Back to the Roots? The Applications of Communication Science Theories in Strategic Communication Research

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ABSTRACT

Recently, the field of strategic communication has been criticized for lacking a coherent theoretical synthesis. Recognizing that strategic communication is a sub-discipline of communication science, we study how the field is anchored in the corpus of established communication theories – including social science, interpretative, and critical approaches. To describe the use, development, and context of communication theories in strategic communication publications, we analyzed all articles published in ten public relations/ corporate communication/ organizational communication/ strategic communication journals over twenty years (N = 4,027). While the vast majority of articles did not refer to one of the 91 communication theories, the share of references to these theories has been increasing. Overall, we found a high diversity of approaches – with considerable differences among journals – indicating a broad discourse. However, we also found a growing relevance of the social science paradigm. We argue that a stronger focus on communication theories may facilitate a consilient synthesis and increase the relevance of the field, academically and practically. We therefore propose to strengthen the communication science perspective in strategic communication.

Critics have argued that strategic communication research is too weak in theory to provide insights beyond the common sense (see special issue in this journal: Christensen & Svensson, 2017; Dühring, 2015; Nothhaft, 2016; Nothhaft, Werder, Verčič, & Zerfass, 2018; Werder, Nothhaft, Verčič, & Zerfass, 2018). We refer to "strategic communication" as an umbrella term to comprehensively address and include the different shades offered in the fields public relations, corporate communication, organizational communication, and communication management. Strategic communication is a close neighbor to many other – older and more established – disciplines within the social sciences, such as business management, psychology, or sociology and a transfer of theories from these disciplines has taken place: stakeholder theory, trust models, systems theory – just to mention a few – have entered strategic communication research providing fruitful avenues to study organization-society relations. Thus, social theories provide one pillar of looking at strategic communication research (Ihlen & Frederiksson, 2018). Besides its clear interdisciplinary character, strategic communication is, however, rooted in communication science, sometimes called the "underrated pillar on which strategic communication rests" (van Ruler, 2018, p. 367). Communication processes and communication theories provide the second pillar of looking at strategic communication research and practice. Also from an institutional perspective, the field is by now – not exclusively, but certainly prominently – established in the field of communication science. This is evidenced by the growing number of related professorships within communication departments and divisions in international research associations (e.g., Public Relations Division as part of

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the International Communication Association since 1985 or the section Organizational and Strategic Communication of the European Communication Research and Education Association since 2007). Therefore, we ask how strategic communication is positioned within communication science and if communication theories are used. To answer this question, we study more specifically how strategic communication is anchored in the corpus of established communication theories. Academic disciplines develop and evolve with theories; this study's goal is to look at this interdependent process in retrospect to understand strategic communication's theoretical anchoring in communication science. Communication theories describe, explain, and predict social phenomena through communication, mostly either as a cause or function (Pavitt, 2010). Thus, strategic communication research resting on communication science theory explains organizations' strategic communication spanning from symbolic interpersonal and social communication to the function of non-personal communication in systems. A communication scientific perspective thus allows distinguishing between mediated and non-mediated communication on micro, meso, and macro levels. Such a perspective also accounts for the increasing importance of mediated personal communication such as on social media.

With the recent criticism that strategic communication is in need of a coherent theoretical synthesis (Nothhaft, 2016), we suggest that a reference to "the roots" in terms of communication science theories could offer such a step forward. To gain an overview of which communication theories have been applied in strategic communication until 2017, this study analyzes the use of 91 communication science theories clustered in social science, interpretative, or rhetorical theories. More specifically, it asks which of these theories were applied in strategic communication over time, in which journals, by whom, and connected to which topics. The study aims to provide a large-scale overview of which theories were applied in the last 20 years of scholarship, not examining in detail how these theories were used. Thus, the analysis is conducted by means of automated content analysis of journal articles published in ten peer-reviewed journals that make direct reference to strategic communication (or one of its related terms, see footnote) in their name. By doing so, the goal is to fuel the debate on a coherent synthesis in strategic communication research and its relevance beyond the discipline's boundaries.

Literature review

This literature review sets out to provide a brief overview by stressing the importance of communication science theories for strategic communication, followed by an overview of related research in the different sub-disciplines of communication in the context of organisations. Then, a short recap of the three paradigms is given, outlining the debate on the dominant social science perspective, and finally providing a rationale for clustering different communication science theories.

In scientific literature about communication in the context of organizations, traditionally, four academic clusters of scholarship are distinguished: (1) corporate communication, (2) marketing, advertising and public relations, (3) business communication skills and (4) organizational communication (Hallahan, Holtzhausen, van Ruler, Verčič, & Sriramesh, 2007). In 2007 a new, fifth, cluster, under the name of strategic communication has been suggested, a cluster that focuses on "the purposeful communication activities by organisational leaders and members to advance the organisations mission" (Hallahan et al., 2007, p. 27).

The content and the direction of research into communication in the context of organizations has been debated for over a decade (see for example: Christensen & Cornelissen, 2011; Ihlen & Verhoeven, 2012; Ihlen, Verhoeven, & Fredriksson, 2018; van Ruler & Verčič, 2005) and has more recently been discussed in a special issue of *the International Journal of Strategic Communication* by Nothhaft et al. (2018) and Werder et al. (2018). Regarding strategic communication, Nothhaft (2016) noted recently that "there is very little convergence in strategic communication research; results do not come together; absolute progress, i.e., accumulation of verified knowledge, is inadequate" (p. 71). This is in particular, as some claim, due to the integrative use of theories from other neighboring disciplines, which renders strategic communication "postdisciplinary" (Dühring, 2015, p. 6), that is,

between disciplines rather than forming an own. Another cause that has been identified for the deficiencies in strategic communication research is the underlying worldview of relativism leading to an overstretched tolerance for plurality of perspectives and blurring the fundamental difference between myths and facts (Nothhaft, 2016). A blurred line between myth and fact resonates well with the practice of strategic communication that, for this reason, is often perceived as ethically problematic (Brown, 2012).

These problems can be overcome by a research framework for strategic communication of organizations that according to Nothhaft (2016) follows the standard social sciences model, thereby possibly overcoming relativism and subjectivity (Nothhaft, 2016). Researchers need to "work towards a consilient synthesis, that is, a theoretical framework that contains nonrelativistic conjectures about the world from a nucleus for research to accumulate around" (Nothhaft, 2016, p. 69). Since strategic communication of organizations and all the connected academic clusters have their common roots in communication (van Ruler, 2018, 2016; van Ruler & Verčič, 2005), communication science theories can be seen as the appropriate framework for studying strategic communication of organisations to mature as a discipline (Sisco, Collins, & Zoch, 2011). Within communication science, three major traditions of analyzing, investigating and explaining communication phenomena in society are distinguished: a social science approach towards communication, next to an interpretative, and a critical research approach (Anderson & Baym, 2004). These three traditions differ in their epistemological, methodological, and ontological assumptions; in other words, they vary in their ways of knowing. Subsequently, they apply different methods used to come to knowledge, and their view on the nature of reality. Along the same lines, other categorizations of the traditions in studying communication have been proposed such as a communication science approach that uses social scientific methods, besides two interpretative approaches: critical/cultural studies and rhetoric. Critical/cultural studies ontologically rest on the assumptions of subjectivity of lived reality and embrace bias, as well as accept the political role of the researcher, and thus use according interpretative methods such as ethnographies. A rhetorical approach relies on social constructivism to analyze discourses, texts, videos or other modes of communication with rhetorical (for instance, argumentation theory-based) methods (Krcmar, Ewoldsen, & Koerner, 2016).

In contrast, a social science approach to study communication rests on assumptions of objectivity and a value-free researcher. It is at the heart of many descriptions of the discipline as a field that aims to understand and improve human communication by using the scientific method to develop theories about communication that describe, explain and predict communication phenomena in society (Chaffee & Berger, 1987). The pursuit of knowledge in this approach rests on value neutral research based on critical-rationalism (or today labelled as post-positivism), with empirical observation as its core activity focused on making and testing relationships between variables to predict, test and model mechanisms that causally explain communication processes (Krcmar et al., 2016). In other words, communication science "attempts to uncover facts about messages, including their content, context, causes, processes, and effects" (Krcmar et al., 2016, p. 65).

