Is Communication via the Internet Public Communication?

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Abstract

The ongoing digitalization of almost all aspects of society also affects communication research as a scientific field. Recent years have witnessed an ongoing discussion of what exactly is communication research, how can our field be defined. In Germany, over the last decades communication scholars often define "mass communication" as their core research interest. In digitalized communication worlds, the boundaries between interpersonal and public communication have become more and more blurred. As a consequence, several authors have argued that we should study any kind of "mediated communication". This paper argues that communication scholars should rather study what I call public communication 2.0.

Recent years have witnessed a recurrent debate on the scope and the focus of Communication as an academic discipline (Vorderer, 2015; Brosius, 2003a, 2016; Hepp, 2016; Jarren, 2016, 2019; Theis-Berglmair, 2016; Strippel et al., 2018). Some authors (e.g., Hepp, 2016) argue for making the entire breadth of mediated communication the subject of our discipline, rather than making restrictions, for example, in the direction of a focus on "public communication" (Brosius, 2016; Jaren, 2008). In a world of digitalization with its infinite number of very different communication offerings and with blurring meaning of the terms "public communication" and "mass communication" and the emergence of several intermediate forms (e.g., interpersonal-public communication), it seems obvious to expand communication studies thematically to include all forms of mediated communication. This chapter argues that a more narrow and contoured conception of communication sensu "public" communication is necessary in order to show the unique contribution of communication as an academic discipline. I would like to take up these impulses and discussions and argue for the second standpoint. This chapter is an updated and extended version of my initial contribution to this debate (Brosius, 2016). It is a reaction to the (ongoing) German debate (and most of the examples refer to the German situation. However, this situation is far from being unique. And, it can serve as a perspective in a broader international discussion on the future of communication research

The debate about the self-conception of Communication as an academic discipline has been going on for decades. Its fundamental question asks for the adequate description of what communication research should investigate. Some argue that "communication research is what communication researchers make it" (Schulz, 2006, S. 96). This rather descriptive approach has been contrasted with more normative ideas. These have become manifest in the two self-conception papers of the German Association of Communication Research (DGPuK) from 2001 and 2008. The 2001 version still states:

"At the center of the subject is indirect public communication mediated by mass media. The associated production, processing, and reception processes are the focus of the subject's interest. In addition to mass media, however, other organizations such as political parties, associations, or companies increasingly function as corporate communicators." (DGPuK, 2001, p. 3)

In 2008, on the other hand, the respective passage reads:

"Communication and media studies deals with the social conditions, consequences and meanings of media, public and interpersonal communication. The outstanding importance that communication and media have in society justifies the relevance of the subject. Communication and Media Studies sees itself as a theoretically and empirically working social science with interdisciplinary references. It conducts basic research to enlighten society, contributes to solving problems of communication practice through applied research, and provides educational services for a media and communication industry that has been growing dynamically for years." (DGPuK, 2008, p. 1)

The media change that took place in the meantime and can be subsumed using keywords such as digitalization, medialization/mediatization, web 2.0, or social media is certainly the driver for this change in the definition of the subject area from a narrow view as in "public communication" to a broad view as in "communication is mediated communication in general". The "field" and many of its prominent representatives have - in some cases decades ago - also repeatedly presented further definitions of the object and concepts of communication, some of which differ considerably (e.g., the Munich "Zeitungswissenschaft" or the Essen version of "Kommunikationswissenschaft"). Expansions of the field beyond the study of public communication are manifold, for example Klaus Beck's work on the telephone (Beck & Lange, 1989) or, even earlier, Winfried Lerg's habilitation on conversation (Lerg, 1970). If one reviews the abundance of definitions and approaches, the question arises whether it is not ultimately futile to establish definitions at all, if we essentially do what we want to do, and no one resents that. In the end, it will always be controversial to define the subject of a subject normatively. Is it not more fruitful to determine its meaning empirically? However, this does not leave us feeling happy either. As communication scholars, we are certainly asked more frequently than colleagues from other academic disciplines what we actually do. A clear self-conception gives the individual researcher self-confidence and provides the field with recognizability value and a unique selling point.

