

The Effects of Elihu Katz: A Stepwise Enrichment of the Concept of Communication Effects

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The field of communication research has remained preoccupied with the effects of media, relying all too often on an impoverished notion of “effects.” Departing from Katz and Lazarsfeld’s original differentiation of communication effects as a two-step flow, this article retraces the gradual enrichment of the concept of effects through 6 cumulative traditions of research, illustrating each tradition through reference to Elihu Katz’s sustained and nonsectarian contributions. We detect the implication, across the traditions, that the field should ask about the effects of communication, rather than of media. Having outlined the continuing relevance of the 6 traditions for research on digital communication environments, we go on to identify both a 3rd and a 4th step of communication, which may further enrich research by including within the conceptualization of effects historically variable technological and institutional structures of communication.

Keywords: media effects, communication effects, multistep flows of communication, communication systems, Elihu Katz

Questions About Effects

Communications research, or media studies, is about effect. It might have been otherwise—consider the study of art, for example—but it is not. However [. . .] the field is subdivided—audience measurement, content analysis, production process, reception studies—the underlying aim, not always acknowledged, is to account for the power of the media. (Katz, 2001, p. 9472; emphasis added)

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And yet, the field has remained decidedly ambivalent in accepting this scientific and social mission:

Two kinds of requiems have been recited, repeatedly: (a) that media effects are exaggerated, and/or that there is nothing much left to learn (Berelson, 1959) and (b) that effects research is exaggerated—either too positivistic or too wild—and that study of the media will benefit from abandoning the obsessive search for provable effects (Carey, 1989). Both suffer from *an impoverished conceptualization of "effect."* (Katz, 2001, p. 9478; emphasis added)

As told by, among others, Denis McQuail through seven editions of his bestselling textbook (McQuail & Deuze, 2020), the received history of the field is that effects studies have gone through repeated phases claiming either "strong" or "weak" media effects. That narrative, however, has been challenged on several counts. For one thing, historiographic scholarship has increasingly debunked the idea that early communication research had taken as its premise the strong effects of media on defenseless users (Löblich & Scheu, 2011; Park & Pooley, 2008). For another thing, publications over the decades have borne witness to an ongoing theoretical and methodological differentiation of effects studies: A systematic review of citation patterns regarding effects studies since the 1950s indicated that the field has, instead, delivered *six long-lived research traditions* (Neuman & Guggenheim, 2011). In each case, Elihu Katz participated in either initiating or refining the tradition.

The first section of this article briefly summarizes the implications of the review of the six traditions, highlighting a stepwise differentiation of the concept of effects. Beyond an encounter between medium and user, media effects can be seen to unfold in the context of, and conditioned by, other social interactions. Early on, Katz (1959) pinpointed the insight that not only do media do things to people, but people also do things with media: They communicate, in more ways than one.

The second section explores the transferability of each of the six traditions of effects studies to current research questions centering on digital media while simultaneously recognizing the need to further specify the concept of effects as applied to networked forms of communication. The seminal *two-step flow model* of communication advanced by Katz and Lazarsfeld (1955) had responded to a historical context in which one-to-many mass communication and one-to-one interpersonal communication were being interwoven throughout contemporary social institutions and everyday life. With society-wide and worldwide digitalization in progress, a third category—of many-to-many communication—carried by so-called social media, is feeding into a historical context featuring *three-step flows* of communication (Jensen, 2009). "New media" have long invited researchers to reconsider conceptualizations of human communication, its nature and effects (Peters, 1999): It is time, we suggest, to move beyond *media* effects to speak of and study *communication* effects.

The third and final section of the article embraces digitalization as an opportunity for research to reconsider the relationship between communication effects at the level of individuals and social structures, respectively. Whereas, in the first section, we recognize the widening perspectives of effects research traditions, the classic focus of effects studies has remained on the individual users of (mass) media. With the diffusion of digital technologies that link processes of human communication to programmed feedback

and control—surveillance, for better or worse (Zuboff, 2019)—communication produces and maintains entire social systems in increasingly manifest ways: Digital communication systems constitute generic back offices for diverse front offices of private enterprise and public service, the media and much else. To begin to account for *their* effects, it is time to include *a fourth step of communication* into future agendas of effects research: Messages from users are communicated *into* the system (Jensen & Helles, 2017), by cookies and via algorithms, conditioning the livelihood both of media organizations and their users. The field that was founded, not least, to account for and, in part, to promote the effects of, mass media in their heyday, may substantiate its continuing interdisciplinary relevance by explicating the multiple steps of the universal human practice of communication in changing technological and institutional circumstances.

