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Research Report

Social media, mass media and the 'public sphere': Differentiation, complementarity and co-existence

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SOI Discussion Paper 2016-01

Social Media, Mass Media and the 'Public Sphere'

Differentiation, Complementarity and Co-existence

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Abstract

In modern society, 'the public' is inevitably a mediated sphere as only media can bridge its spatial, temporal and topical diversity. While this media has traditionally been mass media (one-to-many), the arrival of the Internet has popularised meso media (many-to-many). In that context, the mediated public sphere has undergone significant changes. On the one hand, media theorists emphasise the enabling characteristics of digital media, hoping for an egalitarian public sphere and an empowerment of media users. On the other hand, critics discuss the regulatory attributes of social media platforms, which allow to preformat and to sanction communication more efficiently than ever before. This overview paper discusses the generic relationship between social media and mass media from a systems-theoretical point of view. Further, it addresses the question of whether the social web is in fact on the path to democratising the 'public sphere'.

Zusammenfassung

Die ‚Öffentlichkeit‘ in der modernen Gesellschaft ist zwangsläufig eine mediatisierte Sphäre, da allenfalls Verbreitungsmedien – traditionellerweise Massenmedien – ihre sachliche, räumliche und soziale Diversität überbrücken können. Seit den 1990er-Jahren bietet indes das Internet als Universalmedium eine ideale Projektionsfläche für Hoffnungen auf liberalere Öffentlichkeitsstrukturen, die mit einem Empowerment der Mediennutzer und einem Bedeutungsverlust klassischer massenmedialer Anbieter einhergehen sollen. Von den kommunikationserleichternden Effekten der Onlinetechnologien unmittelbare Veränderungen in den grundsätzlichen Strukturen gesellschaftlicher Öffentlichkeit abzuleiten, wäre allerdings ein technikdeterministischer Fehlschluss, der zuletzt immer wieder zu übersteigerten Erwartungen geführt hat. Vor diesem Hintergrund stellt das vorliegende Übersichtspapier auf der Basis systemtheoretischer Einsichten zunächst ein Einordnungsmodell für Social Media und Massenmedien vor, das ihre unterschiedlichen Wirkungsbereiche in der gesellschaftlichen Wirklichkeitskonstruktion herausarbeitet, und diskutiert daran anknüpfend, inwieweit sich bis dato tatsächlich von einer Demokratisierung der Öffentlichkeitsstrukturen durch das Social Web sprechen lässt.

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1 Introduction: Expectations and empirical developments

Since the 1990s, the web has been hailed as a possible means to achieving more liberal and transparent public structures, the empowerment of formerly passive media users and the undoing of traditional mass media providers. Dan Gillmor, for example, proclaimed that “Grassroots journalists are dismantling Big Media’s monopoly on the news, transforming it from a lecture to a conversation” (Gillmor 2006), while Yochai Benkler maintained that “the network allows all citizens to change their relationship to the public sphere. They no longer need be consumers and passive spectators. They can become creators and primary subjects.” (Benkler 2006, 272; Benkler 2013)

Such positions are generally based on the premise that political and economic power asymmetries are being dissolved by technology. In other words, as ‘prosumers’, individuals are expected to override the boundaries of the production and consumption sphere, overcome the social roles associated with them and serve as a counterweight to the centralisation of production in many sectors of the economy (Ritzer & Jurgenson 2010; see critically Dickel & Schrape 2016). In that vein, online technologies are often referred to as “organising agents” (Bennett & Segerberg 2012, 752), which are seen to build “protocols of communication between different communication processes” (Castells 2009, 125), thereby promoting a more democratic public sphere by means of technology (Carpentier et al. 2013).

However, to date these hopes and expectations have hardly been met. Worse, when measured against the radical extremes of these claims, they were even significantly disappointed. For one, empirical studies show that the number of Internet users seeking to participate in the web from a political or otherwise deeper angle is small; that social networking services are used primarily for entertainment and distraction purposes; that only few user-generated offers are able to maintain a wider audience over a longer period of time; and that the content of established media brands plays a key role in the social web as well (i.a. Smith 2013; Newman et al. 2016). Moreover, it is becoming increasingly clear that the more recent trend to classify contemporary protests (e.g. Arab Spring, Occupy Wall Street, Movimiento 15-M) as “social media rebellions” resulted from an overestimation of the relevance of online communication compared to traditional channels of distribution and modes of coordination (Fuchs 2015, 354). Finally, the basic infrastructures of the web are shaped to a much lesser degree than expected by the users than by a small number of multinational technology corporations that supply the central communication platforms and services of the Internet. These corporations have the financial means necessary to continually invest in research and development, to regularly provide new products to Internet users, and thus to significantly influence their online experience (Haucap & Heimeshoff 2014).

At the same time, however, user-generated content from the social web is increasingly finding its way into mass media coverage. For example, social networking services such as Twitter and Facebook are regularly screened and evaluated for new topics and interesting statements by professional journalists. As well, an increasing number of semi-professional news platforms have emerged that aim to complement or enhance mass media reporting and hence offer expanded research options (i.a. Paulussen & Harder 2014; Neuberger et al. 2014). In addition, the last years have seen several waves of emotionally charged outrage on the social web that were shown to have had an influence on political or business decisions (Bruns & Highfield 2015; Pfeffer et al. 2014). Finally, social media on the web have become central tools of collective action in social movements and communities of interest—the whole without any disintermediation of genuinely social structuring processes (Dolata & Schrape 2016).

