms part of a more comprehensive research project concerning historiographical strategies and case studies of communication for development and social change (CDSC) in Spain, is not to conduct an in-depth analysis of the reasons behind the current decline in the art of citation. Neither is it framed in the parameters of sociology of science or knowledge (Bordieu, 2003; Mannheim, 1936; Merton, 1973; Schutz, 1976; Sousa Santos, 2011; Woolgar & Latour, 1979), nor is its central objective to reflect on the paper as the flagship academic product at present (Golombek, 2006; Latour, 2005; Ortiz, 2009), at the expense of the book or monograph format. Rather, the main aim is to perform a critical analysis of the bibliometric production in the field of CDSC in Spain for the period 2000-2015.

We believe that by means of bibliometric analysis, such as the one performed here, it is possible to identify several citation practices that have undermined the field: the cutting and pasting of citations; potential unfamiliarity with the works of key authors consistent with the original contributions of the cited authors; and the citing of authors with different theoretical and research perspectives in the same work, without explanation. Although these trends are analyzed here through the specific field of CDSC, they can also appear in other fields of knowledge, for which reason this research may inform future studies. The term "mapping" is used here in a figurative sense, as suggested by Schwartz and Jacobs (1984) when talking about "social mapping." In our case, this mapping first involves identifying authors, journals, and rationales that have led to the current situation that we have defined using the term "implosion," which will be explained below.

The research questions that guide this study are as follows:

- Which authors received the largest number of citations in scientific papers on CDSC, published in Spain between the years 2000 and 2015? What place do the cited works occupy in the research careers of these cited authors?

- In connection with the citing authors, what are their fields of knowledge, their institutional affiliations and positions, and the publications in which the citations appear?

Opening the black box of citations

- What types of citations are involved?

- What are the potential consequences of these citation practices?

Background and theoretical framework: CDSC in Spain

The history of the field of CDSC in Spain has intrinsic value as a singular case study. For its part, Spanish communication research is also striking insofar as it tends to intersect communication perspectives of Latin American and Anglo-Saxon traditions. Moreover, the emergence of the 15-M Movement in Spain (2011) has hybridized the Spanish communication field to such an extent that it can be regarded as a "social and communication" laboratory worthy of attention, as underscored by authors such as Tufte (2017) and Barbas and Postill (2017).

In most cases, this meta-research may shed some light on the processes of institutionalization, legitimatization, and coherence of a particular field in a specific geographical context or research community. While Fernández-Viso (2012) holds that the institutionalization process of CDSC in Spain could be seen as "an unfinished task," for Marí (2016) we are witnessing "an implosion of the field," due to its historically inconsistent and weak development. In an initial attempt to contextualize the situation, and after reviewing generic studies of the history of communication research in Spain, it appears that CDSC has certainly not constituted one of the keystones of communication research in this country (Martínez-Nicolás, 2016). For that matter, the absence or marginal presence of Paraguayan Juan Díaz Bordenave and the Bolivian Luis Ramiro Beltrán, is more than remarkable. The former, one of the fundamental authors of Latin American communication thought, does not figure among the most cited authors in the field of CDSC in Spain, which may reveal a disregard for his work and its scant circulation in the country. Regarding the latter, although he is cited more frequently than his colleague, a review of the top 10 communication journals in Spain has yielded just nine citations in 15 years.

In Spain, over the last 20 years, CDSC has gone through three major stages. After an initial stage of neglect and marginalization (from the 1980s until the beginning of the 1990s), it entered a

period of emergence (from the mid-1990s to 2004), followed by a stage of institutionalization and implosion (since 2005). This division into stages has been explained in more detail in a previous work (Marí, 2016). The passing from one stage to another has been justified by the publication of research, the creation of research teams, and the organization of congresses or social protests.

Thus, at a moment when CDSC is emerging in Spain, the field is apparently experiencing more of an implosion than a boom, as an internal rupture due to its inconsistent and weak development during a stage of institutionalization. First, it is important to note the subsidiary nature assumed by the institutions, fields of knowledge, and disciplines that are not directly linked to the epistemological framework that CDSC has constructed at a global level, as is the case with other institutions. Second, the late introduction of CDSC in Spain is remarkable with respect to developments in other closer contexts from a geographical (Europe) or cultural (Latin America) point of view. The dearth of academic spaces and solid research in the Spanish context limits the potential to engage these debates. Owing to the tardy, sporadic, and weak ties with researchers and social activists promoting CDSC at an international level, the most representative authors of Latin American communicology (Kaplún, Luis Ramiro Beltrán, and Juan Díaz Bordenave, to name but a few) in Spanish research have been marginally present.

One of the most relevant contributions of the so-called "Latin American school of communication research" has been to delve into the interrelationships between communication, culture, and power from the perspective of social and political practices of an emancipatory nature. This approach to communication is both far removed from the communication objectives and visions of NGOs and social movements, and conspicuous by its absence in the institutionalization of the field of communication in present-day Spain (Martínez Nicolás, 2016), which may help to explain the absence of these authors in Spanish communication theory and practice.

Besides the historiographical analysis, this research has an immediate precedent in the bibliometric analysis of CDSC in Spain (Marí & Ceballos, 2015). Similar studies performed by Fair

(1997), Lennie and Tacchi (2013), and Morris (2003) were taken as points of departure for this global field analysis. Likewise, bibliometric studies of academic production in Spain of Castillo et al. (2012), Fernández-Quijada and Masip (2013), and Martínez-Nicolás and Saperas (2011) were borne in mind. In short, the results obtained from analyses of the bibliometric production as regards CDSC are as follows: first, an analysis of the 3,782 papers comprising the sample (published in the top 10 communication journals in Spain between the years 2000 and 2015) revealed that 20 (only 0.53%) addressed the subject, a meagre contribution that clearly illustrates the marginality of this field in Spanish research. Most of these works (17) were published in only four journals, with their timing coinciding with the institutionalization of the field in Spain. As to the authors of these papers, those who have served as essential international touchstones for the construction and consolidation of the field are few and far between.