The dominant paradigm in communication research

The social science approach has also been called the dominant paradigm of mass communication research. In this paradigm communication is defined as mediated communication for change in society with the focus on media-effects, using social science methods, especially surveys (Lang, 2013a). A few years ago the results of the dominant paradigm in communication science led to an interesting discussion in *Communication Theory* between Lang (2013a, 2013b) and Perloff (2013).

According to Lang (2013a) the dominant paradigm is in crisis. In this paradigm very small effects of media are described over and over again (three per cent of variance in behavior comes from media effects) while very little progress is made in explaining how they occur and in developing interventions or generalizable knowledge. Lang states that the limited success of the dominant paradigm brought about two moves of researchers in other directions. One group of

researchers made a move abandoning the dominant paradigm and built a new paradigm that Lang labels the culture and communication paradigm. These researchers left the notion of limited effects behind and view the effects of media as omnipresent and mass communication in the interest of the powerful in society. The tone in this perspective is critical, the methods are humanistic and "it has a different paradigm, and that is fundamentally, at this time, nonscientific" (Lang, 2013a, p. 17). Another group of researchers went into a different direction. They abandoned the notion in the dominant paradigm that mass communication does not affect thinking (but only what people think *about*) and started working on more cognitive and psychological approaches of mass communication. In this approach humans, with their evolutionary old brains, are assumed to encounter mediated messages in the same way as real messages and act upon it. In this new paradigm the scientific method is used to study this and communication (interpersonal and mass communication) is considered an adaptive property of human systems and redefined in psychologically relevant characteristics.

According to Perloff (2013), stated in an extensive response to Lang (2013a), the dominant paradigm of mass communication research is not in a crisis at all; it has made impressive progress in answering questions about media effects. Perloff defends the dominant paradigm as adequate and making scientific progress, especially on agenda setting effects and media effects on violent behavior. More than 150 theories have been developed that explain one or more aspects of media effects and steps are made into the direction of theory integration. This theoretical progress is accompanied by empirical progress in communication science that brought a better understanding of moderators in the communication process and underlying mechanisms in the short-term and in the long-term. Lang (2013b) responded to Perloff's defense of the dominant paradigm by stating that there are many points of agreement between them but that their interpretation of the current state of the field differs. Agreement was found on the field having a paradigm called mass communication or media effects, that there are doubts about the appropriateness of the paradigm, that the theories predict only a small amount of the variance in communication behavior, that the explanatory power of the theories does not increase and that there is a growing segment of research in the field that uses different assumptions, questions and methods (Lang, 2013b). But, perhaps the most important agreement was found in the social science approach as the most appropriate approach for studying communication in society, using the scientific method, in line with other notions of communication science theory and research (e.g., Chaffee & Berger, 1987; Krcmar et al., 2016).

Strategic communication: Theoretical roots and publication outlets

Strategic communication can be considered a sub-discipline of communication science and so can public relations, communication management, corporate communication and organisational communication. Not much research has been done to find out which theories are used in these subfields, most in the field of public relations. Sallot, Lyon, Acosta-Alzuru, and Jones (2003) conclude that there is no dominant paradigm in public relations, but that since the 1980s scientific publications about theory in public relations has increased to about 25 per cent of the articles published. In their research they did not look at specific theories used in the field. Jelen-Sanchez (2018) concludes from a representative sample of article in four public relations journals that the theoretical development of the field is poor, particularly immature and unsophisticated (see also Jelen, 2008). In research into theories in public relations no reference is made to the paradigm discussion in communication science, although it seems relevant there too. The reason for this might be that public relations and the other subfields of communication and organisations are treated as a separate social scientific discipline. Only 4.5 per cent of the theories used in public relations journals refer to communication theory (Jelen-Sanchez, 2018). Other studies of journal publishing in public relations focus on specialist areas for example the use of methods in public relations research (Pasadeosa, Lammeb, Gowerb, & Tianc, 2011), new media (Duhé, 2015), and evaluation and measurement research (Volk, 2016).

Sallot et al. (2003) studied theory building in public relations in the two most prominent journals of the field at that time *Journal of Public Relations Research* and *Public Relations Review*. One of their recommendations for future research was to include more journals than only those two. In later research other specialist journals were included as well such as *Journal of Communication Management, PR Inquiry* (Jelen-Sanchez, 2018), *Journal of Business Communication, Journal of Business Ethics, Management Communication Quarterly, Corporate Communications: An International Journal, Corporate Reputation Review, Asia Pacific Public Relations Journal, PRism* and *International Journal of Strategic Communication* (Volk, 2016). Overlooking these studies of journal publishing that has been done previously four groups of important scientific journals about communication in the context of organisations can be distinguished. In public relations those are the *Public Relations Review* and the *Journal of Public Relations Research*, focusing on the functionalistic perspectives, media and management of public relations, and the *PR Inquiry* focusing on the socio-cultural and critical perspectives. In organisational communication the *Management Communication Quarterly* and the *Journal of Business Communication* are important, focusing on the internal communication processes and the organisation as a whole. Journals publishing research on the orchestration of communication, the internal and external management and the application of research in practice are *Corporate Communication: An International Journal, Corporate Reputation Review* and *Journal of Communication Management*. Finally, the latest journal, taking the over-arching perspective of strategic communication from organisations is the *International Journal of Strategic Communication*.

Communication science theories

The dominant paradigm of communication science accommodates a modest pluralism of perspectives that is characteristic of postpositive social sciences. This modest pluralism can be justified when it is, amongst others, constrained by empirical success. One dimension of this modest pluralism is so-called within-level pluralism in one social science discipline. This within-level pluralism gives room to competition between different research programs, alternative models of explaining the same phenomena (Dooremalen, De Regt, & Schouten, 2007) and different methods (Vuuren, Aarts, & Stevens, 2014).

Despite the criticism on the dominant paradigm in communication, it has provided the basis for many theories. Communication science can provide an umbrella for the different clusters of scholarship on strategic communication of organizations and enables insights from the most established media effect theories. Many scholars have presented a clustering or classification of communication science theories starting in the 1960s by Lazersfeld and Berelson (1960) until today. A fairly recent example is Potter (2012) who identified the twelve most salient media effect theories, respectively: Cultivation theory, the third person effect, agenda setting theory, the uses and gratifications approach, priming, cognitive capacity theory, framing theory, feminism, social learning, the elaboration likelihood model of information processing, schema theory and the diffusion of innovations theory.

Neuman and Guggenheim (2011) presented a six-stage model of cumulative research in media effects over time. This evolutionary approach is used for a categorization and clustering of communication science theories over the years. It shows the structure of the theoretical evolution of the field, in philosophical terms this is the received history of the field. The first historical stage of media effects theories is called *Persuasion Theories* and runs from 1944 until 1963. It is characterized by direct and unmediated effects based on persuasion and observed behavior. The second stage, ranging from 1944 until 1986 is called the *Active Audience Theories* and is characterized by direct transmission of media messages to individuals, without taking social structure and/or organization into account. The third stage is the *Social Context Theories* stage, running from 1955 to 1983. In this stage situated social contexts and the social position of individuals is taken into account, more than before. In the fourth stage attention is drawn to the societal level (public sphere) and the accumulative

effects of media on the individual level. This stage is called the *Societal and Media Theories* and runs from 1933–1978. The fifth stage, the *Interpretive Effects Theories* stage, from 1972–1987, the emphasis of the theories shifted from media effects to media processing. The last stage is called *New Media Theories* and runs from 1996 until today and focusses on new media technologies and the interactive properties of those technologies.

The categorizations of communication science theories from Potter (2012) and the six-stage model of Neuman and Guggenheim (2011) can be considered the backbone of the development of communication science. To set up a comprehensive framework for studying the application of communication science theories in strategic communication, we supplemented this list with the theories discussed in one of the most comprehensive introductions to the field of communication science by Griffin, Ledbetter, and Sparks (2015). To do so, a list was compiled of the most established media effects theories and general communication theories based on the three sources. The resulting list of 91 communication theories were clustered into three main categories: the (dominant) social science paradigm (1), the interpretative/cultural/critical studies paradigm (2) and the rhetoric paradigm (3). Each theory was categorized into one of the three categories based on the classification in the literature and/or the main features/characteristics of the theory. Its historical categorization depends on when the theory was first introduced. Table 1 shows the theories per cluster.