Changes in the Media Landscape

The technical digitization of communication channels has undoubtedly had (and still has) an outstanding impact on the constitution of our societies (regional, national, global). The multiplication of communication offers, the facilitated possibilities to react to communication of others, the chance to find new communication partners and to observe the communication of others has changed all our lives. This has certainly also changed our subject, our self-image as researchers as well as our theories and methods (cf. Brosius, 2013). However, I would like to add one aspect that seems important to me. Digitalization makes communication directly visible to all participants, including, but not limited to, communication scientists. Communication of others is abundantly observed by website owners and users and is registered, collected, sorted, and distributed by software, such as bots and algorithms. Thus traditional ways of communicating "offline" (bidirectional talk, group discussions, etc.) are resembled by different types of online communication, such as chats, blogs fora, and social media in general. These types of online communication are not per se public. However, they become public because they can be observed by a principally infinite number of others thus leaving the framework of private, interpersonal communication. We see other people playing, buying, talking, doing business, etc. Most types of communication are not new, but are now visible online. And this is true not only synchronously, but also diachronically due to the seemingly infinite memory of the Internet. The synchronous and diachronic observation of the communication of others expands our horizons of experience enormously and also provides the basis for the communication science study of the manifestations of the Internet. We react to the communication of others with our own communication and thus in turn expand the experiential space of others. The main effect of communication is thus primarily communication again.

The basic observability of the communication of others makes much that was previously private and interpersonal public, even though not many other people may actually observe a particular course of communication. But: Algorithms already do that, they aggregate, categorize and combine their observations of our communication. This result is in turn taken up by humans or other algorithms and made usable, also ultimately implemented again in further communication activities on the Internet. One example may suffice. If we search for web content on Google, this would certainly not be public communication at first, but because Google records and counts our search queries, it becomes part of public communication, becomes indirectly observable for others. This explains, for example, why Google can use the frequency of the search term "flu" as an early warning system for the occurrence of flu-like infections (Ginsberg et al., 2009) - and why the classical mass media take this up and report on it (Unkel, 2019).

Of course, there will still be private communication, which may not even be eavesdropped on by anyone (in the forest while walking, for example, hopefully!); but a large part of digitally mediated interpersonal communication will not be private, in the sense that no one else "hears" it, records it or evaluates it. This also becomes manifest, for example, in the fact that one talks about hiking boots with a conversation partner on an email platform, and the next day one receives corresponding advertisements on Amazon or Ebay. Communication that takes place on the Internet, whether interpersonal, in groups or social networks, initiated by private individuals or classic mass media, is public communication in the true sense of the word due to its basic observability and permanent storage and availability. Public communication is thus no longer bound to mass media dissemination, but it also manifests itself in social networks and in other forms of communication that were initially and actually meant to be interpersonal. We have elsewhere referred to this melange as "interpersonal-public communication (cf. Haas & Brosius, 2011; Haas, Keyling & Brosius, 2010) to emphasize the blurring boundaries between interpersonal and mass communication. A similar approach has been proposed by O'Sullivan & Carr (2018) with their introduction of the term "masspersonal communication".

Mediated Communication as a Key Concept?