Methodological approach

The research questions concerning those authors cited, and scholars citing them, and the way they engage citation practices, are explored through bibliometric analysis of citations. First, we review secondary analyses of bibliometric indicators that are used to evaluate scientific research by calculating the number of citations received, the impact factor of scientific journals, and the H-Index (Csajbók et al., 2007; Egghe & Rao, 2008; Garfield, 1955, 2003).

We also consider how these bibliographic citations are used (Bavelas, 1978; Bazerman, 1988; Roth & Cole, 2010, as cited in Erikson and Erlandson, 2014), according to Erikson and Erlandson's taxonomy. First, we consider the idea of credit as a sort of medium of exchange (Merton, 1973) in the scientific community. From this perspective, science as a social institution revolves around a system in which citations are given in exchange for valuable and original information. This exchange is positioned as a social construction, through which citations become a currency of power relations. This study is based on these analytic approaches to consider the nature of citations of CDSC literature in Spain.

Analysis of this literature focuses on the top 10 Spanish communication journals in the established time frame (2000-2015). Reviewing these journals, the three most cited authors were Alfonso Gumucio-Dagron (21 citations), Javier Erro (15 citations), and Jan Servaes (11 citations). For the purpose of this research, the most cited work of each one of these three authors was chosen: Gumucio-Dragon's "Communication for Social Change Anthology: Historical and Contemporary Readings" (2005), co- edited by Thomas Tufte, with seven citations; Javier Erro's "Descubrir y construir procesos de comunicación social [Discovering and building social communication processes]" (2003), with three citations; and, lastly, Jan Servaes' "Communication for Development: One World, Multiple Cultures" (1999), also with three citations. These cited scholars are described in terms of their own professional positions and texts.

An analysis of the citing authors and their papers was conducted in order to identify: 1) the work including the citation; 2) the institutional affiliation and position of the citing author; 3) the field of knowledge; and 4) the year of publication. After identifying text fragments including the citation, the analytic categories suggested by Erikson and Erlandson (2014) were applied (see Table 1): argumentation with active support; social alignment; mercantile alignment; and data. This methodology has been used in a wide range of studies using bibliometric analysis. This is the case, for example, with the work of Gingras (2016) aimed at identifying and condemning the use and abuse of citation practices currently in vogue, along with recent research by Tahamtan and Bornmann (2018) and Pontille and Torny (2015).

Erikson and Erlandson (2014, p. 628) establish these four categories taking into consideration the different roles that a citation can play in a text, plus implications toward discursive power mechanisms. Argumentation is regarded as the traditional category, "where a citation is actively referred to in a line of argumentation in order to support a particular standpoint" (Erikson & Erlandson, 2014, p. 629). This category can in turn be divided into subcategories (see Table 1), some of which are discussed below. Active support occurs when authors employ citations

to support their arguments, thus showing that others share their opinions. On the other hand, *active criticism* includes those citations with negative connotations, in which the opinions of the cited author are criticized. Currently, this kind of citation is infrequent, due to the fact that authors are usually reluctant to censure their peers. Then there is passive support, which occurs when the strength of the citation does not reside in the arguments put forward, but rather in who the cited author is or in the prestige of the cited journal or source.

Next, the social alignment category includes those citations that refer to a certain scientific tradition in which authors and works are deemed worthy of being cited, either owing to their seminal character or because they lend considerable weight to the paper in which they appear. This category also encompasses scientific self-image in which the citing authors present themselves through their work and take a positive stance vis-à-vis a specific tradition or field. Lastly, this second category also includes effort compensation, with respect to those citations that give kudos to an author's paper, due to the difficulties involved in reading and understanding the cited work.

The third category identified by Erikson and Erlandson is that of mercantile alignment, in which citations are employed to earn credit at different levels. For instance, citing authors can present their own credentials by including a long list of bibliographic references of important authors, thus demonstrating their mastery of the field. There is also self-promotion in which authors cite their own works in order to arouse interest in them or to make a good impression on the editor of the journal or the presumed reviewers.

Lastly, the fourth, or data, category includes citations of empirical studies, to wit, when the cited literature is employed as a data source by the citing author. In this category, citations can appear in the form of an overview or review of a field in the paper itself or as a meta-analysis, which occurs when the data provided by the cited text are used to substantiate a new study. "It is important to keep in mind that a single citation can fit into a number of categories at the same time,

even if it appears only once in a paper" (Erikson & Erlandson, 2014, p. 628), although there they see these as posing a dominant use.

To illustrate some of the citation categories described above, we will now provide a number of examples drawn from our study of these categories in the field of CDSC in Spain. An example of argumentation can be found in the work of one of the citing authors analyzed here, who states:

> According to the experts in communication for social change Alfonso Gumucio and Thomas Tufte this could be defined as a process of dialogue and debate based on collective participation and action through which people themselves determine what they need to improve in their lives. At the heart of this concept lies the conviction that the affected communities have a better understanding of their reality than "experts" far-removed from it (Gumucio-Dagron & Tufte, 2008, p. 23). (cited in *Cuaderno de Información y Comunicación*, 2012, vol. 17, p. 201), [1]

This descriptive citation category incorporates a literal fragment of the text in order to bolster the arguments of the citing author. In this case, a passage is cited from the original text, something that does not occur in other citation categories.

A second example refers to the mercantile alignment category, which involves including a (generally comprehensive) list of bibliographic references to important authors. The following example is taken from a paper by another author studied here, dealing with the reformulations of the field of CDSC:

> This is the case, for example, with analysts who promote a reconversion of our subject from an ecological perspective, whether grounded in definitions such as that of *communication and sustainable growth* (Mefalopulos, 2005; Servaes & Malikhao, 2007) or by taking an approach to other dimensions like *eco-social empowerment* (Chaparro, 2009b) and *communication for sustainability* (Díaz Nosty, 2009; Gumucio-Dagron, 2006). Likewise, the studies

---

[1]   Our translation from the Spanish, as with all the following quoted passages.

of practical experiences in the field, such as those of Flor (2004) and Herrera (2011), are also thought-provoking (cited in *Cuadernos de Información y Comunicación*, 2012, vol. 17, p. 71).