This framework of communication science theories can be used to study the use of theories in the subfields of strategic communication, public relations, communication management, corporate communication and organisational communication. More specifically, this study asks:

RQ1a: Which theories of communication science are applied in the sub-fields of strategic communication, public relations, communication management, corporate communication, and organizational communication? *RQ1b*: To which theory cluster do they pertain?

RQ2a: In which journals and when were the communication science theories applied?

RQ2b: What was the country affiliation of the authors applying the communication science theories?

RQ3: Which topics, as indicated by co-occurring title words of the articles, were applied in conjunction with which theory clusters?

Method

To gain a large-scale overview of applications of communication science theories in strategic communication, a dictionary-based automated content analysis was performed on a population of journal articles. For a comprehensive selection of research published in the field of strategic communication, we looked at the journals in the sub-fields PR/public relations, business communication, corporate reputation, strategic communication and communication management, which resulted in a list of ten journals: *Public Relations Review, Journal of PR Research, Management Communication Quarterly, Journal of Business Communication, Corporate Communications: An International Journal, Corporate Reputation Review, International Journal of Strategic Communication, Journal of Communication Management, PR Inquiry*, and *International Journal of Business Communication*. For the selection of the journals, we followed earlier research and especially the research from Sallot et al. (2003), Jelen (2008), Jelen-Sanchez (2018), and Volk (2016). These ten journals can be considered as the core publication channels for scientific research in the field of communication in the context of organisations. In scientometrics, the field that studies the development of the sciences, journal articles commonly provide a "proxy" for the longitudinal development of research fields (Milojević, Sugimoto, Yan, & Ding, 2011). Books are less suitable for a longitudinal analysis mainly because they are published less frequently than journal articles. Four of the ten journals, *Public Relations Review, Journal of Public Relations Research, Management*

Table 1. Clusters of communication theories.

Category	Theories
I. Social Science Theories	
1. Persuasion theories	
(1944 until 1963)	Laswell linear model
	Persuasion/attitude change
	Social learning
	Shannon linear model
after 1963	Cognitive dissonance theory*
	Orientations stimulus-orientations response model *
	Reasoned action theory *
	Reception gap theory *
2. Active Audience Theories	Attribution theory
(1944 until 1986)	Disposition theory
	Elaboration likelihood model
	Media dependency theory
	Minimal effects
	Parasocial theory
	Protection motivation theory *
	Selective exposure
	Uses & Gratifications
after 1986	Cognitive capacity theory *
	Heuristic systematic model of information processing *
	Prospect theory *
3. Social Context Theories	Diffusion theory
(1955– 1983)	Knowledge gap
	Social identity theory
	Social network/social capital
	Spiral of silence
	Third person effect theory
	Two step flow
after 1983	Functional perspective on group decision making *
	Health Belief Model
	Reinforcing spiral model *
	Social cognitive theory (of mass communication)*
	Social judgement theory *
	Theory of normative social behavior *
	Theory of planned behavior *
	Theory of reasoned action*
4. Societal & Media Theories	Cultivation theory
(1933–1978)	Differential media exposure
	Media hegemony/public sphere
	Social construction of reality
	Source credibility and source attractiveness model *
	Uncertainty reduction theory *
after 1978	Entertainment theory *
	Media richness theory *
	Media Practice Model *
	Neoassociationist model and other accounts of media priming *
	News value theory *
5. Interpretive Effects Theories	Agenda setting theory
(1972–1987)	Priming
	Framing theory
	Gatekeeping theory *
After 1987	Mediatization *
6. New Media Theories	Computer mediated communication
(1996 – today)	Expectancy violations theory *
	Hyperpersonal model of computer mediated communication *
	Limited capacity model (of motivated mediated message processing) *
	Social information Processing theory *
7. Other theories *	Communication accommodation theory *
	Co-orientation theory *
	General aggression model *
	Group communication *

(Continued)

Table 1. (Continued).

Category	Theories
	Inoculation theory *
	Lineation theory *
	Models of narrative engagement *
	Relationship development and maintenance *
	Schema theory *
	Social penetration theory *
II. Interpretive/cultural/critical studies	
	Communication privacy management
	Communicative Action Theory *
	Communicative constitution of organizations
	Coordinated management of meaning
	Dialogue theory *
	Face-negotiation theory *
	Genderlect styles
	Image restauration theory *
	Issue-attention cycle *
	Media ecology
	Media logic *
	Muted group theory
	Narrative paradigm
	Relational dialectics
	Speech act theory *
	Speech codes theory
	Standpoint theory
	Symbolic convergence theory
	Symbolic interactionism*
	The interactional view
III. Rhetoric	
	Argumentation theory *
	Discourse ethics *
	Rhetorical approach

*Added to the original categorization by the authors.

Communication Quarterly and *Journal of Business Communication* have a ranking in the International Science Index (ISI) of the communication discipline. The other six do not have such a ranking but are listed in other databases.

We gathered information of all articles published in these journals for the last 20 years (January 1st 1997 until December 31st 2017). In this time frame, the study of strategic communication flourished with two newly founded journals in 1996 (*Journal of Communication Management* and *Corporate Communications: An International Journal*) and with the most recent additions the International *Journal of Strategic Communication* in 2007 and *Public Relations Inquiry* in 2012. The data were extracted using journal databases such as Scopus and EBSCO, website scraping with the help of the university library, and manual extraction if all other means were not successful. Editorials, introductions to special issues, and corrections where excluded, such that the final sample consisted of N = 4,027 research and review articles.

To map which communication theories were used in strategic communication (RQ1a, b), the title, abstract, keywords, and author-supplied keywords were analyzed using automated content analysis with a Python code (for description, see below). Thereby, the 4,027 articles were automatically scanned for mentioning of one or more of the 91 theories. The underlying assumption was that authors would state the main theory or theories of reference used either in title, abstract, or keywords. For the automated content analysis, a dictionary was built in which for each theory related synonyms were defined. We aimed to generate exhaustive lists of synonyms based on our literature review on communication theories as well as an initial manual search of the full sample. For agenda setting theory, for instance, this resulted in the synonyms "agenda setting," "agenda-setting," "agenda-building," and "agenda building." Another example was: "issue-attention cycles," "issue cycle," "attention cycle," "issue-cycle," and "attention-cycle." We opted for an inclusive

dictionary, where whenever possible generic terms like "theory," "model," or "concept" did not have to be mentioned. Hence, key words, such as "diffusion of innovation" or "framing" resulted in a hit. To check for content validity, a random sample of 10% (*n* = 335) of all articles that were excluded from the sample based on the initial dictionary were manually checked by the author team to validate their exclusion. Based on a careful reading of the title, abstract, introduction, and theoretical framework or literature review of these articles, 91% were found to be correctly classified in the sense that none of the listed theories were discussed. The dictionary was further adjusted based on the remaining articles by including missing theories, for instance, media richness theory or expectancy violations theory, as well as extending the lists of synonyms in a few cases. As a next check, three coders independently looked at a sub-sample of about 10% (*n* = 102) of the articles that were selected based on the dictionary search and validated whether the theory was actually mentioned and also assessed how it was used within the article. In two coding consensus sessions, issues were discussed, the theory list refined, and the dictionary revised. During this check we identified a number of terms, such as "argumentation," "cultivation," "dialogue," or "narrative" that were not always related to the corresponding theory. Therefore, these specific lists were further restricted for the final analysis by only including explicit references to "theory," such as "argumentation theory" and "argumentative theory" or "dialogue theory" and "dialogic theory."

To see where and when these theories were used, we also automatically analyzed outlets and publication years of the articles. For authors' geographical affiliations (RQ2b), a student assistant extracted the country of origin of the institution of the first author by hand for all publications that contained at least one reference to one of the theories.