In this respect, neither established distributions of social roles nor the Habermasian levels of the public sphere¹ are simply overridden by the social appropriation of the Internet. Nevertheless, the more efficient communication structures do give rise to novel forms of reciprocal relationships between these levels. These relationships can only be adequately identified, or named, on the basis of a sharp differentiation of the distinct areas of influence of the various types of dissemination media. Against this backdrop, this overview paper discusses the generic relationship between meso media and mass media from a systems-theoretical point of view (*section 2*) and observes the gradual changes and shifts in societal communication triggered by the appropriation of online technologies (*section 3*). Further, it addresses the question of whether the social web is in fact on the path to democratising the public sphere (*section 4*).

2 Levels of social reality construction

The notion of ‘public’ strikes as particularly ambiguous not only from the perspective of sociological systems theory; often it is laden with normative values and suggests a uniformity that is unattainable in reality. From that angle, ‘the public’ always remains a fiction to some degree (Schmidt 2001). To overcome this predicament, the following classification model proposes to distinguish not according to levels of the

¹ Initially identified by Jürgen Habermas ([1992] 1997, 374), these levels are differentiated according to “the density of the communication, organisational complexity, and range—from the episodic publics found in taverns, coffee houses, or on the streets; through the occasional ‘arranged’ publics of particular presentations and events, such as theatre performances, rock concerts, party assemblies, or church congresses; up to the abstract public sphere of isolated readers, listeners, and viewers scattered across large geographic areas, or even around the globe, and brought together only through the mass media.”

public sphere but according to *levels of social reality construction*, in order to effectively delimit the impact areas of social media and mass media from each other. The model is guided by insights of operational constructivism (Luhmann 2002), which assumes, similar to newer cognitive science, that the knower and knowledge are inextricably linked: “Luhmann’s theory of operative constructivism radicalises hermeneutics by spelling out that observation always involves an observer, and as such it is always biased. An observation (operation) is already an interpretation therefore it makes no sense to distinguish between observation and interpretation, since all interpretation involves observation.” (Rasmussen 2004, 177)

In contrast to radical constructivism, this perspective does not deny the existence of an ontological reality. However, it does hold that that reality cannot be objectively grasped without there being the bias of an observer. In this way, it serves as an observational horizon for a wide range of very different individual interpretations. This is why socially crystallised symbolic structures and communicative references, such as a shared time and numerical system or a common language, are necessary to ensure *compatibility* between these manifold views of reality. In addition, Luhmann ([1997] 2012) identifies functional systems of society (e.g. economic system, legal system), which, via symbolically generalised communication media (e.g. money, law) and binary distinction codes (e.g. payment/non-payment, legal/illegal), reduce complexity in specific contexts. However, aligning general societal communication along one of these specialised systems of meaning would contradict the functional differentiation of modern society.

Non-specific and comprehensively used reality patterns or symbol structures condense on the one hand through their steady reproduction and long-term condensation in communication processes (Tomasello 1999; Berger & Luckmann 1966). Although, this occurs in a way that is much too distributed and gradual to allow producing a description of the present that is commonly acknowledged across society in a continuous manner. Therefore, on the other hand, a number of *broadly received selection and synthetisation sites* have emerged in modern society that define, for the short term, what is to be considered as relevant for society as a whole. In fact, it is this function that is fulfilled by the mass media, understood not as a conglomeration of specific organisations (e.g. publishers) and technical channels but as a *functional system of meaning* that observes its environment according to the unspecific distinction between “information/non-information” (Luhmann 2000, 24), or ‘cross-societal relevance’ versus ‘cross-societal irrelevance’. In this way, the mass media are today accomplishing a description task that had been in pre-modern societies “regulated by (competition-free) representation” (Luhmann 2013, 319).

Together, the selection processes taking place in the various arenas of the mass media (e.g. news and reporting, entertainment, advertising) generate a depiction of the present that is dramatically reduced in its complexity—yet which cannot be reciprocated by the recipient at the same scale of dissemination. Thus, mass media can be rightly accused of excluding a wide range of topics from societal discourse. Admittedly, this does not change the fact that selection processes remain indispensable, since only a few topics can be disseminated across all of society at a given time. Still, this does not mean that a public that could be uniformly addressed exists or that it would be impossible for a recipient to distance him or herself from the depictions of reality proposed by mass media. Newspapers have always, from their beginnings, catered to targeted social milieus, and the same applies to electronic mass media (e.g. radio, television), at the latest since their growing diversification (Stöber 2004). Nevertheless, *commonly known “condensates of meaning, topics, and objects”* are continuously emerging (Luhmann 2000, 37). These, be they classified as worthy of consent or of rejection, in both cases serve as a guiding reference in communication.

The perception of the mass media as a functional system inevitably raises the suspicion of a static theoretical approach in which bottom-up changes seem hardly conceivable. However, Luhmann's (2012, 18) notion of 'meaning' as a “*product* of the operations that use meaning and not, for instance, a quality of the world attributable to a creation, a foundation, an origin” by all means reflects the possibility of a transformation. Similarly, just as 'individuals' as conglomerates of psychic and organic systems cannot do without the internalisation of the references of social systems to meet their (basic) needs, the meaning structures of social systems maintain themselves exclusively through reproduction in communication. However, since the references of a social system are always interpreted situationally, these back references oscillate consistently around the respective benchmarks—and this very blurriness allows for their gradual change. Niklas Luhmann (ibid., 23) therefore considers systems of meaning to have a *dynamic stability*, which, in the case of the mass media, would apply to the focus of their reporting as well.