Hepp (2016) and others suggest, as a reaction to digitization, that the subject of the discipline should be expanded to include "mediated communication in its entire breadth" (p. 226). Outside of Germany, this is the typical approach (in line with what Schulz, 2006, suggested). What communication scholars do defines the field and its borders. In fact, in the American tradition, communication is - to a large degree - interpersonal communication. The German tradition is different in this respect (see Brosius, 2003b; Löblich, 2010). "Communication research in the public interest"¹ might be regarded as the key normative perspective. This can be regarded as the reason for a strong German focus on mass communication as the major vehicle of public communication. So why not shift to a broader definition of our field as mediated communication? I decidedly disagree with this option. Mainly, without a precisely defined concept of "media", the concept seems like an empty formula. What, after all, would be nonmediated communication? Isn't all communication somehow mediated by a medium of some kind (air, cable, waves, sound, internet, etc.)? Wouldn't the corollary necessarily be that we are studying "communication" (period!)? I have similar concerns with terms like technically mediated communication or social communication. What, then, would be non-social communication? In addition to the conceptual vagueness, there is also the question of whether such whether such definition are actually serving the purpose of a definition, which is to grant delineation from phenomena outside of its realms.

I want to delve into two aspects here: First, at least the concept of media would have to be clarified. In the lay understanding media stand for some type of technical devices that convey interesting information to the public (such as television). In a broader sense a medium also includes things like air, cable, paper, etc.) Is Facebook the medium? Or the embedded Youtube video? Or the browser that enables both applications? Or the Internet protocol that supports the browser? Or is it the screen on which communication content is presented? Is every kind of technical mediation of communication also mediated, so that the term "mediated" is ultimately used like other broad terms such as "social"? Can there be "non-mediated" communication? Such a de-limitation of the field's subject seems presumptuous to me. This is also the point of departure for my second

¹ The title of the ICA-conference in 2004, most tellingly organized by the German ICA president Wolfgang Donsbach.

argument, which is of a more strategic nature: Of course, communication scholars can study self-presentation strategies and impression management of Facebook users, but psychologists can do that just as well and probably better. Of course, we can also survey learning success on various textbook platforms, but education researchers can probably do that better, too. Of course, we can also describe the use of communication technologies in digital value chains, but economists can do that just as well and probably better. This is not to exclude interdisciplinary research, which has always existed in the offline world. But our discipline needs a recognizable USP if it is to survive in the competition between disciplines for resources. Otherwise, we will become even more of a purely teaching-oriented discipline that defines itself in terms of professional fields and the training of students.

This does not necessarily mean that we should stick to the "old" concept of public communication as communication mediated by traditional mass media. Therefore, I would like to explain in the following how a modified and expanded concept of public communication could look like. For lack of a better term, I call it public communication 2.0.

Public Communication 2.0 as the Subject of the Field

A central feature of online communication is the disjunction between public and mass communication on the one hand and private and interpersonal communication on the other. In the "golden age of mass media," mass communication and public communication were largely congruent in our theoretical conceptions. Mass media coverage was seen as an indicator or even equivalent of public communication. Private and interpersonal communication were almost completely excluded, presumably mainly because of the difficulties in methodologically capturing them. When mass conversations of individuals take up current topics, deepen them, and derive conclusions from them, this has always constituted a part of public communication that is socially relevant. We have simply overlooked this for methodological reasons. As stated earlier, in the online world, communication activities of individuals exist in a variety of forms, are publicly observable, can be aggregated, stored, and forwarded. I therefore propose a modified model that suggests the vast amount of all communication activities we can observe constitutes public communication. For this model to be fruitful, however, it requires some additional assumptions:

a) The theme/the topic/the issue should act as the central feature of online communication acitvities. Communication is arranged around the-

mes, themes structure communication. Theme/topic/issue has always played a central role in communication research, even beyond agenda-setting research. Content analyses and media impact studies are usually based on one or more themes. Themes structure the totality of communication activities. Themes are socially constructed and can be classified according to various characteristics. Without structuring by themes, public communication is difficult to imagine. It is one of the miracles of contemporary communication research how vague, blurred and ill-defined the concepts of themes/topics/issues are used.

b) Themes differ in terms of their relevance. Relevance is one of several criteria for quality of reporting. In the model I have outlined, relevance is determined on the one hand by the intensity of communication about a theme and can thus be counted and operationalized in online communication through automated observations. On the other hand, the prominence of communicators generates different levels of relevance: One message from the German Chancellor makes a topic more relevant than one message of a a blogger, although both messages are distributed equally often (which is unlikely).