To answer research question three, we focused on mapping the co-occurring title words in the articles. Title words are used for the analysis of the cognitive structure of the sciences (Callon, Courtial, Turner, & Bauin, 1983). Article title words are suitable for the analysis because they are highly codified within the research fields, and provide a reliable view of the longitudinal development of science (Leydesdorff, 1989; Milojević et al., 2011). We use co-occurring title words to identify topics associated with the most prominent theories. The analysis of the main topics is based on co-occurring title words that were extracted and visualized using a semantic network approach in VoSViewer (http://www.vosviewer.com/) (Van Eck & Waltman, 2007). The resulting data were analyzed descriptively as reported below.

Findings

Occurrence of communication science theories

From the 4,027 articles, the vast majority (79.3%) did not include references to one of the theories that were identified as relevant for the broader field of communication science. In 18.1% of all cases, one theory was found and 2.4% of the articles used two theories. Only very few cases (<1%) were found that included three (10 articles) or even four (1 article) different theories. Among these, rhetorics, social capital, and social network theory occurred most often, followed by relationship development and cultivation theory. In total, 954 individual references to theories were found in 835 articles. Out of the 91 theories, 60 occurred at least once in an article. The most prominent theories were rhetorics (n = 175), framing theory (n = 126), relationship development (n = 99), social network theory (n = 78), and agenda setting (n = 54). Table A presents the appearance of all theories also including the ones not mentioned at all.

As a second step, we compared the occurrence of communication theories on the level of the three paradigms that were identified above. Dummy variables were constructed for each theory cluster which allowed to take references to more than one theory per article into account. Simple frequencies shown in Table 2 revealed that the group of interpretative effect theories (e.g., agenda setting, framing, priming as labelled by Neuman & Guggenheim, 2011) was most prominent, followed by rhetoric, social context theories, and interpretive/cultural/critical studies.

Table 2. Distributions theory references per paradigm and theory cluster.

Paradigm	Theory cluster	Frequency	% of theory references	1997-2002	2003-2007	2008-2012	2013-2017
I. Social Science Theories		613	65.9	47	90	197	279
	Interpretive Effects Theories	197	21.2	13	24	66	94
	Social Context Theories	151	16.2	8	11	49	83
	Other theories	133	14.3	14	29	39	51
	Societal & Media Theories	85	9.1	11	20	27	27
	Active Audience Theories	30	3.2	0	4	10	16
	New Media Theories	11	1.2	1	2	4	4
	Persuasion theories	6	0.6	0	0	2	4
II. Interpretive/cultural/critical studies							
	Interpretive/cultural/critical studies	141	15.2	17	24	48	52
III. Rhetoric							
	Rhetoric	176	18.9	29	39	62	46
Total		930	100.0	93	153	307	377

N = 835 journal articles with at least one theory reference.

Developments over time

Importantly, the rank order of the top four does not reveal a clearly dominant paradigm as two groups belong to the dominant paradigm and one to the interpretive paradigm and one to rhetoric. However, the rank order of all clusters reveals a majority of theories from the dominant paradigm (n = 613; 66%) whereas 19% of the theories used stem from rhetoric and 15% from the interpretive/cultural/critical paradigm in communication.

Over the twenty years of our research period, we found an overall increase of publications per year with 131 articles published in 1997 and 291 in 2017 (Figure 1). This corresponded to an increase of articles that mentioned at least one communication theory from 11 in 1997 to 73 in 2017. The ratio of publications with theories and the total amount of publications controls for the overall increase of publication – and at the same time also for the journals that did not cover the entire research period. The corresponding percentage scores, again, indicated an increasing use of communication theories over the years with 8.4% in 1997 and 25.1% in 2017. However, Figure 1 also depicts considerable fluctuations in these percentage scores. A remarkable peak, for instance, could be identified for the year 2010 with 30.5% of journal articles that referred to at least one theory. These variations were also reflected by the occurrence of individual theory clusters over time (Table A1 and Table 2).

Looking at these developments in terms of the three paradigms confirms this shift in prominence over time (see Table 2 and Figure 2). While all three paradigms were on a comparable level in the
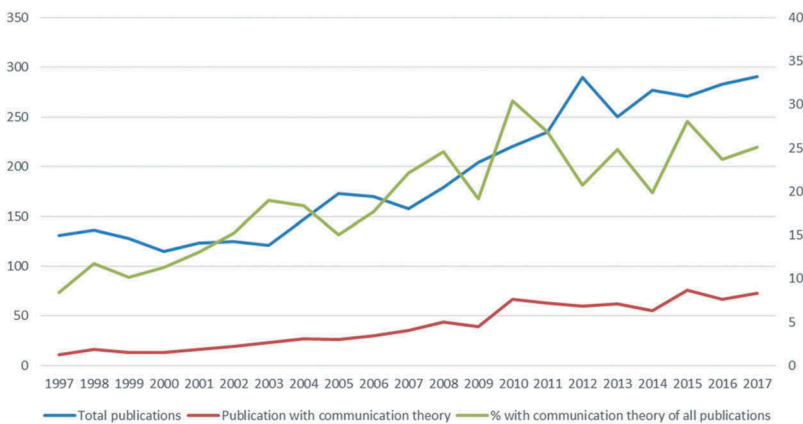

Figure 1. Number of publications using communication science theories over time.
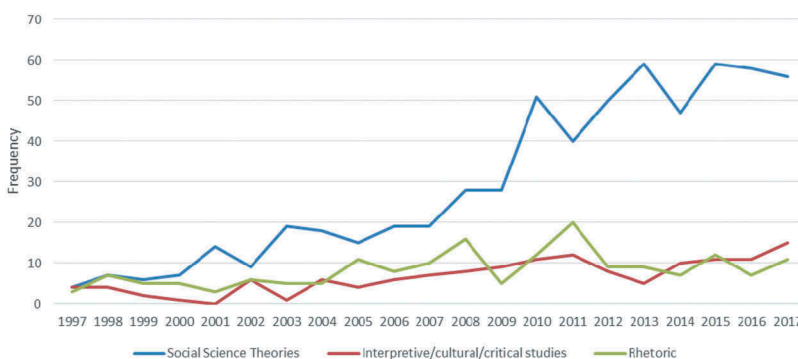
Figure 2. Variations of paradigms over time.

late 1990s, we can see a clear rise of social science theories after 2000. This continued trend led to a clear prevalence of this paradigm at the end of our research period.

Differences across journals

Table 3 presents the overall number of articles per journal and the frequency of published articles with theory references per journal – over the entire research period as well as in 5–6 year intervals. The journals whose articles relatively used most communication theories were *Journal of Business Communication* (30%), *Management Communication Quarterly* (28.3%), and *International Journal of Strategic Communication* (26.4%). However, looking at the development of the proportion of theory references per journal over time revealed considerable changes. While initially having a relatively low share of theory references, the *Journal of Communication Management* showed the highest percentage of references from 2013–2017 (31%). *Management Communication Quarterly*, in contrast, scored highest from 2008 to 2012 with 41% but this period was followed by a decrease to about 28% from 2013 to 2017.

The distribution of references to different paradigms across journals (Table 4) revealed that in most journals, references to social science theories prevailed, which confirms the dominance of the paradigm also in strategic communication. Exceptions are *Management Communication Quarterly* that showed the most balanced distribution across paradigms – looking at the absolute numbers – and the *Journal of Business Communication*, with a relatively high share of rhetorical studies. Both focus on internal communication processes or organizational communication, rather than external communication, possibly pointing to a more multiparadigmatic perspective in this subfield. Moreover, in *Public Relations Inquiry*, the difference between social science theories and rhetorics was smaller compared to other journals, which confirms its orientation toward more socio-cultural and critical scholarship. *Public Relations Review* published the largest share of articles linked to interpretative (38.3%) and rhetoric articles (26.7%). However, with 43.7%, *Public Relations Review* also published the greatest share of articles with a social science reference. Thus, despite being known for a rather functionalist and management perspective, the journal showed quite some diversity in theoretical approaches.