Accordingly, the social construction of reality can be, similarly to the evolutionary concept of 'hierarchical levels' (Gould 2002, 2007), conceptualised as a circular multi-level process that is characterised by numerous complexity-reducing selection stages between these various levels.² *Variations* condense on less differentiated and elabo-

² In this context, Steven J. Gould (1996, 215f.) stresses the radical contingency of (human) evolutionary processes in general: “At any of a hundred thousand steps in the particular sequence that actually led to modern humans, a tiny and perfectly plausible variation would have produced a different outcome, making history cascade down another pathway that could never have led to *Homo sapiens*, or any self-conscious creature.”

rated levels of communication until they are occasionally recognised at a higher selection level as relevant discontinuities, deviations or alterations (*selection*). In this way, they gradually change the state of the observing system of meaning (*restabilisation*), whereby changes of states at higher, more abstract levels of social reality construction can in turn have repercussions on all lower levels of communication (Fig. 1).³

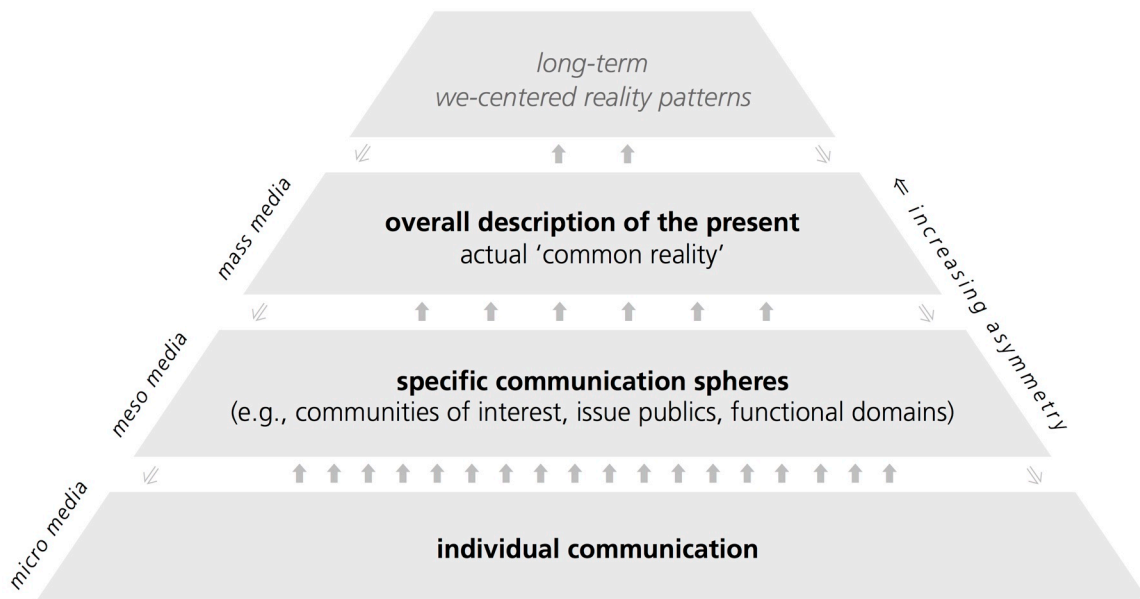


Figure 1: Levels of social reality construction

3 Social media and mass media

From the perspective of such a multi-level model, different dissemination media types facilitate the communication and social reality construction in distinct ways (Bardoel 1996). *Micro media*, such as the telephone, emails or chats, accelerate individual communication; *meso media* such as blogs, podcasts or microblogging services, allow for exchanges in objectively, spatially or socially defined spheres of meaning (e.g. issue publics, communities of interest or practice, network domains); and *mass media* define, amidst the ongoing competition of various providers, what is to be considered as relevant in the so-called 'general public' by selecting and enhancing, from the mass of circulating content, those offers that are characterised by a high degree of (anticipated) connectivity in cross-societal communication (Fig. 2). However, in view of the

³ For a more elaborate version of this multi-level model, see Schrape 2011, 2015.

fundamental scarcity of cognitive resources, the main function of the mass media is not to deliver a comprehensive and detailed representation of current developments but to allow for ‘social forgetting’ (Esposito 2008).


	Micro Media	Meso Media	Mass Media
reach	<i>individuals</i> ← → <i>‘entire’ society</i>		
<i>high asymmetry</i>  <i>low asymmetry</i>	e.g., e-mails, instant messaging (SMS, WhatsApp, Facebook Messenger etc.), chats telephone, postal letters	e.g., special interest stations, video-sharing websites, podcasts, weblogs, microblogging, Facebook sites / groups	e.g., big broadcasting stations, widely read newspapers, popular books and movies, digital news portals

Figure 2. Types of dissemination media

In that sense, the relationship between social media on the web and mass media is less about competition and more about a *complementary coexistence*. Just as the radio did not render the newspaper obsolete, nor television the radio, the Internet poses no inherent threat to all previous media structures. This is because regardless of the decoupling of the content from specific data storage and dissemination media, be it e.g. paper, optical discs, film rolls or radio waves, mass media and social media operate at different levels of social reality construction:

- *Social media on the web* facilitate the exchange, and thereby the genesis and diffusion, of content and statements at the meso-level of communication, whereby the scope of simultaneously circulating topics is much higher here than it is in the commonly known description of the present in a modern society. Insofar as the evolution of social systems can be paraphrased as a “theory of waiting for usable chances” (Luhmann 2012, 253), the pool of visible variations from which systems of higher selection levels can choose in this way expands significantly.
- *Mass media*, however, provide non-specific reference bases in communication in that they observe the distributed communication processes at mid-level and in that they introduce relevant discontinuities into the general discourse. Since

mass media, as a social system, are no longer bound to any specific format since the convergence of technical channels, novel or challenging content providers (e.g. *The Huffington Post*) are now and again well-positioned to compete with incumbents. However, in that case they gradually lose their interactive nature and likewise transform into asymmetrical distribution sites.

From the outlined perspective, an erosion of the fundamental selection patterns and role differentiations in the societal description of the present (and a loss of significance for the mass media in this context) thus appears unlikely, in particular since *basal socio-structural barriers* can be identified that are in conflict with radical re-configurations.⁴ For one, the classic problem of what or who manages to capture the audience's attention exists on the web just the same. For example, a blog post will not receive the same attention, as a rule, as an article of an established news portal.