In the list of citations included in the previous paragraph, there are references to authors who champion different and, in some cases, divergent views, without including a highly recommendable problematization and discussion of the points of divergence across these approaches. In this case, a citation of the work of Gumucio-Dagron and Tufte (2006) appears in the paragraph of the citing author, along with one of the work of the Spanish researcher Manuel Chaparro (communication for eco-social empowerment), but there is no mention of the discussion points from either work.

As will be seen, there is only a literal quote from the cited text and a discussion and reflection on its implications in the case of the argumentation category. In contrast, in the other example (mercantile alignment), the most used in the three cases analyzed here, the theoretical approaches of the cited authors are neither literally quoted nor discussed.

Data analysis

On the strength of the aforementioned background, theoretical framework, and methodology, we will now present and analyze the data obtained in our research, starting with *Communication for Social Change Anthology: Historical and Contemporary Readings*, coordinated by Gumucio-Dagron and Tufte (2006), the most cited text in the field of CDSC in Spain, with the largest number of citations (7) of the first of these authors (see Appendix 1).

In accordance with the established framework, the citing authors were analyzed in terms of their fields of knowledge, institutional affiliation, and the subject of their work. In this respect, the authors of the seven citing papers form a consistent group, inasmuch as nearly all of them (6/7) belong to departments of journalism or audiovisual communication. On the one hand, this highlights a certain command and knowledge of the citations in question, due to the fact that they have been employed by researchers in the same field. On the other, this finding could be interpreted

in a more negative light, since it may indicate an incapacity of communication research to spark the interest of researchers in other disciplines (Anderson, 2016).

The thematic clustering of the titles of the citing authors produced the following results. Of the total number of papers (7), two focus on issues relating to advertising. In one case, this topic is mentioned explicitly in the title, while in another there is an indirect allusion to advertising in the use of one of the terms belonging to the field's thematic universe, efficiency, although employed in a wider sense than usual, appearing under the form of cultural efficiency.

This finding is noteworthy when taking into account that in the field of CDSC there has been a distancing with respect to conventional approaches to advertising. The subject of advertising has not aroused much interest among CDSC researchers across national contexts. Moreover, the other four papers, in which most of the citations of Gumucio-Dagron and Tufte's work appear, address epistemological matters. Their aim is to map CDSC conceptually, reviewing its creation as a field in the Spanish case or outlining ongoing shifts.

Besides this common feature, differences emerge when categorizing or conceptualizing the identified shifts: Differences include attention to eco-social justice as well as edu-communication. In yet another case, the change also receives the additional label of "sustainable." Lastly, the fourth paper frames CDSC in the field of alternative communication.

Therefore, we witness a highly volatile state of affairs with multiple shifts in the object of study and the researchers, their institutions, and the Spanish socio-political context in which these movements are taking place. In parallel, it is also possible to observe signs of implosion, insofar as these epistemological works fall into categories that are neither always equivalent nor derive from the field of research, but on occasion indiscriminately take on categories employed by the activists themselves (Ferron, 2017). Finally, there is a paper that addresses the issue of the professionalization of CDSC in reference to the relationship between theory and practice, a topic

that has been traditionally dealt with in this field from radically different perspectives, close to the Freirean concept of "praxis."

Analysis using the categories suggested by Erikson and Erlandson

Since five out of the seven citations of Gumucio-Dagron's work appear in a monographic number of one of the journals analyzed in the bibliometric review, it is reasonable to assume that, rather than being a coincidence, it seems that there has been some general guidance from the editorial team or the coordinators of the monograph. This anthology is very hard to come by, as it was published by an American foundation, far-removed from the usual circuits of academic production and distribution, in addition to being unavailable online and very costly. All these factors make it a work that is, objectively speaking, difficult to consult.

Most of the authors who cite this work take a critical stance towards the concept of "communication for development," opting for the new term "communication for social change," emerging from the Bellagio Conversations (Chaparro, 2015; Wilkins & Enghel, 2013) or pointing to new conceptual proposals arising from the postulates of post-development or the imaginaries of the South (good living).

It is in this respect that it is worth mentioning that the author whose work begins this monograph dedicated to reviewing the field of CDSC is Jan Servaes, a researcher who has continued to use, with some variation on the theme, the term "communication for development" (Servaes, 1999, 2003, 2008), while other authors, including Gumucio-Dagron and Tufte (2006), have held that it is more convenient to use expressions like "communication for social change." The fact that the monograph's editors invited an author (Jan Servaes) who defends a number of stances that are poles apart from their own and those of other authors to make a contribution is indeed a contradiction. It would appear that they were interested in the author appearing in the monograph, doubtless because of what we have referred to here as mercantile alignment, since in no event do

the editors enter into the necessary conceptual and ideological discussion of these different terms neither in the editorial nor in any other place.

Furthermore, an analysis of the citing authors in terms of their professional careers (senior or junior, type of contract, etc.) reveals that none of them hold a chair (which according to the Spanish system is the highest rank, above that of tenured professor and other temporary contractual modalities or posts with a higher academic or symbolic status). Specifically, among the citing authors there are two PhD students, a post-doctoral fellow, an associate professor, and a PhD assistant professor (a PhD holder with a temporary contract). In short, the majority of them are people just starting out in their research careers and who, to express it in the language of Bourdieu (2004), are beginning to accumulate their symbolic and academic capital in a scientific field (communication for development/social change) in which it is easier to make headway and to stand out than in others (Ferron, 2017; Neveu, 2001). The highest academic post held by the authors citing this work is that of tenured professor, although specializing in other subfields of communication (i.e., journalism or advertising).