Origin of communication science publications

Overall, the greatest share of articles that had at least one references to one of the communication theories originated from a first author who was affiliated to an institution in North America (62.6%), followed by Europe (24.1%). Affiliations from Asia (8.4%), Oceania (4.4%), and Africa (0.5%) occurred considerably less often while no first authors from South America were present.

Table 3. Overall frequency and percentage of articles with reference to communication theory per journal per year.

Journal	Total number of articles	Articles with theories	% of articles	1997-2002 (%)	2003-2007 (%)	2008-2012 (%)	2013-2017 (%)
Public Relations Review	1,439	335	23.3	15.2	18.8	26.9	25.1
Management Communication Quarterly	367	104	28.3	13.8	29.5	40.6	27.7
Journal of Communication Management	533	95	17.8	7.5	15.6	23.9	31.2
Journal of Public Relations Research	357	73	20.4	18.4	16.7	17.2	27.9
Journal of Business Communication	295	64	21.7	15.7	27.1	25.3	19.2
Corporate Communications	548	62	11.3	4.2	10.0	15.9	15.3
International Journal of Strategic Communication	159	42	26.4			24.5	27.3
Public Relations Inquiry	94	23	24.5			31.3	23.1
Corporate Reputation Review	175	19	10.9			8.6	12.8
International Journal of Business Communication	60	18	30.0				30.0
Average %			21.5	12.5	19.6	23.8	24.0
Total frequencies	4,027	835		88	141	273	333

Table 4. Percentage (and absolute number) of articles per paradigm and journal.

Journal	Social science theories	Interpret./cultural/ critical	Rhetorics
Corporate Communications	7.2% (44)	5.7% (8)	9.7% (17)
Corporate Reputation Review	3.3% (20)	0.0% (0)	0.6% (1)
International Journal of Business Communication	1.8% (11)	3.5% (5)	1.7% (3)
International Journal of Strategic Communication	5.5% (34)	5.7% (8)	4.0% (7)
Journal of Business Communication	6.0% (37)	6.4% (9)	15.9% (28)
Journal of Communication Management	13.4% (82)	4.3% (6)	10.8% (19)
Journal of Public Relations Research	9.5% (58)	4.3% (6)	8.5% (15)
Management Communication Quarterly	6.9% (42)	29.8% (42)	17.6% (31)
Public Relations Inquiry	2.8% (17)	2.1% (3)	4.5% (8)
Public Relations Review	43.7% (268)	38.3% (54)	26.7% (47)
Total	100.0% (613)	100.0% (141)	100.0% (176)

Discerning the three paradigms revealed that social science theories were the most dominant paradigm over all five present continents (Figure 3). Although highest in absolute numbers, the relative share of social science theories was lowest for North America with 61.4%, compared to 73-74% for Europe, Asia, and Oceania. Whereas the two other paradigms were about equally
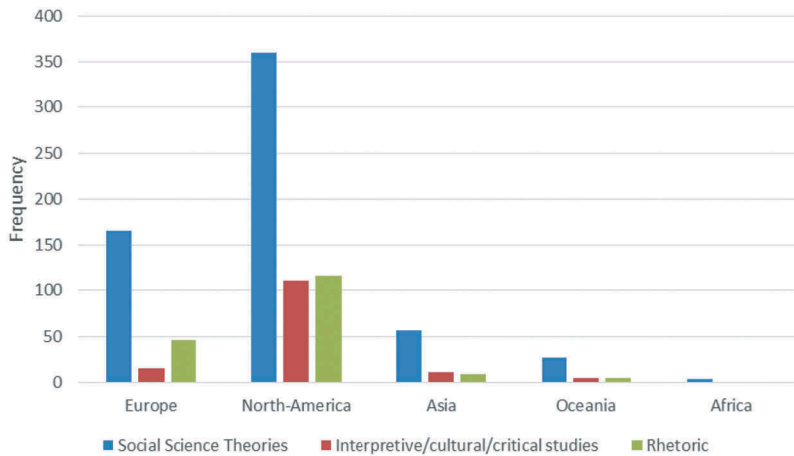
Figure 3. Origin of publications based on first-author affiliation per paradigm.

represented in articles stemming from North America, Asia, and Oceania, the interpretative paradigm had a considerably lower share in European publications (6.6%) compared to rhetoric (20.3%).

Theories and topics

To explore how the use of theories is associated with specific research topics, we performed a semantic network analysis of the terms (single words or multi-word phrases) used in the article titles. For the clustering of the co-occurring words, we used the Newman community detection algorithm that is available in VosViewer. The term frequencies used for each of the three paradigms are presented in Appendix B. We show the semantic networks below (Figure 4–6). Using title words and phrases as a representation of topics, allowed us to compare how the most frequently used words, such as 'public relations,' 'strategy,' and 'crisis communication' differed across the three paradigms.

The dominant paradigm of social science theories consisted of heterogeneous sub-topics, mainly related to public relations (red cluster on the left-hand side), crisis communication (blue cluster on the top), and communication strategy (in the center). Agenda-building theories were connected to the analysis of media coverage and influence (yellow cluster on the right-hand side). In line with the quantitative approach, words such as 'model' and 'influence' were frequently used in the article titles (Figure 4).

In contrast to the large number of unique title words in the articles categorized as the dominant paradigm, articles following the interpretive paradigm used a more codified set of title words. The main sub-topics here focused on organizations with regard to public relations and communication strategy. These articles took the perspective of issues related to power and impact (red cluster on the upper left-hand side). The second prominent sub-topic focused on crisis communication, in relation to communicative action, perception, and crisis events (blue cluster on the right-hand side). The third frequent sub-topic applied image restoration theory, mainly from the perspective of employees, as well as corporate social responsibility/CSR (green cluster lower left-hand side) (Figure 5).

Similar to the interpretive approach, articles referring to rhetoric theories used a smaller set of title words in the articles. In particular, there were three prominent sub-topics surrounding the terms public relations, strategy, and rhetoric (Figure 6). Within this paradigm, rhetoric was connected to power, agency, and symmetry (red cluster upper left-hand side). Public relation, in turn, was linked to organizational rhetoric and specific cases of terrorism (green cluster in lower left-hand side).
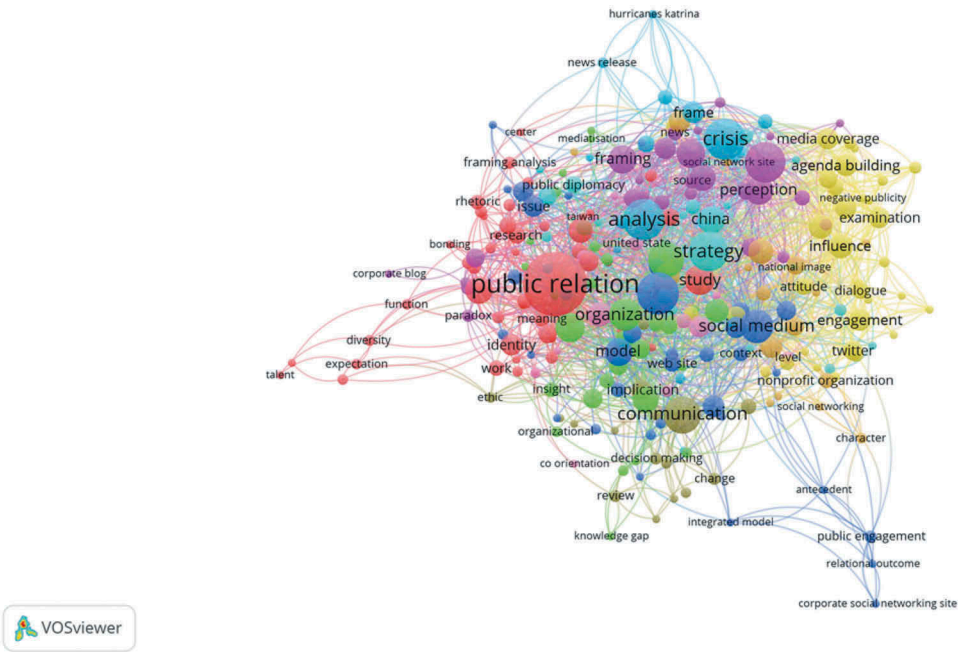
Figure 4. The 272 co-occurring title words, used twice or more often, in the 613 articles on the dominant paradigm of "social science theories".