Secondly, even the most knowledgeable 'information seekers' (Wilson 2000) would be overwhelmed if they had to identify all presently relevant or memorable changes in the 'world society' by themselves: Mass media nowadays are "the source [...] of most of our data concerning the society and the world—it would be insufficient to confine oneself to the notions acquired directly, through perception or through personal knowledge." (Esposito 2008, 188) Finally, laypersons who are active on the web are usually unable to deliver the same quality of work as professionals can on a continual basis, not least because their cognitive resources are limited by demands from other areas of life (e.g. work, family, leisure).

Nevertheless, through the social appropriation of online technologies over the past 20 years, a large number of incremental changes and gradual shifts have been triggered, including foremost (1) the development of algorithmically mediated personal publics, (2) the facilitated emergence of secondary performance roles in functional contexts, and (3) the concomitant intensification of interactions and exchanges between the meso and macro levels of social communication.

(1) Hybrid forms between private and public communication are not an exclusive phenomenon of the Internet. However, the *algorithmically mediated semi-private communication spheres* emerging on social networking platforms such as Facebook and Twitter bear a new quality of that hybridity. These 'personal publics' (Schmidt 2014) are characterised not only by the long-term transferability, scalability and searchability of their content but also by automated factual, temporal and social

⁴ Such a perspective certainly emphasises persistences. However, in my opinion it can prevent "proceed[ing] without overall analysis and [...] to focus on what is new (or what is considered to be so) as substitute for the essential" (Luhmann 2013, 314) or to attribute previously initiated dynamics (e.g. the disentangling of medial and political spaces) exclusively to the web.

structuring services. They are oriented to the platform identity of the respective user, including his or her established contacts and interests, as signalled by means of clicks. These algorithmic filter and dissemination structures facilitate the identity and information management for each user, thereby obviating numerous types of situations in which individuals feel overwhelmed or experience cognitive overload in the age of digital connectivity. However, at the same time, the users of these services inevitably abdicate some of their personal decision-making autonomy to the technological structures of the respective platform and its distinct media logics (see, for the “multiplicity of the political self in social media”, Siri 2014, 233–237).

(2) Contrary to what was anticipated by many, professional journalism has thus far not experienced fundamental competition by laypersons on the web. Nevertheless, the dichotomy between provider and recipient roles does dissolve at certain points since the Internet facilitates the emergence of *secondary performance roles* in functional contexts (Stichweh 2005). Active Internet users (e.g. bloggers) differ clearly from passive recipients in that they selectively perform journalistic research, curation and structuring tasks. However, they also differ from professional journalists as holders of primary performance roles since they do not necessarily follow established journalistic conventions, for example with regard to the universality of topics or periodicity. Very often, they also work without being embedded into any type of organisational framework and are motivated primarily by short-term incentives and personal interests. However, it is thanks to these same characteristics that amateur journalists on the web are at times able to draw the public attention to subjects that otherwise would not have been covered by mass media reporting. In this way, online technologies contribute to an inner differentiation of the field between recipient and producer roles, but they do not fundamentally resolve the underlying dichotomy of professional providers and consumers (Dickel & Schrape 2016). This inner differentiation, while particularly visible in the field of journalism, is also advancing in other functional contexts (e.g. ‘citizen science’, crowdsourcing, public beta testing).

(3) Taken together, these expanded connectivity and participation opportunities lead to an *intensification of interactions and exchanges* between the meso and macro levels of social reality construction. The acceleration and facilitation of communication by Internet and digitalisation increases not only the chances that new issue-focused spheres of meaning take shape; the general user-centred dissemination of contents, statements and opinions is also gaining ground in the social web. For professionals in primary performance roles, or to put it differently, for the functional spheres of society, these waves of dissemination and diffusion at the meso level of communication are much more distinct and visible than was previously the case. This generates numerous new possibilities for interaction; for journalism, for example, this leads to a larger

number of potential sources for research, yet also to an increased pressure towards integration and topicality. Moreover, the new exchange opportunities at mid-level of social reality construction allow for a faster user-driven identification of irregularities and gaps in mass media reporting and coverage (Eberwein & Porlezza 2016).

4 Enabling and control

In this respect, the ‘reality of the mass media’ (Luhmann 2000) is not dissolved by the online technologies, but it has become more permeable in many ways. Nevertheless, predictions “that the networked information economy will democratize the public sphere” (Benkler 2006, 241) have hardly come true, namely because the mentioned communication-facilitating effects of the services on the web are accompanied by a number of coordinating and regulatory characteristics (Van Dijck 2013).

For one, ubiquitously used services such as Twitter, Facebook or Snapchat contribute—with their predefined and reproducible protocols and filter paradigms, which act as technically mediated social order patterns—significantly to the *structuring of the communication and media reception* on the web. The embedding of clickable reaction buttons on Facebook (‘like’, ‘love’, ‘wow’, ‘haha’, ‘sad’, ‘angry’), the character limit on Twitter or the algorithmic curation on these social networking platforms as well as on media streaming portals (e.g. Netflix, Amazon Prime, Google Play, Apple Music) are not just technical gimmicks but rather social structure elements that are incorporated in the platform design. Secondly, the infrastructures of the Internet are opening up *expanded possibilities of social control* because the communication profiles of their users can be observed, evaluated and sanctioned by private operators (or government intelligence agencies) to a degree that is much more exact and effective than previously possible (Dolata & Schrape 2016; Galloway 2004).