The Complementarity of Effects Research Traditions

Academics thrive on controversy, in part reflecting noble ambitions of falsifying theories (Popper, 1934/1972) or replacing paradigms (Kuhn, 1970) over time. In less noble practices of the moment, it is a familiar tendency for scholars and schools to draw attention to themselves by criticizing other scholars and schools. Elihu Katz's colleague at the University of Pennsylvania, the sociologist Randall Collins, published a massive analysis of the dynamics of scholarly debate entitled, *The Sociology of Philosophies: A Global History of Intellectual Change* (Collins, 1978/2009). Although Collins did not include debates from communication research, the frequently polarizing accounts of strong versus weak effects, at conferences and in journals, fit the bill.

And yet, it is also part of the business of research to regularly review and reflect on its own record. In addition to a growing body of historical work about the field, enhanced since 2019 through the *History of Media Studies* journal, bibliometric studies help to capture ongoing conversations among scholars and schools. Where historiographic research provides “externalist” perspectives on the workings of institutional forces, cultural contexts, biographical contingencies, and other conditioning factors, bibliometric studies contribute “internalist” accounts of how fields and traditions, in their own understanding, develop—what Robert K. Merton (1967) denoted as the systematics of science. We build here on a six-stage model of the development of effects theories, which was the result of one of the most comprehensive analyses of citation patterns so far, covering the period 1956–2005, despite being limited to English-language journals (Neuman & Guggenheim, 2011).

Two caveats are in order before summarizing and illustrating the six-stage model. First, “stages” here do not equal progress, but a sequence of periods during which sets of seminal books and articles were published, variously building from and revising earlier stages. Second, while citation data were only available from 1956, the works cited range from 1944 onward, which places several standard references, still widely cited, under the heading of the first stage.

Persuasion Theories

With forerunners such as Harold D. Lasswell's (1938) examination of the “propaganda technique” employed in World War I, and the Payne Fund studies of the effects of movies on children and youth (Jowett, Jarvie, & Fuller, 1996), publications figuring in the first stage of *persuasion theories*

bore witness to the historical setting of early communication research, in two respects. On one side, studies took up contemporary social concerns regarding the role of mass media, for example, in shaping political attitudes (Lazarsfeld, Berelson, & Gaudet, 1944) and in stimulating violent behavior (Bandura, Ross, & Ross, 1963). On the other side, scholars had begun the work of developing field-specific theories to account for media effects. While historical research, as noted, has rejected the common view that early work was premised on the model of a “hypodermic needle” injecting attitudes into and inducing actions in audiences (Lubken, 2008), the communication models representing this first stage (Lasswell, 1948; Shannon & Weaver, 1949) still referred to the direct transmission of information as a preferred guide to “the social scientific as well as an engineering analysis of communication” (Neuman & Guggenheim, 2011, p. 177). As we recognize in the conclusion, however, empirical work had also begun on more diverse communication flows, one of which would become the basis of Katz’s Master’s thesis (on the early formation of Katz as a scholar, see Simonson, 2024).

Active Audience Theories

The second stage of theorizing effects encompassed various *active audience theories*, from concepts of selective exposure and cognitive dissonance to uses-and-gratifications (U&G) research. Common to these contributions was an explicit recognition that effects are themselves mediated, at the very least, through the mental activities of media users. Building on early studies of both factual and fictional genres (Berelson, 1949; Herzog, 1944), U&G brought home the point that media use is not mindless but motivated by different mindsets. With Jay G. Blumler and Michael Gurevitch, Katz led the field toward confirming U&G as part of its theoretical canon (Katz, Peters, Liebes, & Orloff, 2003). One takeaway, offered in an appropriately titled article, “On the Use of Mass Media for Important Things,” by Katz, Gurevitch, and Haas (1973), was that individuals’ media use could, indeed, be motivated by a desire to *strengthen* but equally to *weaken* their ties with social groups or institutions. The insight resonates with current research and public debate on polarized politics (Ferguson, 2021), including presumed echo chambers and filter bubbles, to which we return in the next section.

Social Context Theories

The most influential of Katz’s multiple contributions to effects research, undoubtedly, was the idea of two-step flows of communication (Pooley, 2006). In the wider history of effects research (Neuman & Guggenheim, 2011), the two-step-flow model belonged to the third stage of inquiry advancing *social context theories*. Compared with the first stage focusing on one-step transmission and the second stage reemphasizing the interpretive participation of media users in communication, the third stage began to specify the diverse contexts in which communication serves to relate social agents and institutions, still with primary reference to small groups interacting in delimited settings.

The original emphasis in the survey-based volume coauthored by Katz and Lazarsfeld (1955) had been on the role of “opinion leaders” guiding groups of “followers,” thus moderating the process of media influence in two steps. Subsequent work by both Jensen (2009, 2022) and Rogers (2003) expanded the basic model to cover *multistep communication flows*, further adding diverse analytical methodologies to interpret and explain the interactions among individuals within networks of communication, beyond a

dualism of leaders and followers. Katz (1992) himself later returned to early work in sociology by Gabriel Tarde and others who had anticipated the insight that social networks are constituted in and through communication. As hinted by U&G research, social networks are, in part, the outcome of an *absence* of communication: For the communications field, Elizabeth Noelle-Neumann (1984) coined the concept of a spiral of silence, and recent political science by, for instance, Diana Mutz (2006) has demonstrated how social norms may entail conflict avoidance, leading to *not* airing viewpoints either at home or the workplace.