c) The intensity of communication on themes can be determined by the sum of all observable messages on that theme. The sum is of course not equally distributed among communicators. Communicators with a high reach (classic mass media, Spiegel online) have a greater influence on public communication than communicators with a lower reach (for example, individuals, most bloggers), simply because they create different numbers of recipients for their message.

d) Liking, commenting and sharing strengthen the intensity and articulation function of communication (Noelle-Neumann, 1980). At the same time, forming one's own opinion is presumably made more difficult.

e) The previous concept of interpersonal communication breaks down into interpersonal-public communication) and interpersonal private communication. The observability of a large share of interpersonal communication in the online sphere makes it part of public communication 2.0; due to the multiplicity of communicators. Small reaches of individual communicators can sum up via networks of social media and makes themes more visible. Interpersonal public communication interacts and ingtermingles with mass media communication, for example via user comments under journalistic articles.

Data Specification and Adaptation of Methods

Above, I have already explained that algorithms and software not only collect and aggregate and distribute data about our behavior and our communication, but that through further processing the algorithms themselves become part of the communication events on the Internet. Algorithms take on genuinely journalistic functions of agenda-setting and gate-keeping on the one hand. But they also take on intra- and interpersonal functions by giving us feedback on our behavior (e.g., in fitness apps) or influencing our buying behavior (e.g., on Amazon), to give just two examples. Algorithms and bots in particular, have become powerful communication agents. They are, for example, supposed to influence elections in foreign countries, manipulate public opinion on candidates and issues or create wrong impressions of products using fake user comments.

As communication scientists, we should also take advantage of datafication by developing and using data collection methods ourselves in the digitalized media world. The German Association of Communication Research (DGPuk) has established a working group on this topic. The results of their work have been presented to the German community (cf. Hepp et al., 2021). However, we are not alone and are competing with other disciplines - as I have mentioned before -, the platform operators, the private media sector and intelligence agencies, which have disproportionately larger budgets for the development of observation software of any kind. And almost logically, communication researchers are usually lagging behind, dependent on the good will of platform owners. This situation reminds me very much of the early days of survey research, when we were grateful, for example, that Gallup and other polling organizations provided us with survey data on the public agenda that we could not have collected ourselves to the same extent and quality. The fascinating possibilities of jumping on the bandwagon of datafication and even surveying people's behavior on the Net flash up every now and then in communication science publications, but are certainly not yet sufficiently exploited. One fundamental problem will presumably remain for some time to come, namely that others have much better and broader access to behavioral and communication activities than we scientists do. For example. Facebook can record and evaluate all communication activities of all users on their platform, while we can only look at the public pages, as long as the respective platform operators let us do so. And Facebook certainly has little interest in providing us with the complete data picture so we can do theory work. The relationship between platforms and communication research has been discussed in a paper by Bruns (2019).

This also quickly leads to an imbalance in that we can collect vast amounts of behavioral and communication data on the one hand, but know comparatively little about the original communicators (public or private, organizational or individual) and the situation in which their messages were originated. Without knowledge of the communicator and/or recipient side, however, our findings often lack depth of focus, and ecological fallacies loom. Möller et al. (2020) have made a promising proposal of how to integrate observational with survey data. Unfortunately, we cannot approach the problem as unconcernedly as the media or advertisers, who often quite pragmatically infer personal characteristics from communication behavior. For example, if someone clicks on a sports website such as www.kicker.de from a computer with an identifiable IP address and later on purchases an aftershave on www.amazon.com, algorithms identify the person behind the IP address as male. This might be a good guess, but could also be woefully wrong. Inferences about other personal characteristics such as age or income are certainly even more difficult to make. Anyway, such procedures certainly do not score under "good research practice".