As to their content and placement, it is surprising to note that two out of the seven citations appear in footnotes and, in both cases, in general references tangential to the cited work. Secondly, none of the seven citations fall into the category defined by Erikson and Erlandson as "data," namely, they lack an empirical basis, or for that matter into the active criticism subcategory, aimed at voicing appreciably negative opinions about the arguments of specific authors. Notwithstanding the fact that these negative citations are fairly uncommon nowadays, they cannot be ruled out in some of the citing papers which, at least in four instances, propose mapping a field of knowledge.

An analysis of the citations of Gumucio-Dagron's work reveals that the most dominant category is that of mercantile alignment (which appears six times in the citing works), viz., that whose main function is to help authors to promote themselves and their own credentials as eminent researchers by citing the works of outstanding scholars in the field. For instance, this is the case of

one of the citing authors when referring to the work of Gumucio in the following terms: "In this respect, the compendiums of Gumucio-Dagron (2001) on participative projects in communication and development or the recent anthology on communication for social change, edited by Gumucio and Tufte (2006), as well as the websites of the Communication Initiative Network, the Communication for Social Change Consortium, the Association for Christian Communication and Our Media, are very useful." (cited in *Comunicar*, vol. 29 (2007), p. 119).

The second most frequent type of citation is that of social alignment (which appears five times in the citing works), a category which would include scientific self-image, involving a sort of self-presentation made by the citing author so as to appear to take a positive stance towards a specific tradition or field. For example, the following citation used by one of the citing authors falls into this category: "There is no theoretical consensus on this topic, neither terminological nor epistemological. For the purpose of our position, from among the diverse concepts that have been proposed as alternatives to the meaning of communication for development we have recovered the following: communication for social change (Gumucio & Tufte, 2008) …." (cited in CIC, vol. 17 (2012), p. 210).

Analysis of the citations appearing in the second text: Javier Erro

The same analytical method was applied to the second most cited work, Javier Erro's book entitled, *Descubrir y construir procesos de comunicación social* (Discovering and building social communication processes; 2003). The author is a Professor in the Department of Sociology at the Public University of Navarre (UPNA), and one of the researchers and social activists behind the introduction of Latin American communicology, revolving around authors such as Jesús Martín Barbero, Rosa María Alfaro, Paulo Freire, and Mario Kaplún, in Spanish social organizations. This cited book forms part of a body of research into communication and non-governmental

development organizations (NGDOs) in the Basque Country with the aim of working towards the following objectives:

1) To diagnose the communication situation of NGDOs operating in the Basque Country.

2) To contribute to foster a process of reflection on the role of communication in the field of international development aid.

3) To create theoretical-practical tools for furthering that reflection and improving the communication practices of NGDOs (Erro, 2003, p. 14).

Of the three citations received by this work (see Appendix 1), two are by authors who have also cited the first work analyzed here, so what has been said before also applies in this case. Concerning their fields of knowledge, the citing authors also belong to departments of communication or areas relating to this field. A closer look at the titles and content of the citing papers, however, brings to light a number of differences. In all three cases, they are theoretical approaches that do not envisage the production of empirical data. In the first citing paper, the state of the question in the field of CDSC is established. The second work analyses the communication practices of NGDOs and social movements from a conceptual approach in which the term "cultural efficiency," deriving from the field of social advertising, stands out. The third paper is an essay that reflects on the contribution that theoretical approaches, such as biopolitics and neuroethics, could make to social advertising. As with the previously analyzed work, the endeavor to relate the field of advertising to CDSC is at odds with current international trends in which the issue is of little or no concern to researchers.

As to the context, in one of the cases the citation of Erro's work appears in a generic paragraph which begins as follows: "The last 10 years have witnessed the advent of a new generation of researchers concerned with the analysis of the articulation between social communication and processes of development and change (Erro, 2003, p. 53)." What follows is a list of academic products, with Erro's work being included in a chapter dealing with new books on the subject. The second case involves two citations in two footnotes, in addition to one in the body

of the text amidst a plethora of definitions. The third is the only case of a direct quote from the cited work: "The communication practices of NGOs have gone from improvisation and a lack of foresight to professionalization, through a stage marked by an instrumental approach to communication, aimed at obtaining financial and human resources (Erro, 2003, pp. 17-30)."

As with Gumucio-Dagron's work, the dominant type of citation also falls into the mercantile alignment category (the citing authors have resorted three times to this type of citation). The following extract is a specific example of this: "Data gathering, meta-analysis and the dissemination of theories, currents and authors in the field of communication for development and social change have also been undertaken, all of which has contributed to focus reflection on practices from a broader and, above all, historical perspective. Lastly, books have been published [seven authors and 12 works, including Erro and his book, are then cited in succession]".

Analysis of the citations appearing in the third text: Jan Servaes

The third text with the greatest number of citations is by Jan Servaes. In addition to being one of the most outstanding authors on the subject, Servaes is also one of the world's most prolific researchers in the field of CDSC. Born in Belgium, Servaes studied at the Catholic University of Leuven, from where he earned his Bachelor's and Master's degrees and PhD (1987). After lecturing at several Dutch universities, he continued his career with the University of Queensland (Brisbane, Australia) (2003-2007), the University of Massachusetts Amherst (USA), and now with City University of Hong Kong.

Applying the same analytic method as in the two previous case studies, let us first take a look at the fields of knowledge of the citing authors. In two cases (citations 1 and 3), the papers written by authors affiliated with communication-related departments at Spanish universities have already been analyzed here. The third case involves a self-citation appearing in a paper published by Jan Servaes in a Spanish journal, included in the corpus under study. So, once again, all the citing authors are directly related to the field of communication.