Societal and Media Theories

The fourth stage of theorizing communication effects shifted the emphasis from micro-social contexts to macro-social systems, exploring how communicative practices lend orientation, in multiple steps across time and space, to the structuration of societies (Giddens, 1984). *Societal and media theories* have examined the social construction of reality (Berger & Luckmann, 1966) in and by communication (Carey, 1989), as well as the cultivation of worldviews by television and other media (Gerbner & Gross, 1976). This family of theories, further, counts Marshall McLuhan's (1964) grand theorizing about the "channel effects" distinguishing communication technologies, and social critiques of media in perpetrating hegemony (Gramsci, 1971) and in the rise and decline of public spheres (Habermas, 1962/1989).

With Daniel Dayan, Katz examined the meaning production pervading social systems (Dayan & Katz, 1992). As summarized by Sonia Livingstone (1997),

by focusing on the institutional arrangements and social interconnections which link media and audience [. . .] [Dayan and Katz's] *Media Events* shows the complex interplay among diverse participants involved in the new genre of "media events"—the broadcasters, marketers, diplomats, journalists, public relations experts, viewers, fans, contestants, experts, technicians, managers, and so forth. In this way, Dayan and Katz take further earlier work on diffusion of innovation, showing the constructive role of media and audiences in an ever more complex set of relations between public opinion, everyday conversation and media representation and participation. (p. 32)

Where critical research has commonly emphasized the exercise of power by media institutions, Dayan and Katz (1992) unearthed the active participation of audiences in the communicative rituals by which these institutions are themselves produced and maintained, with live public events as their case in point.

Interpretive Effects Theories

The fifth stage of effects research—*interpretive effects theories*—witnessed Katz joining a dialogue involving both social scientists and scholars from humanities and cultural studies, renewing insights from the second stage regarding users' interpretive activities as one of the steps by which communication takes effect. Whereas the fifth stage spanned work examining agenda setting, framing, and priming through quantitative methodologies, it also came to include qualitative studies of the experience and decoding of media discourses. Katz's background covered professional engagements with Israeli and British television,

which helps to explain his commitment to cross-cultural effects studies. His work with Tamar Liebes, *The Export of Meaning* (Liebes & Katz, 1990), probed the ways in which audiences around the world would creatively (re-)interpret the highly popular syndicated *Dallas* (Capice, Rich, Katzman, & Hagman, 1978–1991) drama series in terms that made sense in the context of *their* local cultures. With a nod to another intellectual precedent—Stuart Hall’s (1973) classic encoding/decoding essay—Liebes and Katz (1990) showed how, beyond dominant/hegemonic or oppositional decodings, global audiences were amused and fascinated by exaggerated soap-operatic mischief while certainly not abandoning their own cultures or “becoming American” through media use (Tunstall, 1977). The close analyses, among other things, explained how Japanese audiences rejected the *Dallas* universe, in marked contrast to other cultural contexts.

The methodology chosen by Liebes and Katz (1990)—having audiences retell episodes from the series—proved a methodological goldmine for understanding reception and effect as socially and culturally situated processes; it has not yet been elevated to the prominence it deserves among empirically oriented critical media theorists. For future work, this methodology, originating from the study of television and communication *about* television, belongs to an expanding range of quantitative and qualitative, online as well as offline methodologies for capturing the multiple steps of communication effects.

New Media Theories

The sixth and final stage in the development of effects theories—*new media theories*—constitutes, above all, “a placeholder for things to come,” even if “there is a newly evolving theoretical tradition focusing on new technologies and interactive properties” (Neuman & Guggenheim, 2011, p. 178). The field is still struggling with updating its conceptions of effects in the context of digital communication environments. For example, what used to be thought of as the *products* of media use have been referred to in terms of *processes* instead, including calls for research to consider “the full range of media *effects processes*, which are often complicated, fluid, and interactive” (Nabi & Oliver, 2009, p. 4; emphasis added). Katz (1992), as noted, looked down the road ahead by returning to classic sociology in the figure of Gabriel Tarde, recovering an understanding of networks as, at once, products and processes of meaningful social interaction—communication. As suggested by recent research that we begin to assess in the next section, it may be time to prefer a terminology of *communication* effects over *media* effects, if only because media typically take effect in two or more steps of communication.

The Continuing Relevance of Effects Research Traditions

The references to “stages” in the preceding section recognize the fact that different conceptions of effects were articulated in particular historical moments of the field and of its objects of study. What the citation analysis (Neuman & Guggenheim, 2011) highlighted is both that several bodies of research have coexisted and interacted and that, in a sense, each stage never ended. Figure 1 sums up the distribution of the five traditions across 50 years of citations. Rather than being overtaken by the next paradigm in fashion, the first five stages still bear witness to considerable, if variable, levels of theoretical, empirical, and methodological activity.