Method adaptations are not only necessary in data collection, but above all in data analysis. Datafication makes it necessary to move away from a pure regression logic with strictly separated independent and dependent variables. The interconnectedness of media messages and their communication in online media environments ultimately makes it impossible to distinguish unequivocally between the independent variable (media message) and the dependent variable (media impact). Media messages diffuse hence and forth in the cosmos of different online communicators (human or bot). Every "use" of a message changes it and alters its relevance and visibility on the web. For example, algorithms count the frequency with which an article is clicked on a news site, thereby extending or shortening its life on the site. Forwards, shares, and likes change the way the next user sees an article (cf. Kümpel, 2021). User comments following an article add information to the article that was not originally intended by its author. As a consequence, the article is possibly perceived differently by subsequent readers. So it is also no longer the journalists or the actual communicators alone who shape the appearance and meaning of a message, but the users through acts of actively using it. This means that the news situation and the relationship between the news items are changing almost continuouslv.

Messages therefore do not remain constant, but become variables themselves. This ultimately makes traditional pre-/post-designs which are intended to identify which message influenced which recipients superfluous. Whereas in a periodically printed newspaper, for example, every piece of content could be assigned to exactly one and only this date and could thus be placed in a before-and-after relationship with the date of a survey, this is no longer possible in the online world. On the one hand, contributions are available online for longer and may change several times in the course of a publication period; on the other hand, communication is so fast that even intervals shorter than one day are no longer sufficient to determine a before and after of two time series (cf. Haim, Weimann & Brosius, 2016). In any case, conventional time series analyses with fixed intervals are rendered impossible.

However, datafication also means that we need to make theoretical adjustments. The close interplay between journalists and recipients requires to modify classical approaches such as agenda-setting or gate-keeping (cf. Weimann & Brosius, 2016; Friedrich, Keyling & Brosius, 2016). For example, the clear distinction between a media agenda and a public agenda is disappearing in favor of a shared online agenda that is developing with rapid dynamics and whose composition can be changed by every act of use.

Conclusion

Several aspects can be stated as a conclusion:

1. Digitization is challenging the self-conception of the discipline and its actors more than it ever did before. We need to rethink and adapt our approach to the manifestations of communication theoretically and methodologically.

2. The often drawn dichotomy between "mediated" and "public" communication cannot be resolved by giving up "public communication" as the USP of our discipline. "Mediated communication" is arbitrary, its methodological and theoretical implications make our research indistinguishable from that of neighboring disciplines.

3. All those involved in online communication (i.e. including scientists) observe each other and mutually influence each other. Through the synchronous and diachronic observation of the actors and their behavior, online communication becomes " public communication in principle" or, as I would like to call it, public communication 2.0.

4. Communication scholars are thus concerned with public communication in the broadest sense, but in a different sense than the classic "public communication" mediated by mass media and oriented toward ideas of democratic theory. 5. Public communication 2.0 is the totality of all online communication activities that take place in a society. Communication creates messages that are classified by its recipients into themes, topics and/or issues. These identified themes are constituted by communicators and influences their further communication behavior. Depending on the number of communication partners, a distinction can be made between influential (e.g., traditional mass media) and less influential communicators (e.g., bloggers).

6. The relevance of a theme is thus determined by the intensity of communication, which can be operationalized as the sum of all communication activities originated by participants in online communication.

7. The consequences and effects of communication are primarily further communication activities.

8. In this way, the field can keep its raison d'être and can distinguish itself from other fields that also deal with the manifestations of digitization.