As regards the titles and topics of the citing works (see Appendix 1), there is a new convergence insofar as they are all theoretical reviews of, or conceptual approaches to, the field. It is noteworthy, however, that each one of these citing papers refers to the field employing different terminology. In the first, the term "communication for development and social change" is used; in the second (Servaes' own work), "communication for sustainable social change"; and in the third, "edu-communication for social change." This conceptual diversity and hybridization could tentatively be an ambivalent trend: evidence of the weakness of the field or a sign of its dynamism and rejuvenation. In the absence of theoretical rigor, however, it could be understood as more of a sign of the former (implosion) than of the latter (dynamism and rejuvenation).

As in the previous case studies, the last aspect that should be taken into account is the most frequent citation categories according to the taxonomy suggested by Erikson and Erlandson (2014). Mercantile alignment yet again prevails (appearing three times in the works of the citing authors), although the novelty now lies in Servaes' self-citation, a subcategory – viz., the so-called "self-promotion" – that has not appeared before.

Lastly, it is important to note that the cited work of Servaes was published (in English) in 1999, that is, some time ago, and is therefore not readily available in the Spanish context. There are other more recent texts by the same author which basically formulate the same ideas as in the earlier work and are more accessible, at least online. Such is the case with the work published in 2002 by the UNESCO, which can be downloaded free of charge from the organization's official website. This may be due not only to the fact that it has become a classic in the field, but also because of its continuous appearance in bibliographies on the subject and, therefore, to the normative value that it has for anyone who wants to give the impression of being knowledgeable on the subject.

Three books, two practitioners

A global analysis of the three cited works shows that they are all monographs (books), rather than scientific papers published in journals. This is indeed significant at a time when the social sciences

are being subject to measurement, indexing, and ranking systems deriving from the field of natural sciences (Ortiz, 2009; Reig, 2014).

Moreover, two out of the three cited authors are what are known, in Anglo-Saxon parlance, as "practitioners," namely, people engaged in practice who construct their theoretical positions from that social and epistemological domain. This is an uncommon feature in other fields of knowledge, but not so in the tradition of CDSC, in which, according to the experts, the praxis approach (Freire, 1976), integrating theory and practice (Gumucio & Tufte, 2006), prevails. Be that as it may, this practitioner status does not imply that the works of these authors are less relevant or familiar to researchers in their field of knowledge. The productivity, dissemination, and recognition of the works of Gumucio and Erro have had, to a different extent, an important impact on their respective communities and contexts of dissemination.

The practitioners mentioned in this paper have unearthed the Freirean connection (Richards, Thomas, & Nain, 2001), which is important to this theoretical approach to CDSC; that is, the value of social transformation processes as a source of knowledge and theoretical construction. Somehow or other, in the praxis of the work of these practitioners (Gumucio-Dagron in relation to the field's international reach and Javier Erro with respect to CDSC in Spain), it is possible to glimpse a theory of knowledge and a theory of communication based on their capacity to transform reality, along the lines suggested by Quarry and Ramírez (2009), among many other practitioners in the field. This circularity across action, knowledge, and communication is a specific contribution of practitioners in the field of CDSC.

Conclusion: opening the black box of citations

In the introduction to this paper, we mentioned that Benjamin's dream was to write a book composed entirely of quotations. Among possible reinterpretations of Benjamin's intent, stress should be placed on its association with his own allegorical method, "the dissociation of immediately experienced unities," his dialectical image (García García, 2010; Kracauer, 1995), and

his theory of montage (Hansen, 1999; Zamora, 1999), as understood by the surrealist movement. What fascinated Benjamin about the surrealists was the way in which they separated pieces of the world of objects in order to present them in montages as ruins of modernity, attempting to produce a shock, or a clash. Thus, for him "the critical decoding of modernity will not be brought about by the knowledge of social processes as a whole, as Lukács proposed, but by micrologically interpreting fragments of the world of objects, as the surrealists do" (Zamora, 1999, p. 131). The experienced unities and dialectical images correlate through the collection of discarded things, when pursuing history through the "salvation of the fragment" (García García, 2010).

By applying Benjamin's categories, it is possible to see that the dominant citation practices in the academic field turn researchers into collectors of fragments and "dissociators of immediately experienced unities," albeit in a very different way than that envisaged by Benjamin. We believe that a critical reflection on citation practice should include, as an objective, a critical decoding of the functioning of a field of knowledge and, in this specific case, that of the field of CDSC in Spain. And in order to combat mercantile alignment as a dominant citation strategy, it is necessary to perform studies that generate debate on conflicting theoretical paradigms and perspectives. Furthermore, our analysis is meant to contribute to a "critical decoding of social totality" proposed by Benjamin.

In light of the above, the time has come to discuss the results on the basis of the research questions posed at the beginning of this paper. We have identified and analyzed the most cited authors, along with their institutional and research affiliations. In this regard, we can conclude that, among the cited authors, there are more practitioners than genuine researchers, Spanish-speaking than Anglo-Saxon authors, and older works (10 years) than recent ones. With regard to the citing authors, practically all of them belong to departments of communication, which highlights the considerable convergence between the cited works and the citing authors, which could be reinterpreted in an ambivalent fashion: not only as a sign of affinity, but also as one of a self-enclosed field.

In this regard, a number of authors have recently identified the field of communication's tendency to being self-enclosed and sterile. In contrast with the encouraging vision of "ferment in the field" noted by George Gerbner (1983), there is now a "disincentive to theoretical and conceptual work in the discipline" (Hanitzsch, 2015), due to the rationales of academic production that have ultimately prevailed in the field of communication in particular and in that of scientific knowledge in general, as noted at the beginning of this paper. According to Hanitzsch, this is the reason why "theory development is sometimes pushed to the margins of the field" (p. 353). So, our work poses a question, which can be resumed in future studies, relating to the possible presence of the aforementioned dynamics in the field of communication research as a whole in Spain or in other contexts.