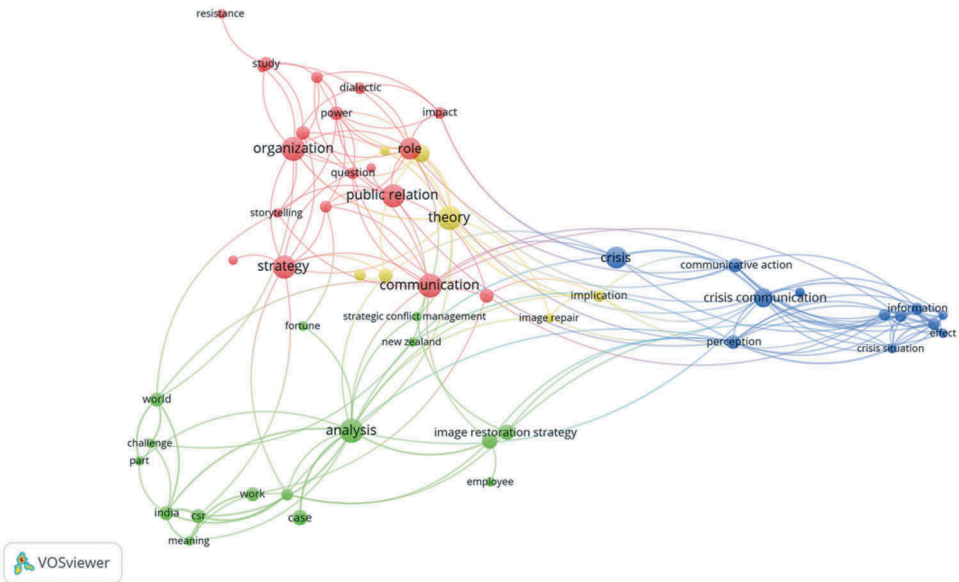**Figure 5.** The 56 co-occurring title words, used twice or more often, in the 141 articles in "interpretive/ cultural studies/ critical studies approach".

Finally, strategy connected the sub-topic of crisis, time, case, and culture (lower right-hand side). Interestingly, research into crisis communication formed a separate cluster of studies with a specific focus on theory (upper right-hand side).
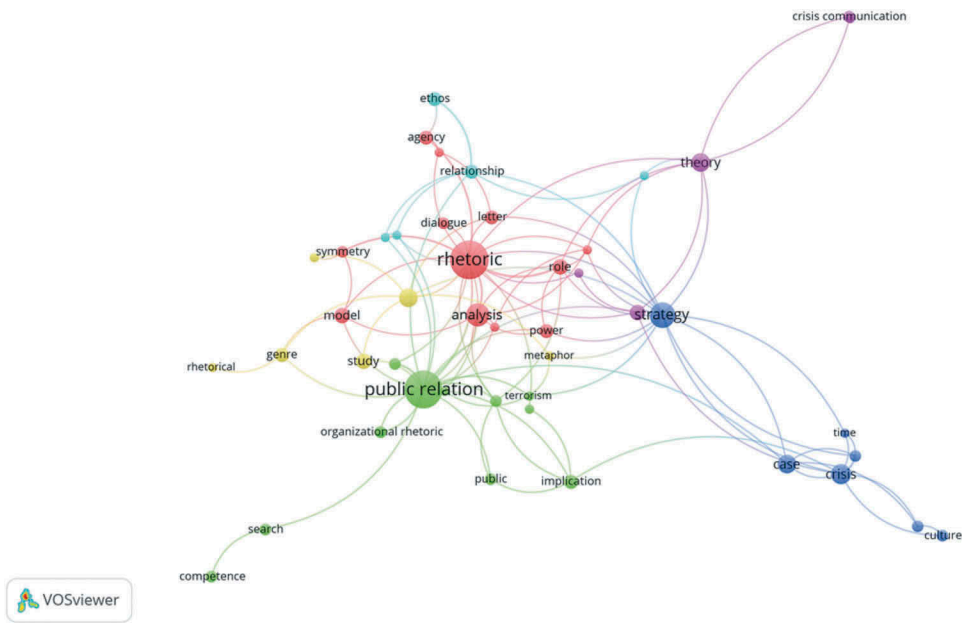
Figure 6. The 47 title words co-occuring twice or more often in the 176 articles on "rhetorics".

In summary, in all three paradigms, the most prominent title words were 'public relation,' 'strategy,' and 'crisis communication.' These three topics, however, were linked to paradigm-specific perspectives. Within the dominant paradigm, public relations was connected to meaning, identity, and work, whereas in the interpretive approach public relations co-occurred with organization and strategy. Finally, in the rhetoric paradigm, public relations was linked to organizational rhetorics and implications. In both the dominant paradigm and rhetoric, strategy was connected to crises, and further to frame (dominant paradigm), and culture (rhetoric). In contrast, for the interpretive approach, strategy and public relations co-occurred in the article titles, whereas research into crises and a communicative action perspective co-occurred.

Discussion: toward a strong communication perspective on strategic communication

Strategic communication, like communication science, is an integrative discipline (Kunczik & Zipfel, 2005, p. 20; Dühring, 2015) that imports approaches and theories from neighboring fields. Authors in this sample have been importing theories from management and organization theory (e.g., organizational change, Lewis, Hamel, & Richardson, 2001), sociology (e.g., structuration theory, Falkheimer, 2007), or psychology (e.g., psychographics, DeSanto, 2000), illustrating the field's roots in social theory (Ihlen & Frederiksson, 2018). At the same time, references to communication science theories of the three paradigms (social scientific, interpretative, and rhetorical) have been increasing. Overall, although only used in 21% of the articles, the application of communication theories in the field of strategic communication has risen between 1997 and 2017. This is more than the 4.5 per cent that Jelen-Sanchez (2018) found, which can be explained by the smaller number of journals in that study. The social science paradigm in particular has become stronger, leading in absolute numbers by the end of the sampling period. However, this change has only occurred in the last decade: the number one position of rhetoric was taken over by effect theories in the period 2008–2012. Moreover, social context theories (such as social network analysis) have become more prominent, now in second position followed by interpretive theories (specifically, framing or agenda setting) and other theories from the dominant paradigm. Against the backdrop of the debate between Lang (2013a) and Perloff (2013) about the state of

communication science, we can conclude that strategic communication scholars see potential for the social science approach in the mass communication and media effects paradigm (as Lang labeled the dominant paradigm). Although communication theory is only used in a small part of the studies, the number of studies within the social science paradigm has risen since 2008 and is now the biggest group. The relative use of interpretative/cultural/critical communication theories from the culture and communication paradigm (Lang, 2013a) has been decreasing.

Going "back to the roots" of communication theories in strategic communication can help generate new insights to our field, by focusing on communicative variables as causal or functional explanatory variables (Pavitt, 2010) and by analyzing strategic communication phenomena from micro, meso-, and macro levels. This is in line with the central perspective in strategic communication scholarship (and practice) that communication is the primary way to create meaning when building relationships (van Ruler, 2016, 2018; van Ruler & Verčič, 2005). By using established and developing new communication science theories in the field, the "underrated pillar" of communication (van Ruler, 2018, p. 367) can be strengthened. Fostering communication science theories over other social science perspectives can re-enforce the position of strategic communication as a sub-discipline of the multi-paradigmatic field of communication science and thus allow for spill-overs to other research areas in communication. A central position of communication can also be a step into the direction of connecting with the new cognitive and psychological paradigm of mass communication that Lang (2013a) described. Communication is then considered an adaptive property of human evolution. This also matches Nothhaft proposal for a research framework for strategic communication that follows the standard social sciences model (Nothhaft, 2016).