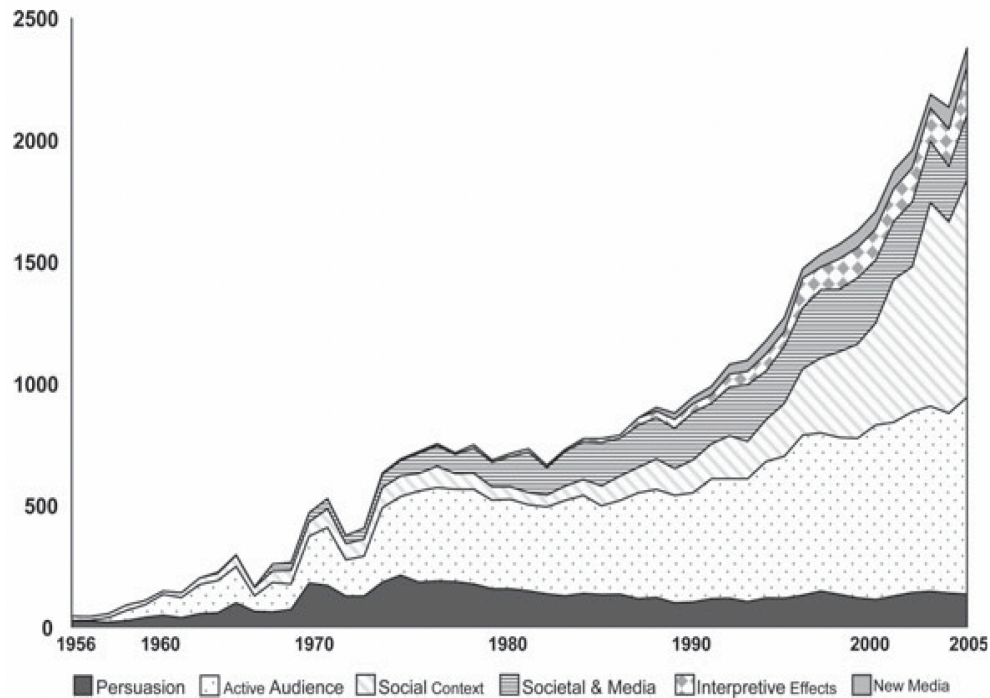


Figure 1. Cumulative growth of media effects theories in the communication literature (average number of citations per year for 36 seminal articles). Source: Neuman and Guggenheim (2011, p. 182).

The five effects research traditions hold rich lessons for the study of contemporary communication environments, even while these differ from the configuration of newspapers, radio stations, and small-group interactions that Katz and Lazarsfeld (1955) witnessed. For each of the five literatures, this section assesses its continuing relevance with reference to illustrative studies. Whereas a detailed review of the partial reformulation of conceptual frameworks and research questions, from the 1940s through the 2000s, falls outside the scope of this article, we highlight the extent to which current work is swimming in streams of scholarship from the past, with Elihu Katz among the inspirational lifeguards.

Are Filter Bubbles and Echo Chambers Real?

Effects studies were founded, to an extent, on social concerns that the classic mass media would make people form opinions and do things against the public interest as well as their own best interests. With the global breakthrough of digital and mobile media over the last two decades, comparable concerns have been voiced. The most common worry has been summed up, variously, as filter bubbles (Pariser, 2011) and echo chambers (Sunstein, 2007): Because information flows not just selectively, but separately to different online segments, many people are thought to end up in living in polarized universes. The research question, in the words of the above heading, adapted from Axel Bruns (2019), is whether, in fact, online communication has this effect. The answer so far is, apparently not. At least for strong formulations

widespread in public debate and among (our) students and (some) colleagues, the null hypothesis holds. Online news use is no more fragmented than other news use, and online news users meet relatively diverse viewpoints through self-selection and incidental exposure (Bakshy, Messing, & Adamic, 2015; Bruns, 2019; Fletcher & Nielsen, 2017; Webster, 2014).

Two questions remain key, socially and scientifically: To what quantitative extent and in which qualitative terms do particular platforms and communicative practices promote social disconnection? Given the widespread presumption of disconnection by digitalization in public and policy debate, it is remarkable that the field has had so relatively few answers to offer. In the words of one review, "How common is fake news, and what is its impact on individuals? There are surprisingly few scientific answers to these basic questions" (Lazer et al., 2018, p. 1095). As the field begins to engage with a major social concern systematically and at scale (González-Bailón et al., 2023; Guess et al., 2023a, 2023b; Nyhan et al., 2023), Katz (1959) reminds us to ask not only what (fake) media do to people, but also what people do with (fake) media in multiple steps of communication.

What Are the Gratifications of Interacting With Digital Media?