In connection with the content and qualitative analysis of the citations, this study brings to light a clear privileging of mercantile alignment, whose main function is to give credit and a position of influence to the citing authors, the majority of whom have just set out on their academic career paths and therefore need to resort to a peripheral field in which it is easier to make headway than in other areas of knowledge dominated by senior researchers.

The results bear out the implosion thesis inasmuch as this has occurred due to the fact that, after a period of marginalization, the field of CDSC is experiencing a (relative) boom in Spain, which has lacked the necessary rigor to include adequately those authors, theoretical frameworks, and concepts that have served to consolidate CDSC in other contexts. This has happened because varied perspectives have prevailed in the informational approaches to communication and social movement research in Spain, whose aim has been to make an impact on the mass media, rather than focusing on stimulating social communication processes. In the case of this subject, CDSC is not to be found among the fundamental theoretical approaches in meta-research communication studies performed in Spain (Martínez Nicolás, 2016). In this context scholars are more likely to resort to journalistic approaches (Morris, 2003) rather than employing theoretical frameworks (Marí, 2016).

Opening the black box of citations

In our study, we have used the term "implosion" on a number of occasions to refer to the theoretical inconsistency and shortcomings of the field of CDSC in Spain. Consequently, now at a moment of certain growth and interest its present and future substantiation and consolidation lack firm foundations. This can be seen in several aspects. Of these, we highlight two. On the one hand, there is the structural weakness of the elements defined by Martínez Nicolás (2016), which would put a field in the process of being institutionalized on a firmer footing.

On the other, the rationales of academic production prevailing in the field of CDSC in Spain involve the subjugation of scientific production to commodity logic and to the intensive exploitation of the productivity of researchers. This second trend has a negative impact on knowledge construction processes and the theories sustaining them, since it ultimately favors those approaches that are easily measurable and conventional. In pragmatic terms, this had led to an exaggerated use of meta-data analyses in the case of bibliometric studies, which are necessary but insufficient to identify reading, comprehension, and citation rationales. Moreover, these dominant dynamics in the field of CDSC and in communication as a whole in Spain (Martínez Nicolás, 2016) ultimately favor the use of functionalist theoretical frameworks, work rationales and procedures in which the empiricist principle of analyzing what is "easily measurable and observable" displaces and marginalizes theories and methodologies that are more useful for critical analysis. These dominant citation practices challenge the potential to turn citations, as Benjamin suggested, into "dialectical images," able to engage in social and political critique. These conclusions set the alarm bells ringing about the quality standards to which citation practices ought to adhere in the field of research. Sustaining the black box metaphor, the "airplane" of scientific production runs the risk of crashing as a consequence of these destructive trends. Analysis of this entrapment through narrow citation strategies may reveal problematic practices. In other words, the black box metaphor is an invitation to re-examine "laboratory life" (Woolgar & Latour, 1979); in this case, the laboratory of citations.

In this case, citation practices signal an internal implosion of the field of CDSC. Although we have focused here on the analysis of the field of CDSC in Spain, this study may inform future work considering communication scholarship more broadly, particularly critical to explore if these practices limit our contribution to evolving communication theories.

References

Aksnes, D. W., & Rip, A. (2009). Researchers' perceptions of citations. R*esearch Policy,* **38**(6), 895-905. https://doi.org/10.1016/j.respol.2009.02.001

Anderson, J.A. (2016). Communication descending. *International Communication Gazette,* **78**(7). https://doi.org/10.1177/1748048516655708

Barbas, A., & Postill, J. (2017). Communication Activism as a School of Politics: Lessons from Spain's Indignados Movement. *Journal of Communication*, **67**(4). https://doi.org/10.1111/jcom.12321

Bavelas, J. B. (1978). The social psychology of citations. *Canadian Psychological Review,* **19**(2), 158–163. http://doi.org/10.1037/h0081472

Bazerman, C. (1988). *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science*. Madison, WI: University of Wisconsin Press.

Benjamin, W. (1999): The Arcades Project. (Howard Eiland and Kevin McLaughlin, Trans.) Cambridge, MA: Harvard University Press. (Original work published in 1982).

Bertin, M. (2008). Categorizations and Annotations of Citation in Research Evaluation. *FLAIRS Conference*, 456-461.

Bourdieu, P. (2004). *Science of Science and Reflexivity*. Chicago, IL: University Of Chicago Press.

Castillo, A. *et al.* (2012). La investigación en Comunicación. Análisis bibliométrico de las revistas de mayor impacto del ISI. *Revista Latina de Comunicación Social,* **67**.

Chaparro, M. (Ed.) (2015). *Claves para repensar los medios y el mundo que habitamos. La distopía del desarrollo.* Bogotá, Colombia: Ediciones desde abajo.

Csajbók, E., Berhidi, A., Vasas, L., & Schubert, A. (2007). Hirsch-index for countries based on Essential Science Indicators data. *Scientometrics*, **73**(1), 91-117. http://doi.org/10.1007/s11192-007-1859-9

de Sousa Santos, B. (2011). Epistemologies of the south. *Etudes Rurales,* **187**(1).

Díaz Bordenave, J. (2012). La comunicación y el nuevo mundo posible. *Commons. Revista de Comunicación y Ciudadanía Digital,* **1**(1). http://doi.org/10.25267/COMMONS.2012.v1.i1.02

Egghe, L., & Rao, I. K. R. (2008). Study of different h-indices for groups of authors. *Journal of the American Society for Information Science and Technology,* **59**, 1276-1281. http://doi.org/10.1002/asi.20809

Erikson, M. G., & Erlandson, P. A. (2014). Taxonomy of motives to cite. *Social Studies of Science,* **44**(4). http://doi.org/10.1177/0306312714522871

Erro, J. (2003). *Descubrir y construir procesos de comunicación social*. Bilbao: Hegoa.