This applies in particular to the *socio-technical ecosystems of mobile devices* such as smartphones, tablets or wearables (as well as ‘smart home gadgets’) that are increasingly used for personal online access. More explicitly even than in the general World Wide Web, what prevails in the world of mobile media platforms are the rules and regulations of private sector providers, which users and developers are obliged to accept by confirming the General Terms and Conditions. With the centrally coordinated ‘walled gardens’ of Apple’s iOS and Google’s Android devices, the production, distribution and use of media content and software has indeed become simpler. However, this bundling and standardisation has also served to buttress the rule-setting and determining influential force of a few globally dominant infrastructure operators.

For the providers, this *infrastructural power*⁵ is accompanied with a previously unknown control over the data that is generated continuously during the use of web platforms, smartphones or tablets and their ecosystems. For example, Google today is able to create user profiles (e.g. for advertising purposes) not only by resorting to its search engine and email platform but also by evaluating its social networking service Google+, Google Maps, Google Drive, YouTube, its software and media store Google Play, as well as numerous application programs that are pre-installed on Android devices. Moreover, with the practice by Google and Apple, begun many years ago, to expand activities beyond their traditional areas of business (e.g. mobile payment services, home automatization, connected and autonomous cars), the mass of integratable data continues to grow (Andrejevic 2015).

However, the reflex to flatly reproach the dominant corporations in online and mobile communications for their infrastructural hegemony and the associated data power appears to be a step in the wrong direction. This is because the development, provision and operation of free of charge usable services and platforms is costly as well; the survival in the rapidly changing market for communication and information technologies requires continual investments in research and development and; last but not least, Google and Apple, or Facebook and Twitter, are for-profit companies that must, for reasons of self-preservation, remain true to that mandate. Thus, to maintain their core business and to remain competitive, information technology companies must continually enhance their products and services and cater to user preferences—and for this they are heavily dependent on mining and analysing user data (Shelanski 2013; Gerlitz & Helmond 2013; Van Dijck 2014).

The situation that basic communication infrastructures are operated and driven by private sector providers is, of course, not an exclusive phenomenon of our time. The invention of the metal movable-type printing press, for instance, was driven by Johannes Gensfleisch zu Gutenberg and his investor Johannes Fust above all due to tangible economic interests; and from the mid-15th century on, it was able to spread rapidly primarily in light of its high sales potential along the European trade routes (Stöber 2004). However, the novelty of digital modernity is the *hegemony of a very few multinational companies* as the operators of the key infrastructures of communication, media distribution and information retrieval on a global scale. Indeed, such a level of power concentration was not even reached at the height of former phases of media consolidation (Zerdick et al. 2000).

⁵ 'Power' is here understood, in the sense of Norbert Elias (1978), not as a firmly established entity but as a volatile balance that has to be constantly renegotiated (e.g. between providers and users).

This global bundling of private sector power over infrastructures and data, unprecedented in media history, can hardly be counteracted by means of national government regulations—at least not without making serious compromises or accepting locational disadvantage (see Luhmann [1997] 2012, 83ff.). From the perspective of the outlined multi-level model of social reality construction, however, an *incremental change from the bottom* up appears possible, provided an increasing proportion of users of such services are bothered by this concentration, change their preferences and collectively express their displeasure, e.g. by initiating lively discussions on the social web concerning this matter. Such episodes of ‘public outrage’, some of which gain momentum on their own terms while others are triggered by non-governmental organisations or journalistic coverage, can be expected to undergo a mass media reflection upon reaching a certain threshold of attention and visibility on the meso level of societal communication. As thus they may represent a serious disruption, or discontinuity, for the targeted companies, forcing these to react—though not necessarily in the sense of their critics. For such forms of bottom-up public pressure the social web offers an ideal playing ground (Mölders 2014).

5 Conclusion: Differentiation, complementarity, co-existence

The media transformation initiated by Internet and digitalisation by no means leads to a disintermediation or dissolution of the socio-evolutionary crystallised role differentiations and selection stages in the social construction of reality. On the one hand, modern society requires, due to its temporal, factual and social diversity, a *complexity-reduced description of the present* that is acknowledged by a ‘general public’ and that ensures a basal compatibility in communication. For this reason, it cannot do without the continuous synthesising and disseminating services of the mass media (or functional equivalents). On the other hand, social media on the web effectuate the exchange in specific communication contexts, or defined spheres of meaning, and facilitate user-centred distribution of contents and opinions, thereby *expanding the pool of visible variations of meaning* to which functional systems at a higher selection levels of social reality construction can respond (or in some cases have to respond).

In this respect, the current transformation of media structures is characterised less by substitution, competition and resolution than by *differentiation, complementarity* and *co-existence*. Against this backdrop, the potential for reciprocal irritations is enhanced, namely between communicative dynamics on the social web and mass media reporting; between selectively participating laypersons and professionals; and between specific communication contexts and the so-called ‘general public’, whereby

the latter essentially remains the product of a cascade of communicative attributions, or a signifier, that only gains meaning from a specific perspective of observation.

However, despite this *increased permeability* between the various arenas of societal communication and social reality construction, we cannot in any way speak of a general democratisation of media structures or the ‘public sphere’. This is because although the extremely advantaged positions of some publishers and broadcasting corporations were eroded in the course of digitalisation, the Internet economy of today exhibits a consistently *higher level of concentration* than former media markets. Moreover, the need for a non-specific description of the present in societal communication, and therewith the need for a strong reduction of complexity in the construction of that present, does not simply vanish due to the Internet and digitalisation. Instead, a common description of the present remains indispensable not only as an orientation for individuals as well as a point of reference for discourse and for cross-societal decision-making processes. The belief that social change might be induced solely by means of technological possibilities is thus still a fallacy that is founded on technological determinism.