With Katz's (1959) distinction as an early guide, effects studies began to address the diverse U&G of media: Why, after all, did and do people spend so much time with media? When doing something—interacting—with newspapers, radio, and television, audiences interacted vicariously and virtually with other human beings too, feeling gratified to varying degrees, whether by news presenters or fictional personas. In the meantime, such social *functions* of mass communication have been complemented by the *functionalities* of digital communication: Beyond identification or empathy, users now literally interact with the individuals on-screen or their personal assistants or their bots. This reconfiguration of communicative relations has presented methodological challenges for a research tradition that had been criticized, from the outset, for producing abstracted and decontextualized measures of what people (think and say they) get out of media (Carey & Kreiling, 1974; Lichtenstein & Rosenfeld, 1983). A study of the gratifications in relating to candidates for political office through social network sites, for one, presented as a substantial finding that "social interaction with other like-minded supporters" proved more important than information seeking or entertainment (Ancu & Cozma, 2009, p. 567)—which would seem a foregone conclusion for the communicative genre in question.

The U&G literature has begun a hesitant revision of its gratification typologies (Sundar & Limperos, 2013; Tefertiller & Sheehan, 2019), which had remained static for decades. A more ambitious approach would embrace the understanding of communication as social action, as elaborated by speech-act theory (Austin, 1962; Searle, 1969). Certainly in the case of websites and apps through which users accomplish mundane but important ends in their lives, they can be seen to *do* things in their various roles of citizens, consumers, and much else. One current opportunity is to refocus attention on the concrete *uses* affording the *gratifications* that have preoccupied U&G researchers; the uses point toward the social contexts in which any *effects* on attitudes and actions will be manifest. Early U&G, in fact, had considered the potential of a *uses-and-effects* tradition (Rosengren & Windahl, 1972) recognizing a stepwise articulation of media impact. Recent notions of *effects processes* (Nabi & Oliver, 2009), as mentioned, equally suggest that effects manifest themselves through multiple steps of communication.

Which Kinds of Contexts Are Established Through Digital Communication?

The public breakthrough of the Internet with the World Wide Web, from the mid-1990s, gave rise to the common metaphor of a *cyberspace* (Gibson, 1984), separate from everyday reality, in which people would express themselves and interact with others in unprecedented ways. The early literature reported identity experiments that might liberate and empower individuals (Turkle, 1984, 1995) and the coming of entire cybersocieties and cybercultures (Bell & Kennedy, 2000; Benedikt, 1991; Jones, 1998). Compared with the early insight that social *contexts*—political and cultural institutions, mass media contents, and local conversations—were being related through two-step flows of communication (Katz & Lazarsfeld, 1955), the Internet, thus, initially invited theorizing about a medium leaving behind society as people had known it.

With pervasive digitalization underway, accelerated by mobile media (Ling, Goggin, Fortunati, Lim, & Li, 2020), research in the early 21st century has been rediscovering the many ways in which digital communication constitutes shared social contexts. As detailed, for example, by Lee Humphreys' (2018) work on the place of social media in everyday life, digital forms of interaction carry forward familiar forms of face-to-face interaction by different means and with a historical bonus: The social sharing of diaries and other personal artifacts had a long tradition as means of communication among communities of American women. The title of Humphreys' (2018) volume—*The Qualified Self*—added a methodological reminder that digital technologies are sources not just of big data (Mayer-Schönberger & Cukier, 2013) for users seeking a quantified sense of self (Lupton, 2016) but also of small data and qualitative meanings, for their users and for scholarship.

Digital communication systems recall the insight of medium theory (Meyrowitz, 1994) and media ecology (Strate, 2016) that shifting historical media have constituted environments enabling and bounding human communication. To the two-step flow of one-to-many mass communication and one-to-one (or few-to-few) interpersonal communication has been added many-to-many networked communication, prototyped by social media as examined by Humphreys (2018). The total, so far, has been a *three-step flow* of communication (Jensen, 2009, 2022) in which much information still moves from centralized sources into localized conversations and onto online chats, but which may also be communicated in alternative and reverse orders. The current field is studying the stepwise dissemination of information (and misinformation) as it flows through social networks.

As we elaborate in the final section, implicit in the two-step flow model (Katz & Lazarsfeld, 1955) is the idea that research should ask about *communication effects*: It is communication as event, action, and interaction, whether this is through exposure to a news item or involvement in a feature film or video game, which has effects (or not), being motivated by more or less conscious gratifications (Blumler & Katz, 1974), and unfolding through more or less extended effects processes (Nabi & Oliver, 2009), always in social contexts.

What Is the Place of Media in Digital Infrastructures?