References

- Beck, K. & Lange, U. (1989). Mensch und Telefon Gedanken zu einer Soziologie der Telefonkommunikation. *Hessische Blätter für Volks- und Kulturforschung*, 24, 139–154.
- Brosius, H.-B. (2003a). Aufgeregtheiten durch Technikfaszination. Trotzdem und gerade deshalb: Die neue ist die alte Kommunikationswissenschaft. In: M. Löffelholz & T. Quandt (eds.), Die neue Kommunikationswissenschaft. Theorien, Themen und Berufsfelder im Internet-Zeitalter. Eine Einführung. Wiesbaden: Westdeutscher Verlag, p. 43–48.
- Brosius, H.-B. (2003b). Kommunikationswissenschaft als empirisch normative Sozialwissenschaft. In: H. Richter & H. W. Schmitz (eds.), *Kommunikation - ein Schlüsselbegriff der Humanwissenschaften?* Münster: Nodus Publikationen, pp. 401-420.
- Brosius, H.-B. (2013). Neue Medienumgebungen: Theoretische und methodische Herausforderungen. In: O. Jandura, A. Fahr & H.-B. Brosius (eds.), *Theorieanpas*sungen in der digitalen Medienwelt. Baden-Baden: Nomos, pp. 13–30.
- Brosius, H.-B. (2016). Warum Kommunikation im Internet öffentlich ist. Zu Andreas Hepps Beitrag "Kommunikations- und Medienwissenschaft in datengetriebenen Zeiten. *Publizistik*, 61, 363-372.
- Bruns, A. (2019). After the 'APIcalypse': Social media platforms and their fight against critical scholarly research. *Information, Communication & Society, 22,* 1544–1566.
- DGPuK (2001). Die Mediengesellschaft und ihre Wissenschaft. Herausforderungen für die Kommunikations- und Medienwissenschaft als akademische Disziplin. München: Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft.

- DGPuK (2008). Kommunikation und Medien in der Gesellschaft: Leistungen und Perspektiven der Kommunikations- und Medienwissenschaft. Eckpunkte für das Selbstverständnis der Kommunikations- und Medienwissenschaft. http://www.dgpuk.de/wp-c ontent/uploads/2012/01/DGPuK_Selbstverstaendnispapier-1.pdf
- Friedrich, K., Keyling, T. & Brosius, H.-B. (2016). Gatekeeping revisited.
 In: G. Vowe & P. Henn (eds.), *Political Communication in the Online World Theoretical Approaches and Research Designs*. New York: Routledge, pp. 59–72.
- Ginsberg, J., Mohebbi, M. H., Patel, R. S., Brammer, L., Smolinski, M. S. & Brilliant, L. (2009). Detecting influenza epidemics using search engine query data. *Nature*, 457(7232), 1012–1014.
- Haas, A. & Brosius, H.-B. (2011). Interpersonal-öffentliche Kommunikation in Diskussionsforen: Strukturelle Äquivalenz mit der Alltagskommunikation? In: J. Wolling, A.Will & C. Schumann (eds.), *Medieninnovationen. Wie Medienentwicklungen die Kommunikation in der Gesellschaft verändern*. Konstanz: UVK, pp. 103– 119.
- Haas, A., Keyling, T. & Brosius, H.-B. (2010) Online-Diskussionsforen als Indikator für interpersonale (Offline-) Kommunikation? Methodische Ansätze und Probleme. In: N. Jackob, T. Zerback, O. Jandura & M. Maurer (eds.), Das Internet als Forschungsinstrument und –gegenstand in der Kommunikationswissenschaft. Köln: von Halem, pp. 246–267.
- Haim, M., Weimann, G., & Brosius, H.-B. (2018). Who sets the cyber agenda? Intermedia agenda-setting online: the case of Edward Snowden's NSA revelations. *Journal of Computational Social Science*, 1(2), 277–294.
- Hepp, A. (2016). Kommunikations- und Medienwissenschaft in datengetriebenen Zeiten. Publizistik, 61, 225-246.
- Hepp, A., Hohmann, F., Belli, A., Boczek, K., Haim, M., Heft, A., Jünger, J., Jürgens, P., Koenen, E., von Nordheim, G., Rinsdorf, L., Rothenberger, L., Schatto-Eckrodt, T., & Unkel, J. (2021). Forschungssoftware in der Kommunikations- und Medienwissenschaft: Stand, Herausforderungen und Perspektiven. Positionspapier der DGPuK-Arbeitsgruppe Forschungssoftware.