References

- Andrejevic, Mark, 2015: Personal Data: Blind Spot of the 'Affective Law of Value'? In: *The Information Society* 31(1), 5–12.
- Bardoel, Johannes, 1996: Beyond Journalism: A Profession between Information Society and Civil Society. In: *European Journal of Communication* 11(3), 283–302.
- Benkler, Yochai, 2006: *The Wealth of Networks. How Social Production Transforms Markets and Freedom*. New Haven: Yale University Press.
- Benkler, Yochai, 2013: Practical Anarchism, Peer Mutualism, Market Power, and the Fallible State. In: *Politics & Society* 41(2), 213–251.
- Bennett, W. Lance/Segerberg, Alexandra, 2012: The Logic of Connective Action. Digital Media and the Personalization of Contentious Politics. In: *Information, Communication & Society* 15(5), 739–768.
- Berger, Peter/Luckmann, Thomas, 1966: *The Social Construction of Reality. A Treatise in the Sociology of Knowledge*. New York: Anchor.
- Bruns, Axel/Highfield, Tim, 2015: From News Blogs to News on Twitter: Gatewatching and Collaborative News Curation. In: Coleman, Stephen/Freelon, Deen (Eds.): *Handbook of Digital Politics*. Cheltenham: Edward Elger, 323–339.
- Carpentier, Nico/Dahlgren, Peter/Pasquali, Francesca, 2013: Waves of Media Democratization. A Brief History of Contemporary Participatory Practices in the Media Sphere. In: *Convergence* 19(3), 287–294.
- Dickel, Sascha/Schrape, Jan-Felix, 2016: Materializing Digital Futures. In: Ferdinand, Jan-Peter/ Petschow, Ulrich/Dickel, Sascha (Eds.): *The Decentralized and Networked Future of Value Creation*. Dordrecht: Springer, 163–178.
- Dolata, Ulrich/Schrape, Jan-Felix, 2016: Masses, Crowds, Communities, Movements: Collective Action in the Internet Age. In: *Social Movement Studies* 15(1), 1–18.
- Eberwein, Tobias/Porlezza, Colin, 2016: Both Sides of the Story: Communication Ethics in Mediatized Worlds. In: *Journal of Communication* 66(2), 328–342.
- Elias, Norbert, 1978: *What is Sociology?* New York: Colombia University Press.
- Esposito, Elena, 2008: Social Forgetting: A Systems-Theory Approach. In: Erll, Astrid/Nünning, Ansgar (Eds.): *Cultural Memory Studies. An International and Interdisciplinary Handbook*. Berlin/New York: De Gruyter, 181–190.
- Fuchs, Christian, 2015: *Culture and Economy in the Age of Social Media*. New York: Routledge.
- Galloway, Alexander, 2004: *Protocol. How Control Exists After Decentralization*. Cambridge: MIT Press.
- Gerlitz, Carolin/Helmond, Anne, 2013: The Like Economy: Social Buttons and the Data-intensive Web. In: *New Media & Society* 15(8), 1348–1365.
- Gillmor, Dan, 2006: *We the Media. Grassroots Journalism by the People, for the People*. Sebastopol: O'Reilly.
- Gould, Steven J., 2002: *Full house. The Spread of Excellence from Plato to Darwin*. New York: Three Rivers Press.
- Gould, Steven J., 2002: *The Structure of Evolutionary Theory*. Cambridge: Belknap.

- Gould, Steven J., 2007: *Punctuated Equilibrium*. Cambridge: Belknap.
- Habermas, Jürgen, 1997: *Between Facts and Norms. Contributions to a Discourse Theory of Law and Democracy*. Cambridge: Polity Press.
- Haucap, Justus/Heimeshoff, Ulrich, 2014: Google, Facebook, Amazon, eBay: Is the Internet Driving Competition or Market Monopolization? In: *International Economics and Economic Policy* 11(1/2), 49–61.
- Luhmann, Niklas, 2000: *The Reality of the Mass Media*. Stanford: Stanford University Press.
- Luhmann, Niklas, 2002: *Theories of Distinction*. Stanford: Stanford University Press.
- Luhmann, Niklas, 2012: *Theory of Society. Volume 1*. Stanford: Stanford University Press.
- Luhmann, Niklas, 2013: *Theory of Society. Volume 2*. Stanford: Stanford University Press.
- Mölders, Marc, 2014: Irritation Expertise. Recipient Design as Instrument for Strategic Reasoning. In: *European Journal of Futures Research* 15:32. Doi: 10.1007/s40309-013-0032-3.
- Neuberger, Christoph/Hofe, Hannah Jo vom/Nuernbergk, Christian, 2014: The Use of Twitter by Professional Journalists. In: In: Bruns, Axel/Burgess, Jean/Mahrt, Merja (Eds.): *Twitter and Society*. New York: Peter Lang, 345–358.
- Newman, Nic/Levy, David A. L./Nielson, Rasmus K., 2016: *Reuters Institute Digital News Report 2016*. Oxford: Reuters Institute for the Study of Journalism.
- Paulussen, Steve/Harder, Raymond A., 2014: Social Media References in Newspapers: Facebook, Twitter and YouTube as Sources in Newspaper Journalism. In: *Journalism Practice* 8(5), 542–551.
- Pfeffer, Jürgen/Zorbach, Thomas/Carley, Kathleen, 2014: Understanding Online Firestorms. In: *Journal of Marketing Communications* 20(1/2), 117–128.
- Rasmussen, Jens, 2004: Textual Interpretation and Complexity. Radical Hermeneutics. In: *Nordisk Pedagogik* 24(3), 177–193.
- Ritzer, George/Jurgenson, Nathan, 2010: Production, Consumption, Prosumption. The Nature of Capitalism in the Age of the Digital ‘Prosumer’. In: *Journal of Consumer Culture* 10(1), 13–36.
- Schmidt, Siegfried J., 2001: Media Societies: Fiction Machines. In: *Critical Studies* 16(1), 11–24.
- Schmidt, Jan-Hinrik, 2014: Twitter and the Rise of Personal Publics. In: Bruns, Axel/Burgess, Jean/Mahrt, Merja (Eds.): *Twitter and Society*. New York: Peter Lang, 3–14.
- Schrape, Jan-Felix, 2011: Social Media, Massenmedien und gesellschaftliche Wirklichkeitskonstruktion. In: *Berliner Journal für Soziologie* 21(3), 407–429.
- Schrape, Jan-Felix, 2015: *Kommunikation und Partizipation im Social Web. Eine Übersicht*. Studienbrief der FernUniversität in Hagen.
- Shelanski, Howard, 2013: Information, Innovation, and Competition Policy for the Internet. In: *University of Pennsylvania Law Review* 161, 1663–1705.
- Siri, Jasmin, 2014: Discursive Crossings and the Emergence of a Multiple Political Self in Social Media. In: Robson, Garry/Zachara, Malgorzata (Eds.): *Digital Diversities. Social Media and Intercultural Experience*. Newcastle: Cambridge Scholars Publishing, 230–245.