Media events (Dayan & Katz, 1992) no longer play the role they once did in uniting publics through society-wide and mostly consensual meaning production. For one thing, disruptive events have been gaining

renewed prominence on media agendas (Katz & Liebes, 2007; Sonnevend, 2018), suggesting a need for revised typologies of media events (Skey, 2021; Ytreberg, 2022). For another thing, media have become more diversified than the centralized systems of press and broadcasting during analog eras. Such dedicated systems of public communication are being replaced by generic infrastructures that carry both communication and other forms of social interaction across private-public divides and in multiple steps. Referred to variously as platformization and infrastructuralization (Plantin, Lagoze, Edwards, & Sandvig, 2018), the shift, still ongoing, suggests that media are becoming one type of front offices of digital infrastructures, sharing back offices with other private businesses and public services.

For the field of media and communication research, this infrastructural shift presents a fundamental challenge regarding its identity and delimitation. For a long time, the reference has been to *media systems*, as influentially laid out in comparative studies by Dan Hallin and Paolo Mancini (2004, 2012, 2017). The two authors have, however, been at pains to account for the consequences of digitalization within their model centering on political communication (Hallin, 2020; Mancini, 2020). With three-step flows of communication crisscrossing traditional institutional boundaries, it is time to introduce a concept of *communication systems* (Jensen & Helles, 2023) and specify their interfaces and interdependencies with media systems and with economic, political, and cultural institutions of society writ large. We return to the relationship between communication systems and communication effects in the next section. The emergence of communication systems presents an especially urgent task for research at a time when different world regions approach each other as systemic rivals, in and by communication (Carey, 1989): The 2020s are witnessing a face-off among (at least) four different versions of what the Internet is, could be, and ought to become (O'Hara, Hall, & Cerf, 2021), with implications for the continued viability of national fourth estates and the institutions of post-1945 global governance.

How to Decode Algorithms

The studies by Liebes and Katz (1990) of the cross-cultural reception of the television series, *Dallas* (Capice et al., 1978–1991), recognized the decoding of messages as one step in the chains of communication and as one stage in the development of effects research. Any attitudinal or behavioral effects are conditioned by audiences' interpretive engagement with television, the Internet, and media still to come. The hermeneutics of communication carries over to the Internet as users make sense of the interactive options on offer, acting on some of them. Digital communication, however, stands out, in part, through the operation of algorithms that respond to users' actions, returning repertoires of further steps in iterative sequences. Indeed, interactions with algorithms lend themselves to studies of *decoding* (Hall, 1973): "How people come to know and understand algorithms, what they imagine algorithms to do, and their valorization of and responses to algorithmic work in daily media use" (Lomborg & Kapsch, 2020, p. 745). Like the decoding of television fiction, the decoding of algorithms invites critical assessment of why particular options are being offered here and now, recalling previous steps of communication in much longer trajectories: Why is the medium telling me this, and doing this to me? (See further Taylor & Choi, 2022.)

Like preceding traditions, decoding studies overlap with several other stages of effects research. Decoding an algorithm can deliver its own gratifications; it may lead to both evaluations of the underlying communication system and arguments about misinformation and disinformation. Responding to more or

less artificial intelligences, users may further engage in varieties of parasocial interaction (Horton & Wohl, 1956), this time with bots (Guzman, McEwen, & Jones, 2023). As exemplified by ChatGPT, the latest generation of generative artificial intelligence models represents categorically different forms of computer-mediated communication and a renewed challenge to communication theory (Bostrom, 2014; Neuman, 2023). Most fundamentally perhaps, algorithms establish contexts of communication in which users encounter items of information and choices to be navigated, both of which generate further iterations of the algorithms and further steps of decoding.

New Communication Theories

Following the stepwise differentiation of the concept of effects throughout the era of mass media, the accelerating predominance of digital technologies has been prompting reconsideration of the nature of effects. As we argue further in the next section, a common denominator for the six stages of effects research, and for Katz's contributions since the two-step flow model (Katz & Lazarsfeld, 1955), has been an implicit invitation to reorient theory development regarding effects *beyond media, toward communication*—from media as delimited technologies and institutions toward communication as distributed processes. In the preceding reviews, we referred to filter bubbles and echo chambers as open questions awaiting more research on what people do with digital media; we recognized the gratifications of communicating with known as well as unknown others, and of flows of communication connecting online and offline contexts; we identified the emergence of a new category of communication systems that is currently reconfiguring media systems; and, with reference to the decoding of algorithms, we anticipated analyses of a distinctive set of effects arising in the communications between users and digital systems, which we turn to next.

We end this section, accordingly, with a heading of new *communication* theories: Following several decades of research referencing new "media" theories, a redevelopment of communication theory generally may be needed to further enrich the concept of effects. Three-step flows of communication extend across good old-fashioned mass communication (if not necessarily via "mass media"), embodied face-to-face communication, as well as networked digital communication (Jensen, 2022), all of which have effects of different kinds and degrees. Some of these effects, however, are not captured by the traditional focus of effects research on the attitudes and actions of individual social agents. To recognize certain distinctive effects of emerging communication systems, we introduce one more step in the conceptualization of communication effects: Digital communication systems facilitate a fourth step of communication—into communication systems—with structural implications for senders as well as receivers.