Multi-paradigmatic research based on communication science theory includes approaches from all three paradigms. Thus, the value of a communication science perspective for strategic communication is that it allows for modest, within-level pluralism, modest in the sense that the research is always empirical (Dooremalen et al., 2007). A focus on communication science theories bears the potential to fuel strategic communication research with robust theoretical insight and to overcome relativism and subjectivity with a qualitative and quantitative social sciences model (Nothhaft, 2016). This might also help strategic communication become more relevant outside of its narrow peer group. Some claim that strategic communication moves toward postdisciplinarity and occupies a "no-man's land between different disciplinary fields" (Dühring, 2015, p. 6). Eventually, a strategic communication contribution to neighboring fields may spring from incorporating communication theories and applying them to organizational communication phenomena, in particular in a mediated, digital communication context. Here, exploring the potential of underused communication theories in strategic communication can result fruitful. For example, models and measures of narrative engagement (e.g., Busselle & Bilandzic, 2009) could help explain social movements and the new formation of organizations such as the Occupy movement or #metoo followership and predict the impact of such digitally infused organizations on public debate, for instance in combination with an agenda-setting perspective (Carroll & McCombs, 2003). Argumentation theory (e.g., Walton, 2007) can provide insights into the frame-building process to understand how and why frames are being selected and built by organizational actors, for instance in news rooms or in civil society organizations' lobbying efforts. Taking another example, the hyperpersonal model of computer-mediated communication (Walther, 1996) can – in its assumptions of hyperpersonality – be regarded as close to conceptions of organizations as persons with a character (Davies, Chun, Da Silva, & Roper, 2004) and related corporate reputation models (Chun, 2005) and thus aid in the development of a communication-based perspective on reputation formation in the digital environment. In a similar vein, CSR communication can benefit from further applications of framing theory (e.g., Wong & Danesh, 2017), for instance, using quantitative content analysis, to outline paradoxes relating to controversial industries and social responsibility. Finally, public relations evaluation research can incorporate insights from effect studies on online crisis response strategies (e.g., Kim & Park, 2017).

As evident from our findings, strategic communication researchers have been making use of diverse communication theory approaches. The field's publication outlets also accept a variety of theoretical approaches therewith reflecting the within-level pluralism of the field (Dooremalen et al., 2007). Most diverse theories were presented in *Public Relations Review* (in terms of absolute numbers) and *Management Communication Quarterly* (in terms of overall balance across paradigms). However, *Public Relations Review* has a higher overall output with five issues per year and "research-in-brief" articles. Thus, the highest ranked journals for the functionalist and management perspective in strategic communication and for organizational communication also offer the broadest range of theoretical perspectives. This illustrates how within-level pluralism, as a defining quality of communication science theories, can help foster multiparadigmatic research also in strategic communication. Researchers in strategic communication can publish all sorts of communication theory approaches in the field's journals, which indicates that a broad discourse is taking place.

Less diverse are the institutional backgrounds of researchers publishing in strategic communication journals. We see a clear dominance of Western (North American and European) countries of origins, with entire continents such as South America institutionally not represented. The social science paradigm is leading in this Western perspective, and interpretative approaches are underrepresented in research from European institutions. Such a lack of diversity comes with certain pitfalls: theoretically, the developed concepts and models apply to and are based on a Western context. Thus, empirically, it is questionable whether they can be validly tested in other cultures. Furthermore, different cultural angles can prove fruitful for the understanding of strategic communication processes in the Western hemisphere, or for Western organisations communicating with non-Western markets. However, institutional affiliation might not be the sole indicator of diversity in researchers' backgrounds, as many communication scientists do not work at institutions in their country of origin.

Striving for the highest possible degree of within-level pluralism – from the micro "everything is communication" CCO perspective to the macro "society is only communication" perspective and all that's in between – within the field of strategic communication will help to create synthesis and strengthen the position of the field, both academically and in practice. A strong and clear disciplinary basis does not prevent doing interdisciplinary research, on the contrary, it will help to focus on the communicative side of phenomena. It can strengthen the input and the voice of strategic communication scholars in interdisciplinary research and context.

When it comes to the thematic context in which communication science theories are used, we generally observe that prominent topics such as public relations, communication strategy, and crisis communication are researched from all three theoretical paradigms, each with their specific angle to these broad topics, and thus with qualitative as well as quantitative social science methods. This shows the theoretical and methodical pluralism with which some strategic communication topics are researched, such as crisis communication that is studied from a framing as well as rhetorical angle. While such a multi-paradigmatic approach helps gain a pluralistic understanding of social phenomena, there are major themes such as media relations that are looked at more monolithically from an agenda-building/setting perspective and regarding traditional (news) media. More generally, however, dominant topics also hinder niche topics from getting published, which potentially narrows strategic communication's field of vision. Such mechanisms can be – and are – overcome by special issues on new or niche phenomena such as strategic communication in public sector organizations (volume 10, issue 3 in this journal).

Limitations

The biggest limitation of this study comes with the fact that we only considered journal publications within a defined set of ten journals from the field. Despite the fact that these outlets can certainly be regarded as main journals for strategic communication, researchers in the community continue publishing relevant research in handbooks, monographs, or as conference publications, all of which could not find entrance in our data set, because of their very limited availability in digitally searchable databases.

Another reservation comes with the focus on titles, abstracts, and keywords as the sources where to find references to theories. The underlying assumption is that authors might regard the theoretical frame of their research paper as important enough to be stated in either of these parts of an article, which can also be seen in the use of structured abstracts by some journals. However, authors might not include their theory of reference for various reasons such as personal taste or style. Thus, our analysis is limited to articles that make a clear theory reference and – as we would assume – thus also regard the use of this theory as substantial. This limitation extends to the use of title words as a representation of topics. Article titles may be subject to changes in the style of publication titles. In addition, different journals prefer different styles and allow a maximum number of title words. Despite these shortcomings, the topical analysis based on the article title words provided insights into the most frequently used topics and their inter-connections across the three paradigms.

This research lays the foundation for further exploration of the networks of that produce the different communication approaches to strategic communication. Questions like who used the theories and in what kind of institutional contexts they work are questions for further research. Moreover, research into nominations of new editorial boards and related changes in publishing trends would be interesting to pursue. Similarly, our approach did not capture in which way the theories are used within the articles, even though a distinction between empirical or empirical-analytical articles and conceptual or essayistic articles is of significance for the development of the field (Nothhaft, 2016). A narrower and more in-depth content analysis can certainly reveal more fine-grained results in terms of qualitative versus quantitative or conceptual studies. Last, since the majority of articles did not apply communication science theories, future research could investigate which theories were used by the authors, for instance, with a focus on other social theories (Ihlen & Frederiksson, 2018), following the approach outlined in this paper.

Conclusions

To gain an overview of which communication theories have been used in strategic communication and describe their development and institutionalization in the sub-field over time, we looked at 20 years of journal publications in ten strategic communication journals. Despite being a sub-discipline of communication science (van Ruler, 2018), the vast majority of articles did not refer to a communication science theory. We propose that developing a strong communication perspective rooted in communication science can strengthen the field of strategic communication and its academic and societal relevance. Whether more use of communication theories also aids in maturation of the field – as some claim that strategic communication is still not a mature discipline (Sisco et al., 2011) – or leads to more incremental research, lies in the hand of strategic communication researchers. Similarly, the question whether strategic communication can fuel other (communication) sub-disciplines with knowledge, theories, and insights does not only depend on the use of a specific set of theories. But an orientation toward an empirical basis for theory development rooted in communication science can mark a beginning for generating more insights beyond the common sense (Nothhaft et al., 2018), and possibly facilitate a stronger position in interdisciplinary research and export of theoretical results to other social sciences.

Disclosure statement

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Appendix

Table A: Distribution per communication theory.