- Smith, Aaron, 2013: *Civic Engagement in the Digital Age*. Washington: PEW Research Center.
- Stichweh, Rudolf, 2005: *Inklusion und Exklusion. Studien zur Gesellschaftstheorie*. Bielefeld: Transcript.
- Stöber, Rudolf, 2004: What Media Evolution Is. A Theoretical Approach to the History of New Media. In: *European Journal of Communication* 19(4), 483–505.
- Tomasello, Michael, 1999: *The Cultural Origins of Human Cognition*. Cambridge: Harvard Press.
- Van Dijck, José, 2013: *The Culture of Connectivity. A Critical History of Social Media*. Oxford: Oxford University Press.
- Van Dijck, José, 2014: Datafication, Dataism and Dataveillance: Big Data between Scientific Paradigm and Ideology. In: *Surveillance & Society* 12(2), 197–208.
- Wilson, Thomas D., 2000: Human Information Behavior. In: *Informing Science* 3(2), 49–56.
- Zerdick, Axel/Schrape, Klaus/Artopé, Alexander et al., 2000: The Media and Communications Sectors. A Review Looking Forward. In: Zerdick, Axel/Schrape, Klaus/Artopé, Alexander et al. (Eds.): *E-economics: Strategies for the Digital Marketplace*. New York: Springer, 28–135.

Further Publications

Research Contributions to Organizational Sociology and Innovation Studies

Schrage, Jan-Felix, 2015: *Open Source Softwareprojekte zwischen Passion und Kalkül*. SOI Discussion Paper 2015-02.

Radig, Ann-Kathrin, 2015: *Der Wandel des deutschen Videoverleihmarktes durch Digitalisierung und Internet*. SOI Discussion Paper 2015-01.

Dolata, Ulrich, 2014: *Märkte und Macht der Internetkonzerne. Konzentration – Konkurrenz – Innovationsstrategien*. SOI Discussion Paper 2014-04.

Kungl, Gregor, 2014: *The Incumbent German Power Companies in a Changing Environment. A Comparison of E.ON, RWE, EnBW and Vattenfall from 1998 to 2013*. SOI Discussion Paper 2014-3.

Dolata, Ulrich/Schrage, Jan-Felix, 2014: *Masses, Crowds, Communities, Movements. Collective Formations in the Digital Age*. SOI Discussion Paper 2014-2.

Neukirch, Mario, 2014: *Konflikte um den Ausbau der Stromnetze. Status und Entwicklung heterogener Protestkonstellationen*. SOI Discussion Paper 2014-1.

Dolata, Ulrich/Schrage, Jan-Felix, 2013: *Zwischen Individuum und Organisation. Neue kollektive Akteure und Handlungskonstellationen im Internet*. SOI Discussion Paper 2013-2.

Kosche, Robert, 2013: *Kollektive Identitäten in Industrial Cultural Districts*. SOI Discussion Paper 2013-1.

Fuchs, Gerhard/Hinderer, Nele/Kungl, Gregor/Neukirch, Mario, 2012: *Adaptive Capacities, Path Creation and Variants of Sectoral Change*. SOI Discussion Paper 2012-2.

Fuchs, Gerhard/Wassermann, Sandra, 2012: *Organising a Market. Photovoltaics in Germany*. SOI Discussion Paper 2012-1.

Werle, Raymund, 2011: *Institutional Analysis of Technical Innovation. A Review*. SOI Discussion Paper 2011-04.

Dolata, Ulrich, 2011: *Radical Change as Gradual Transformation. Characteristics and Variants of Socio-technical Transitions*. SOI Discussion Paper 2011-03.

Dolata, Ulrich, 2011: *The Music Industry and the Internet*. SOI Discussion Paper 2011-02.

Schrage, Jan-Felix, 2011: *Der Wandel des Buchhandels durch Digitalisierung und Internet*. SOI Discussion Paper 2011-01.

Books

Dolata, Ulrich, 2013: *The Transformative Capacity of New Technologies. A Theory of Socio-technical Change*. London: Routledge.

Dolata, Ulrich/Schrage, Jan-Felix (Hg.), 2013: *Internet, Mobile Devices und die Transformation der Medien. Radikaler Wandel als schrittweise Rekonfiguration*. Berlin: Edition Sigma.

Dolata, Ulrich, 2011: *Wandel durch Technik. Eine Theorie soziotechnischer Transformation*. Frankfurt/New York: Campus.

Fuchs, Gerhard/Shapira, Philip (Eds.), 2014: *Rethinking Regional Innovation. Path Dependency or Regional Breakthrough*. Springer: Shanghai (chinese edition).

Schrage, Jan-Felix, 2016: *Open-Source-Projekte als Utopie, Methode und Innovationsstrategie. Historische Entwicklung – sozioökonomische Kontexte – Typologie*. Glückstadt: Hülsbusch.