The Structural Effects of Communication Systems

Communication research in general, effects studies in particular, are heir to the classic social-scientific duality of agency and structure (Giddens, 1984): How to interpret and explain the production, maintenance, repair, and transformation of social structures through the distributed agency of innumerable individual and collective human actions, in and by communication (Carey, 1989)? Whereas the field has long claimed communication as the missing third link in the social-scientific equation, digitalization is reconfiguring the mediating processes at work. John Durham Peters (1999) taught the field that "mass

communication came first" (p. 6): It was only following the public breakthrough of telegraphy and telephony and, subsequently, cinema and broadcasting that scholars and the publics came to think and speak of such diverse practices in terms of their family resemblances and include face-to-face interaction under a generic heading of communication. With digitalization, further social practices are being included in that common category and practice.

To the two-step juncture of one-to-one interpersonal communication and one-to-many mass communication (Katz & Lazarsfeld, 1955) has been added, first, many-to-many communication, typified by social media, interlaced with legacy media, and extending across private and public realms through three-step flows (Jensen & Helles, 2011). It was these communicative practices that challenged classic effects research agendas from the 1990s onward. Figure 2 lays out the prototypes of one-to-one, one-to-many, and many-to-many communication, synchronous and asynchronous, and exemplifies each practice as it traverses current digital systems.

	Asynchronous	Synchronous
One-to-one	Email, text message	Voice, instant messenger
One-to-many	Book, newspaper, audio and video recording, Web 1.0 / webpage, download	Broadcast radio and television
Many-to-many	Web 2.0 / wiki, blog, social network site	Online chatroom

Figure 2. Six communicative prototypes. Source: Jensen and Helles (2011, p. 519).

As one further step, we submit, a fourth prototype has long been missing from communication theory: *Many-to-one* communication. Just as a good many instances of the one-to-one and many-to-many variants are more appropriately referred to as few-to-few communication, so many-to-one communication could be specified as many-to-few—very few, indeed. Whatever else people do with digital media, they speak into these media (Jensen & Helles, 2017)—which then do something to people.

The operation of many-to-one communication in digital systems is summed up in Figure 3. The flows of information—whether one-to-one, one-to-many, or many-to-many—from media and many other private and public agents are structured in consequential ways by continuous flows of feedback from users, via present platforms, back to these same agents, and those able and willing to pay for the resulting data. Figure 3 denotes this feedback *metacommunication*, recognizing both the centrality of metadata in a technical sense and the implicit messages accompanying any transfer of information. As elaborated by Gregory Bateson (1972), "human verbal communication can operate and always does operate at many contrasting levels of abstraction" (p. 150), with metacommunication specifying the meaning of the signs and symbols being exchanged and of the relationships among the parties to the interaction.

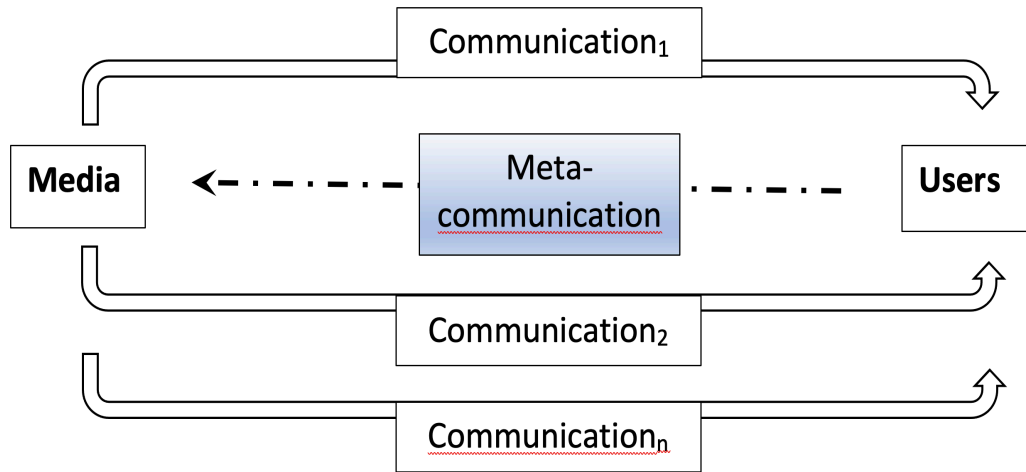


Figure 3. Many-to-one communication as metacommunication.

Many-to-one communication is not without historical precedent—examples include tax registers and military drafting. However, digital communication systems stand out as technologies and institutions of many-to-one communication. It is a distinctive feature of digital technologies that they register specific aspects of their use, in and of this use. They, thus, bear out an early insight of communication theory, namely, that humans cannot *not* communicate (Watzlawick, Beavin, & Jackson, 1967): We constantly give off (Goffman, 1959) implicit signals to others face to face, just as we continuously interpret the signals afforded by others. And, at the interface of digital communication systems, while we may seek to decode *their* algorithmic signals, we can rest assured that system operators are processing *both* the signals we give—in posts, comments, and more—and the additional signals we give off, as accumulated across time, sites, and apps. We cannot *not* communicate into the system.