Rank	Theory	Overall	1997–2002	2003–2007	2008–2012	2013–2017
1	Rhetorics	175	29	38	62	46
2	Framing theory	126	6	18	46	56
3	Relationship Development	99	11	20	30	38
4	Social network	78	1	4	26	47
5	Agenda setting theory	54	5	5	19	25
6	Social construction of reality	41	4	9	18	10
7	Social capital	39	1	3	14	21
8	Image restoration theory	37	5	8	19	5
9	Relational Dialectics	27	2	7	9	9
10	Co-orientation	19	2	7	4	6
11	Communicative Action Theory	17	3	3	7	4
12	Communicative Constitution of Organizations	16	0	2	2	12
13	Public sphere	16	2	2	4	8
14	Dialogue theory	14	1	1	5	7
15	Attribution theory	12	0	3	5	4
16	Mediatization	12	1	0	1	10
17	Source credibility and source attractiveness model	12	2	1	3	6
18	Diffusion of innovation model	9	1	2	4	2
19	Media richness theory	9	1	4	3	1
20	Speech act theory	9	3	1	0	5
21	Computer-mediated communication	8	1	2	3	2
22	Gatekeeping	8	1	1	2	4
23	Social identity theory	8	1	0	2	5
24	Group Communication	6	0	1	2	3
25	Inoculation theory	6	0	1	2	3
26	Narrative Paradigm	6	2	1	2	1
27	Parasocial theory	6	0	0	0	6
28	Priming theory	6	0	2	2	2
29	Social cognitive theory (of mass communication)	6	1	0	1	4
30	Knowledge gap theory	5	1	1	1	2
31	News value theory	5	1	3	0	1
32	Elaboration likelihood model	4	0	1	0	3
33	Genderlect Styles	4	0	0	2	2
34	Media logic	4	0	0	0	4
35	Symbolic Convergence Theory	4	1	1	0	2
36	Uses and gratifications theory	4	0	0	1	3
37	Functional Perspective on Group Decision Making	3	1	0	1	1
38	Media dependency	3	0	0	2	1
39	Reasoned action approach	3	0	0	1	2
40	Symbolic Interactionism	3	1	1	1	0
41	Theory of reasoned action	3	0	0	1	2
42	Uncertainty Reduction Theory	3	1	1	0	1
43	Cognitive dissonance theory	2	0	0	1	1
44	Communication Accommodation Theory	2	0	0	2	0
45	Communication Privacy Management Theory	2	0	1	0	1
46	Expectancy Violations Theory	2	0	0	0	2
47	Schema theory	2	1	1	0	0
48	Theory of planned behavior	2	0	0	0	0
49	Third person effect	2	1	0	0	1
50	Cultivation theory	1	0	0	0	1
51	Discourse ethics	1	0	1	0	0
52	Lineation Theory	1	0	0	0	1
53	Minimal effects	1	0	0	1	0
54	Muted Group Theory	1	1	0	0	0
55	Prospect theory	1	0	0	1	0
56	Social Information Processing Theory	1	0	0	1	0
57	Social Judgment Theory	1	0	1	0	0

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Rank	Theory	Overall	1997-2002	2003-2007	2008-2012	2013-2017
58	Social learning	1	0	0	0	1
59	Spiral of silence	1	0	0	0	1
60	Standpoint Theory	1	0	0	1	0
61	Argumentation theory	0	0	0	0	0
62	Cognitive capacity theory	0	0	0	0	0
63	Coordinated Management of Meaning	0	0	0	0	0
64	Differential media exposure	0	0	0	0	0
65	Disposition theory	0	0	0	0	0
66	Entertainment theory	0	0	0	0	0
67	Face-Negotiation Theory	0	0	0	0	0
68	General aggression model	0	0	0	0	0
69	Health belief model	0	0	0	0	0
70	Heuristic-systematic model of information processing	0	0	0	0	0
71	Hyperpersonal model of computer-mediated communication	0	0	0	0	0
72	Interactional View	0	0	0	0	0
73	Issue-attention cycles	0	0	0	0	0
74	Lasswell linear model	0	0	0	0	0
75	Limited Capacity Model (of Motivated Mediated Message Processing)	0	0	0	0	0
76	Media Ecology	0	0	0	0	0
77	Media hegemony	0	0	0	0	0
78	Media Practice Model	0	0	0	0	0
79	Models of narrative engagement	0	0	0	0	0
80	Neoassociationist Model and other accounts of Media Priming	0	0	0	0	0
81	Orientations-Stimulus-Orientations-Response Model	0	0	0	0	0
82	Persuasion/attitude change	0	0	0	0	0
83	Protection motivation theory	0	0	0	0	0
84	Reception gap theory	0	0	0	0	0
85	Reinforcing Spiral Model	0	0	0	0	0
86	Selective Exposure Theory	0	0	0	0	0
87	Shannon linear model	0	0	0	0	0
88	Social Penetration Theory	0	0	0	0	0
89	Speech Codes Theory	0	0	0	0	0
90	Theory of normative social behavior	0	0	0	0	0
91	Two-step flow theory	0	0	0	0	0
	Total	954	95	158	314	387

Table B: Term frequencies per paradigm.

RHETORICS	n	RELATIONSHIP DEVELOPMENT	n	SOCIAL NETWORKS	n	FRAMING	n	AGENDA-SETTING	n
term	*n*	*term*	*n*	*term*	*n*	*term*	*n*	*term*	*n*
rhetoric	26	relationship	26	social medium	20	crisis	10	agenda building	11
public relation	25	public relation	25	company	14	framing	6	agenda	8
strategy	12	relationship building	12	facebook	10	public relation	6	media coverage	6
analysis	10	**strategy**	10	public relation	10	analysis	6	public opinion	5
crisis	8	**communication**	8	social networking site	8	effect	6	public relation	5
case	7	organization public relationship	7	study	8	frame	6	role	5
communication	7	public	7	nonprofit organization	6	discourse	5	agenda setting	4
theory	7	role	7	stakeholder	6	organization	5	analysis	4
model	5	analysis	5	twitter	5	perception	5	corporate reputation	4
persuasion	5	dialogue	5	analysis	5	public	4	medium	4
role	5	leadership	5	china	5	response	4	news medium	4
study	5	web site	5	crisis	5	study	4	examination	3
agency	4	china	4	relationship	4	**crisis communication**	4	influence	3
csr	4	company	4	role	4	framing analysis	4	media	3
ethos	4	fortune	4	fortune	4	implication	3	media relation	3
genre	4	implication	4	impact	4	issue	3	public relations effort	3
implication	4	public diplomacy	4	influence	4	media coverage	3	relationship	3
letter	4	stewardship	4	power	4	paradox	3	reputation	3
power	4	united state	4	public	4	relationship	3	social medium	3
relationship	4	attitude	4	public engagement	3	role	3	agenda building process	2
rhetorical analysis	4	case study	4	character	3	case	2	agenda setting theory	2
competence	3	corporation	3	complaint	3	case study	2	corporation	2
crisis communication	3	dimension	3	corporate reputation	3	china	2	fortune	2
culture	3	effect	3	corporate social networking site	3	corporate social responsibility	2	journalist	2
dialogue	3	impact	3	effect	3	identity	2	practice	2
image repair	3	twitter	3	part	3	news medium	2		
medium	3	bosnia	3	performance	2	time	2		
organizational rhetoric	3	british activism	3	public relations practitioner	2	tool	2		
public	3	building	3	sensitive business issue	2	challenge	2		
search	3	content analysis	3	social network	2	device	2		
social medium	3	**dialogic communication**	3	social network site	2	empowerment	2		
strategic communication	3	dialogic principle	3	social networking	2	face	2		
symmetry	3	employee organization relationship	3	use	2	facebook	2		
apologia	2	examination	2			human right	2		
business communication	2	exploration	2			hurricanes katrina	2		

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RHETORICS		RELATIONSHIP DEVELOPMENT		SOCIAL NETWORKS	FRAMING		AGENDA-SETTING
case study	2	**internal communication**	2		journalist	2	
collective action	2	media relation	2		leader	2	
corporate communication	2	organisation	2		news release	2	
corporate discourse	2	outcome	2		organizational change	2	
corporate social responsibility	2	public relations research	2		presidential election	2	
democracy	2	public segmentation	2		public framing	2	
image repair discourse	2	rapport management	2		public relations campaign	2	
legitimacy	2	**relationship maintenance strategy**	2		rita	2	
life	2	satisfaction evaluation	2		social medium	2	
limit	2	singapore	2		success	2	
metaphor	2	smartphone	2		working	2	
public relations research	2	toward	2				
rhetorical	2						
social capital	2						
terrorism	2						
time	2						
values	2						