Fair, J. E., & Shah, H. (1997). Continuities and discontinuities in communication and development research since 1958. *Journal of International Communication,* **4**(2). http://doi.org/10.1080/13216597.1997.9751852

Fernández-Quijada, D., & Masip, P. (2013). Tres décadas de investigación española en comunicación: hacia la mayoría de edad. *Comunicar,* **41**. Available at: http://doi.org/10.3916/C41-2013-01

Fernández Viso, A. (2012). Historia de una travesía inconclusa: la comunicación para el desarrollo y el cambio social en la investigación y la docencia universitarias en España. *CIC: Cuadernos de información y comunicación,* **17**, 41-62. http://doi.org/10.5209/rev_CIYC.2012.v17.39257

Ferron, B. (2017). Sociología Política de la 'Comunicación para el Cambio Social': pistas para un cambio de enfoque. *Commons. Revista de Comunicación y Ciudadanía Digital,* **6** (1). http://doi.org/10.25267/COMMONS.2017.v6.i1.04

Freire, P. (1976). *Education: The Practice of Freedom.* London, UK: Writers and Readers Ltd.

García García, L. (2010). Alegoría y montaje. El trabajo del fragmento en Walter Benjamin. *Constelaciones. Revista de Teoría Crítica,* **2**, 158-185.

Garfield, E. (1955). Citation indexes to Science: a new dimension in documentation through association of ideas. *Science*, **122**, 108-111. https://doi.org/10.1093/ije/dyl189

Garfield, E. (2003). The meaning of the Impact Factor. *International Journal of Clinical and Health Psychology*, **3**(2), 363-369.

Gerbner G. (1983). The importance of Being Critical: In One's Own Fashion. *Journal of Communication*, **33**(3), 355-362. https://doi.org/10.1111/j.1460-2466.1983.tb02435.x

Gilbert, G. N. (1976). The transformation of research findings into scientific knowledge. *Social Studies of Science*, **6**(3/4), 281–306. https://doi.org/10.1177/030631277600600302

Gilbert, G. N. (1977). Referencing as persuasion. *Social Studies of Science*, **7**(1), 113–122. https://doi.org/10.1177/030631277700700112

Gingras, Y. (2016). *Bibliometrics and Research Evaluation: Uses and Abuses*. Cambridge, MA: MIT Press.

Golombek, D. (Comp.) (2006). *Demoliendo papers*. Buenos Aires, Argentina: Siglo XXI Editores.

Gumucio-Dagron, A. (2001). *Making Waves: stories of participatory communication for social change: a report to the Rockefeller Foundation*. New Jersey: Rockefeller Foundation.

Gumucio-Dagron, A., & Tufte, T. (2006). *Communication for Social Change Anthology: Historical and Contemporary Readings*. New Jersey: Communication for Social Change Consortium.

Hanitzsch, T. (2015) Celebrating 25 years of Communication Theory: Growing diversity under heavy strain. *Communication Theory*, **25**(4), 349-355. https://doi.org/10.1111/comt.12079

Hansen, M. B. (1999). Benjamin and cinema: Not a one-way street. *Critical Inquiry, ***25***(2)*, 306-343. https://doi.org/10.1086/448922

Kracauer, S. (1995). *The mass ornament: Weimar essays*. Cambridge, MA: Harvard University Press.

Latour, B. (1987). *Science in Action*. Cambridge, MA: Harvard University Press.

Latour, B. (2005). *Reassembling the Social*. New York: Oxford University Press.

Lennie, J., & Tacchi, J. (2013). *Evaluating communication for development. A framework for social change*. London, UK: Routledge.

Löwy, M. (2005). *Fire Alarm: Reading Walter Benjamin's On the Concept of History*. New York: Verso Books.

Mannheim, K. (1936). *Ideology and Utopia*. London, UK: Routledge.

Marí, V. M. (2016). Communication, development and social change in Spain: A field between institutionalization and implosion. *The International Communication Gazette*, **78**(5). https://doi.org/10.1177/1748048516633616

Marí-Sáez, V. M., & Ceballos-Castro, G. (2015). Bibliometric analysis on "Communication, Development and Social Change" in the top ten journals of Communication in Spain. *Cuadernos.info*, **37**. https://doi.org/10.7764/cdi.37.828

Martínez-Nicolás, M. & Saperas-Lapiedra, E. (2011). La investigación sobre Comunicación en España (1998-2007): Análisis de los artículos publicados en revistas científicas. *Revista Latina de Comunicación Social*, **66**, 101-129. https://doi.org/10.4185/RLCS-66-2011-926-101-129

Martínez-Nicolás, M., & Saperas-Lapiedra, E. (2016). Objetos de estudio y orientación metodológica de la reciente investigación sobre comunicación en España (2008-2014): Análisis de los trabajos publicados en revistas científicas españolas. *Revista Latina de Comunicación Social*, **71**, 1365-1384. https://doi.org/10.4185/RLCS-2016-1150es

Merton, R. (1973). *The Sociology of Science.* Chicago, IL: University of Chicago Press.

Morris, N. (2003). A comparative analysis of the diffusion and participatory models in development communication. *Communication Theory*, **13**(2). https://doi.org/10.1111/j.1468-2885.2003.tb00290.x

Neveu, E. (2001) *Sociologie du journalism*. Paris: La Découverte.

Ortiz, R. (2009). *La supremacía del inglés en las ciencias sociales*. Buenos Aires, Argentina: Siglo XXI.

Quarry, W., & Ramírez, R. (2009). *Communication for Another Development: Listening before Telling*. London, UK: Zed Books.

Reig, R. (2014). La investigación dependiente: crítica estructural al sistema JCR. *Ámbitos: revista internacional de comunicación,* **27**.

Richards, M., Thomas, P., & Nain, Z. (Eds.) (2001). *Communication and Development: The Freirean Connection*. New York, NY: Hampton Press.

Ritzer, G. (1993). *The McDonaldization of Society*. Thousand Oaks, CA: Pine Forge Press.