Many-to-one communication is enabled by digital technologies, but the effects—on individual users, economic markets, and other social practices and institutions—depend on the embedding of technologies in societies and cultures through political economies. The full social structure conditions what people can do with communication, and what communication can do to people (Katz, 1959). The Big Five in the West (Alphabet, Amazon, Apple, Meta [Facebook], Microsoft) and the Big Three in China (Baidu, Alibaba, Tencent) are the effects not of technologies but of the prestructured, unequal exercise of communicative agency over time by senders and receivers. The reception of information on digital platforms entails simultaneously sending information as feedback, first to the tech corporations in question, next to their clients in markets for personal information. Accordingly, many-to-one communications condition much later flows of one-to-one, one-to-many, and many-to-many communication—which pervade everyday life and subsequently feed into dedicated political communication about the legitimate regulation of the institutions that carry all these flows. Communications have effects, in multiple steps and across many social institutions, far beyond the entities formerly known as “the media.”

Conclusions and Beginnings

Imagine, if you will, the reunion of Katz and Lazarsfeld beyond the pearly gates. After warmly greeting the newly arrived Elihu, Paul eagerly inquires who, then, prevailed in the debate on strong versus weak media effects.

"Well, Paul," Elihu replies, "we gradually understood that the social importance of effects is not a simple function of their 'size.' Media effects, as we often discussed, are ephemeral, dynamic, accumulative, subtle, and sometimes conflicting. The research question articulated and enriched over the last half-century became, instead, what are the technological, institutional, and discursive conditions that structure communication effects—whatever their quantity and quality."

"Of course," Lazarsfeld agrees, "Yes, yes, more and more multivariate cross-tabs to capture those structuring variables!"

"Not quite, Paul," Elihu tries again, "We, um, sort of moved beyond surveys and cross-tabs to a more diverse set of methodologies."

Before Katz's arrival, it turns out, Lazarsfeld had engaged in a similar exchange with his Columbia colleague, the sociologist C. Wright Mills. Mills would read aloud the first sentence of *The Sociological Imagination* (Mills, 1959): "Nowadays men often feel that their private lives are a series of traps" (p. 3). And Lazarsfeld would respond: "How many men, which men, how long have they felt this way, which aspects of their private lives bother them, do their public lives bother them, when do they feel free rather than trapped, what kinds of traps do they experience, etc., etc., etc." (Stein, 1964, p. 215, as cited in Gitlin, 1978, p. 223).

Katz, for his part, would go on to reemphasize both the value of multiple methodologies and the complementary and stepwise conceptions of communication and its effects that he helped to articulate over three quarters of a century. We imagine Katz summarizing his own legacy for effects research in four points:

- Communication is *motivated* by diverse personal and social uses and gratifications, which structure both the processes and the products of communication;
- Communication is *mediated*, sometimes by people, sometimes by technological systems, but typically and importantly by both over time;
- Communication is *interpreted*, as it is sent and as it is received, against the background of long-lived social norms and cultural conventions;
- Communication is *contextual*, in the dual sense that physical and imagined contexts enable and constrain what is said and done, and also that communication, in the process, produces, maintains, repairs, and transforms the contexts circumscribing other human action and social interaction.

Having retraced the development of effects research, illustrated through the seminal contributions of Elihu Katz, as the field emerged and was consolidated as a de facto discipline (Levy & Gurevitch, 1994), we conclude that the six paradigmatic traditions retain their relevance for research on the consequences and implications of digital media and networked communicative practices and that Katz's four-point synthesis may aid the continued refinement and accumulation of theoretical and empirical insights in coming decades. We add that a further, implicit point of the traditions, including Katz's oeuvre, has been to ask about the effects of communication, rather than of media, as either technologies or institutions. Media take effect in and by communication, which remains subject to redefinition and extension, both as an analytical category and as a common practice, in response to historically variable media and communication systems. Scientific and other social communities will interpret and reinterpret the meaning of communication through the exercise of what Anthony Giddens (1979) termed double hermeneutics.

Early on, Elihu Katz (1950/2012) had embraced the study of one variety of many-to-one communication—fan mail—for his Master's thesis at Columbia University. It is now up to the international community of media and communication researchers to curate and make good use of Katz's legacy as well as of the wider and complementary research traditions addressing multiple steps of communication—both will have enduring effects. These effects, appropriately, flow in two or more steps, when past insights are transferred to new historical communication environments and diverse cultural settings. We trust that Katz, in view of the structural effects of many-to-one communication, will grant a slight reformulation of one of his central punchlines (Katz, 1959) and join us in asking what media still do to people even as people have come to do more things with media.

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