Schrage, Jan-Felix, 2015: *Kommunikation und Partizipation im Social Web. Eine Übersicht*. Studienbrief der FernUniversität in Hagen.

Schrage, Jan-Felix, 2012: *Wiederkehrende Erwartungen. Prognosen, Visionen und Mythen um neue Medien seit 1970*. Boizenburg: VWH.

Schrage, Jan-Felix, 2011: *Gutenberg-Galaxis Reloaded? Der Wandel des deutschen Buchhandels durch Internet, E-Books und Mobile Devices*. Boizenburg: VWH.

Schrage, Jan-Felix, 2010: *Neue Demokratie im Netz? Eine Kritik an den Visionen der Informationsgesellschaft*. Bielefeld: Transcript.

Recent Journal Articles and Contributions in Edited Volumes

Dolata, Ulrich/Schrage, Jan-Felix, 2016: *Masses, Crowds, Communities, Movements: Collective Action in the Internet Age*. In: *Social Movement Studies* 18(1), 1–18.

- Dolata, Ulrich, 2016: Internetökonomie und Internetkonzerne. Märkte – Expansion – Macht. In: Schröder, Lothar/Urban, Hans-Jürgen (Hg.): *Gute Arbeit. Digitale Arbeitswelt – Trends und Anforderungen. Ausgabe 2016*. Frankfurt (Main): Bund-Verlag, 148–155.
- Dolata, Ulrich/Schrape, Jan-Felix, 2015: Zwischen Ermöglichung und Kontrolle. Kollektive Formationen im Web. In: *Forschungsjournal Soziale Bewegungen* 28(3), 17–25.
- Dolata, Ulrich, 2015: Forschung und Entwicklung in der Wirtschaft: Konzentration, Kooperation und Internationalisierung. In: Simon, Dagmar/Knie, Andreas/Hornbostel, Stefan (Hg.): *Handbuch Wissenschaftspolitik*. Wiesbaden: Springer VS. DOI: 10.1007/978-3-658-05677-3_35-1.
- Dolata, Ulrich, 2015: Volatile Monopole. Konzentration, Konkurrenz und Innovationsstrategien der Internetkonzerne. In: *Berliner Journal für Soziologie* 24(4), 505–529.
- Dolata, Ulrich/Schrape, Jan-Felix, 2014: Kollektives Handeln im Internet. Eine akteurtheoretische Fundierung. In: *Berliner Journal für Soziologie* 24(1), 5–30.
- Fuchs, Gerhard/Hinderer, Nele, 2016: One or many Transitions: Local Electricity Experiments in Germany. In: *Innovation: The European Journal of Social Science Research*. DOI: 10.1080/13511610.2016.1188683.
- Fuchs, Gerhard, 2015: Building the Agenda for Carbon Dioxide Capture and Storage: Limits of EU-Activism. In: Tosun, Jale/Biesenbender, Sophie/Schulze, Kai (Eds.): *Energy Policy Making in the EU*. London: Springer, 205–223.
- Fuchs, Gerhard/Hinderer, Nele, 2014: Situative Governance and Energy Transitions in a Spatial Context: Case Studies from Germany. In: *Energy, Sustainability and Society* 4:16.
- Fuchs, Gerhard, 2014: Die Rolle lokaler Initiativen bei der Transformation des deutschen Energiesystems. In: *GAIA* 23(2), 135–136.
- Fuchs, Gerhard, 2014: The Governance of Innovations in the Energy Sector: Between Adaptation and Exploration. In: *Science & Technology Studies* 27(1), 34–53.
- Fuchs, Gerhard, 2014: Innovationen im Energiesektor als strategische Handlungsfelder. In: Löw, Martina (Hg.): *Vielfalt und Zusammenhalt. Verhandlungen des 36. DGS Kongresses*. Frankfurt (Main): Campus, 675–691.
- Geels, Frank W./Kern, Florian/Fuchs, Gerhard/Hinderer, Nele/Kungl, Gregor/Mylan, Josephine/Neukirch, Mario/Wassermann, Sandra, 2016: The Enactment of Socio-technical Transition Pathways. In: *Research Policy* 45(4), 896–913.
- Kungl, Gregor, 2015: Stewards or Sticklers for Change? Incumbent Energy Providers and the Politics of the German Energy Transition. In: *Energy Research & Social Science* 8, 13–23.
- Neukirch, Mario, 2016: Protests against German electricity grid extension as a new social movement? A journey into the areas of conflict. In: *Energy, Sustainability and Society* 6:4.
- Neukirch, Mario, 2015: Mehr Netz mit weniger Kohle? Zwei ökologische Perspektiven auf ‚Korridor D‘. In: *politische ökologie* 141, 132–135.
- Schrape, Jan-Felix, 2016: Soziologie als ‚Marke‘. In: *Soziologie* 45(3), 279–293.
- Schrape, Jan-Felix/Dickel, Sascha, 2016: Materializing Digital Futures. In: Ferdinand, Jan-Peter/Petschow, Ulrich/Dickel, Sascha (Hg.): *The Decentralized and Networked Future of Value Creation*. Dordrecht: Springer, 163–178.
- Schrape, Jan-Felix, 2015: Social Media, Massenmedien und Öffentlichkeit. Eine soziologische Einordnung. In: Imhof, Kurt et al. (Hg.): *Demokratisierung durch Social Media?* Wiesbaden: Springer VS, 199–212.
- Schrape, Jan-Felix/Dickel, Sascha, 2015: Dezentralisierung, Demokratisierung, Emanzipation. Zur Architektur des digitalen Technikutopismus. In: *Leviathan* 43(3), 442–463.

<http://www.uni-stuttgart.de/soz/oi/publikationen/>