Roth, W. M., & Cole, M. (2010). The referencing practices of *Mind, Culture, and Activity*: On citing (sighting?) and being cited (sighted?). *Mind, Culture and Activity,* **17**(2), 93–101. https://doi.org/10.1080/10749030903402040

Schutz, A. (1976).*Collected Papers II. Studies in Social Theory*. Netherlands: Springer Netherlands.

Schwartz, H., & Jacobs, J. (1984). *Sociología Cualitativa: Método para la reconstrucción de la realidad.* México D.F.: Trillas.

Servaes, J. (1999). *Communication for Development: One World, Multiple Cultures*. Cresskill, NY: Hampton Press.

Servaes, J. (2003). *Approaches to development communication*. Paris, France: UNESCO.

Servaes, J. (2008). *Communication for Development and Social Change*. New Delhi, India: Sage.

Tahamtan, I., & Bornmann, L. (2018). Core elements in the process of citing publications: Conceptual overview of the literature. *Journal of Informetrics, **12***(1), 203-216. https://doi.org/10.1016/j.joi.2018.01.002

Tufte, T. (2017). *Communication and Social Change: A Citizen Perspective*. Cambridge, MA: Polity Press.

Wilkins, K., & Enghel, F. (2013). The privatization of development through global communication industries: Living Proof? *Media, Culture & Society,* **35**(2). https://doi.org/10.1177/0163443712468606

Woolgar, S., & Latour, B. (1979). *Laboratory Life: The Construction of Scientific Facts*. Princeton, NJ: Princeton University Press.

Zamora, J. A. (1999). El concepto de fantasmagoría. Sobre una controversia entre W. Benjamin y Th. W. Adorno. *Taula: quaderns de pensament,* **31***,* 129-151.

Table 1. Taxonomy of motives to cite: Erikson and Erlandson (2014)

Argumentation	Social alignment	Mercantile alignment	Data
Delimitation	Scientific tradition	Credits	Review
Active support: gives support for arguments; cited author's claims are treated as correct	Scientific self-image	Own credentials	Meta-analysis
Passive support	Effort compensation	Bartering material: authors are cited in the expectation that they will respond in kind	Text study
Further reading		Self-promotion (self-citations) Pledging: citations are included in the attempt to make the right impression on a journal editor or (presumed) reviewers	

Source: Erikson and Erlandson (2014:628).

Appendix 1. Most cited CDSC authors in Spain

	Papers citing the work of Gumucio-Dagron and Tufte			
	Title	University affiliation	Field of knowledge	Journal
1	La publicidad en el marco de la comunicación para el desarrollo: hacia un nuevo modelo de publicidad para el cambio social	University of Valladolid (UVa)	Audiovisual Communication and Advertising	*Cuadernos de Información y Comunicación* (CIC), vol. 17, 2012
2	De la comunicación para el desarrollo a la justicia ecosocial y el buen vivir	Carlos III University (UC3M), Madrid	Audiovisual Communication and Advertising	CIC, vol. 17, 2012
3	Historia de una travesía inconclusa: la comunicación para el desarrollo y el cambio social en la investigación y la docencia universitarias en España	Autonomous University of Barcelona (UAB)	Communication Policies Observatory (OPC), Institute of Communication (InCom), Autonomous University of Barcelona (UAB)	CIC, vol. 17, 2012
4	La profesionalización de la comunicación para el desarrollo: relaciones entre la teoría y la práctica	Camilo José Cela University (UCJC), Madrid / Autonomous University of Madrid	Communication and Political Marketing / Social Anthropology	CIC, vol. 17, 2012

		(UAM)		
5	La eficacia cultural de la comunicación de las ONGD: los discursos de los movimientos sociales actuales como revisión	Interuniversity Institute of Social Development and Peace (IUDESP) / Jaume I University (UJI), Castellón	Audiovisual Communication and Advertising / Journalism	CIC, vol. 17, 2012
6	Concepto, instrumentos y desafíos de la edu-comunicación para el cambio social	University of Malaga (UMA)	Audiovisual Communication and Advertising	*Revista Comunicar*, vol. 29, 2007
7	País Vasco, laboratorio de comunicación alternativa. Compilación de las experiencias más interesantes	University of the Basque Country (UPV/EHU)	Journalism	*Revista Latina de Comunicación Social*, vol. 65, 2010

Papers citing the work of Javier Erro

	Title	University affiliation	Field of Knowledge	Journal
1	Historia de una travesía inconclusa: la comunicación para el desarrollo y el cambio social en la investigación y la docencia universitarias en España	Autonomous University of Barcelona (UAB)	Communication Policies Observatory (OPC), Institute of Communication (InCom), Autonomous University of Barcelona (UAB)	CIC, vol. 17, 2012

| 2 | La eficacia cultural de la comunicación de las ONGD: los discursos de los movimientos sociales actuales como revisión | Interuniversity Institute of Social Development and Peace (IUDESP) / Jaume I University (UJI), Castellón | Audiovisual Communication and Advertising / Journalism | CIC, vol. 17, 2012 |
| 3 | El valor de las ideas para el cambio social: Publicidad social, Biopolítica y Neuroética | Rey Juan Carlos University (URJC), Madrid | Audiovisual Communication and Advertising | CIC, vol. 18, 2013 |

Papers citing the work of Jan Servaes

	Title	University affiliation	Field of Knowledge	Journal
1	Historia de una travesía inconclusa: la comunicación para el desarrollo y el cambio social en la investigación y la docencia universitarias en España	Autonomous University of Barcelona (UAB)	Communication Policies Observatory (OPC), Institute of Communication (InCom), Autonomous University of Barcelona (UAB) DIALNET	CIC, vol. 17, 2012
2	New challenges for communication for sustainable development and social change: a review essay	City University of Hong Kong	Audiovisual Communication and Advertising	CIC, vol. 17, 2012
3	Concepto, instrumentos y desafíos de la edu-comunicación para el cambio social	Carlos III University (UC3M),	Audiovisual Communication and Advertising	

Madrid	

Source: own elaboration.