https://www.dgpuk.de/sites/default/files/DGPuK%20Positionspapier%20-%20Fo rschungssoftware%20in%20der%20Kommunikations-%20und%20Medienwisse nschaft_0.pdf

- Jarren, O. (2008). Massenmedien als Intermediäre. Zur anhaltenden Relevanz der Massenmedien für die öffentliche Kommunikation. *Medien & Kommunikationswissenschaft*, 56, 329–346.
- Jarren, O. (2016). Nicht Daten, sondern Institutionen fordern die Publizistik- und Kommunikationswissenschaft heraus. Zu Andreas Hepps Beitrag "Kommunikations- und Medienwissenschaft in datengetriebenen Zeiten. *Publizistik*, 61, 373-383.
- Jarren, O. (2019). Fundamentale Institutionalisierung: Social Media als neue globale Kommunikationsinfrastruktur. Der Beitrag der Kommunikationswissenschaft zur Analyse medialer Institutionalisierungsprozesse. *Publizistik, 2*, 163–179.
- Krotz, F. (2007). *Mediatisierung. Fallstudien zum Wandel von Kommunikation*. Wiesbaden: VS Verlag für Sozialwissenschaften.

- Kümpel, A. S. (2021). Social media information environments and their implications for the uses and effects of news: The PINGS framework. *Communication Theory*. Advance Online Publication.
- Lerg, W. B. (1970). Das Gespräch. Theorie und Praxis der unvermittelten Kommunikation. Düsseldorf: Bertelsmann Universitätsverlag.
- Löblich, M. (2010). Die empirisch-sozialwissenschaftliche Wende in der Publizistik- und Zeitungswissenschaft. Köln: Halem.
- Möller, J., van de Velde, R. N., Merten, L., & Puschmann, C. (2020). Explaining online news engagement based on browsing behavior: Creatures of habit? *Social Science Computer Review*, 38, 616–632.
- Noelle-Neumann, E. (1980). Die Schweigespirale. Öffentliche Meinung unsere soziale Haut. München: Piper.
- O'Sullivan, P. B., & Carr, C. T. (2018). Masspersonal communication: A model bridging the mass-interpersonal divide. New Media & Society, 20, 1161–1180.
- Schulz, W. (2006). Communication Research in the Past Half Century. A Personal Account of what has been Typical, Striking, Important, and Deplorable in German-Speaking Countries. *Publizistik*, *51*, 92–96.
- Strippel, C., Bock, A., Katzenbach, C., Mahrt, M., Merten, L., Nuernbergk, C., Pentzold, C., Puschmann, C. & Waldherr, A. (2018). Die Zukunft der Kommunikationswissenschaft ist schon da, sie ist nur ungleich verteilt. Eine Kollektivreplik auf Beiträge im "Forum". *Publizistik*, 63, 11–27.
- Theis-Berglmair, A. (2016). Auf dem Weg zu einer Kommunikationswissenschaft. Zu Andreas Hepps Beitrag "Kommunikations- und Medienwissenschaft in datengetriebenen Zeiten. *Publizistik*, 61, 385-391.
- Unkel, J. (2019). Informationsselektion mit Suchmaschinen. Wahrnehmung und Auswahl von Suchresultaten. Baden-Baden: Nomos.
- Vorderer, P. (2015) Der mediatisierte Lebenswandel. Publizistik, 60, 259-276.
- Weimann, G. & Brosius, H.-B. (2016). A new agenda for agenda-setting research in the digital era. In: G. Vowe & P. Henn (eds.), *Political Communication in the Online World Theoretical Approaches and Research Designs*. New York: Routledge, pp. 26–44.

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