Politics and ‘the digital’: From singularity to specificity

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Abstract

The relationship between politics and the digital has largely been characterized as one of epochal change. The respective theories understand the digital as external to politics and society, as an autonomous driver for global, unilateral transformation. Rather than supporting such singular accounts of the relationship between politics and the digital, this article argues for its specificity: the digital is best examined in terms of folds within existing socio-technical configurations, and as an artefact with a set of affordances that are shaped and filled with meaning by social practice. In conceptualizing the digital as numeric, countable, computable, material, storable, searchable, transferable, networkable and traceable, fabricated and interpreted, it becomes clear that the digital cannot be divorced from the social. These affordances of the digital are discussed in relation to specific political, digital practices that are further developed in the different contributions in this special issue, such as predictive policing (Aradau and Blanke, this issue), data protection (Bellanova, this issue), extremist recruitment videos (Leander, this issue), political acclamation (Dean, this issue), and pandemic simulations (Opitz, this issue).

Keywords

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How does ‘the digital’ make a political and social difference, and how do we make sense of this difference? We have been surrounded by claims and controversies about the effects of information and communication technology since the 1970s, when the advent of micro-electronics gave factual traction to the notion that an ‘information society’ was in the making (Fuchs, 2013; Webster, 2014). The focal point of these claims and controversies has evolved over time, from ‘the information society’ in the 1970s and the 1980s to ‘the network society’ in the 1990s (Castells, 1996; van Dijk, 2006) to the revolutionary potential of ‘Big Data’ today (Mayer-Schönberger and Cukier, 2013), whereby the ‘world is being turned into digital data and thus transformable via digital manipulation’ (Packer, 2013: 297). These claims highlight different matters of concern with regard to the growing availability and use of digital devices, from the organization and division of labour to the texture of inter-personal relations, or the functioning of political communities. Diverse as they may be, however, these claims display two shared characteristics. First, these claims assign agential power to ‘the digital’, effectively arguing that it is fostering epochal political and social change (Ruppert et al., 2013: 26). This is the problem of singularity. Second, this agential power is deemed to be exercised in a relation of exteriority to politics and society, as an external or autonomous driver for transformations in existing political and social orderings.

This special issue develops an analysis of ‘the digital’, politics and society where the growing availability and use of digital devices are examined as a process that unfolds within society and within particular sociotechnical arrangements, rather than outside of them (Mackenzie, 2005; Ruppert et al., 2013). The relationship between politics and ‘the digital’ and politics of ‘the digital’ examined by the various contributors is one of interiority rather than exteriority. They map situated accounts of digital affordances (cf. Gibson, 1986) within, rather than outside, politics and society. The outlook of digitization, that is the growing spread of digital devices and information in the daily life of government and society, which emerges from these accounts is one of increasing intricacy, as digital devices become ever more thoroughly entangled in our ways of saying, doing and knowing. As such, change ought to be conceived of in terms of inflection (as foregrounded by Aradau and Blanke, this issue, drawing on Foucault, 1978) rather than rupture or ‘disruption’, to reference a term in vogue among technologists (Schmidt and Cohen, 2010).

To participate in this common effort, we propose in this introductory article to conceptualize ‘the digital’ as an artefact with a set of specific affordances, rather than as a singular, global phenomenon. In the process, we aim to avoid entrenching another broad, all-encompassing noun (‘the digital’) in the vocabulary of the social sciences that would ultimately steer our inquiries away from populated and situated accounts of how digital devices affect politics and society and vice versa (on nouns, reification and ‘de-population’, see Billig, 2013: especially 95–114). Rather, we would like to take ‘the digital’ as a vantage point to speak about its various affordances and the situated relationship it entertains with politics. Our own concern with digital devices is grounded in discussions among scholars of international relations and security studies (Amicelle et al., 2015; Jeandesboz, 2016; Kaufmann, 2015). While some of the contributions speak from the same areas of scholarship (Aradau and Blanke, this issue; Leander, this issue), the special issue tackles the notion of politics more broadly. In investigating politics and digital
affordances, the contributors engage with selected topics in the study of what Foucault (2009: 191–226) called conduct and counter-conduct: how and through which processes individual and collective behaviours are shaped, how individuals and groups quite literally behave themselves, how one behaves in a way that is different from what is planned, demanded or plainly expected, and the frictions, conflicts and struggles that thereby arise. Although we draw on Foucault to outline our concern with politics, the special issue engages with several ‘systems’ (Latour, 2009) of social theory and sociology rather than committing itself to a single conceptual framework. The proposition we lay out in the following pages, namely, to conceive of ‘the digital’ as a set of affordances, speaks to such diversity. It is a way out of a particular analytical problem – the combination of singularity and exteriority in examining the effects of digital devices on politics and society – rather than a way into a particular system of thought.

To set the stage for the discussion and introduce the contributions to the special issue, this article is divided into three parts. We first explore the notion that there is in fact an abundance of claims on how the digital matters politically. We examine those claims as ‘spontaneous sociology[ies]’, an expression we borrow from Pierre Bourdieu (1989: 18). Bourdieu uses it to characterize immediate, pre-reflexive and self-interested understandings of the social world, what he elsewhere describes as the ‘native relation’ to social phenomena, the views and conceptions held by social agents about the very configuration in which they are involved (Bourdieu and Wacquant, 1992: 73). Here, these spontaneous sociologies are found in particular in the writings of technologists who are most closely and socially interested in the digital. The reason why it is so important to outline them, as we show, is twofold: first, because these claims become entangled in scholarly arguments about digital practices, and, second, because they follow a pattern, whereby the digital is framed as a unique process of epochal change or rupture. We then proceed to examine the question of the digital not in terms of its singularity, but rather of its affordances that allows for a situated analysis of ‘the digital’. The final section reframes the question of how ‘the digital’ makes a political and social difference as a discussion about the specificity, rather than the singularity, of ‘the digital’ as a socio-technical arrangement.

**Spontaneous sociologies: The digital as singularity**

Should social science, political science, the humanities and their cognate fields care about digital affordances? To ask this question is not to dismiss wholesale numeric artefacts as an object of inquiry, but to call for a specification of their social and political coordinates. The scope of the debates surveyed by the contributors to this special issue indicates that most of these fields of knowledge production are impacted by issues related to the wide circulation and use of digital devices: this includes cultural studies (Leander, this issue), political theory (Dean, this issue), social theory, security studies, international relations (Aradau and Blanke, this issue; Opitz, this issue) and law (Bellanova, this issue). Yet, why and how these fields should care about digital affordances deserves to be specified further, which requires an investigation of some of the scholarly claims that are made in this regard.
A recent volume surveying debates in the digital humanities, for instance, introduces the development of this area of research in terms of significant public attention, growing departmental hires and increased funding – to the effect that ‘digital humanities is not just “the next big thing” . . . but simply “the Thing”’ (Gold, 2012: ix). In the same volume, however, several contributors express unease about this development. Bianco (2012: 97) points out, for instance, that scholars have so far failed to ask questions about ‘the web of politics, people, institutions, and technics in a network of uneven, albeit ubiquitous relations’ that traverse the production of digital humanities as a field of knowledge. To the same effect, Kirschenbaum finds the use of the term ‘digital humanities’ to be first and foremost tactical, ‘having primarily to do with marketing and uptake’ as it is ‘wielded instrumentally . . . amid the increasingly monstrous institutional terrain of the contemporary academy’ (2013: 415).

To frame scholarly debates on digital affordances only as a tactical shift in a context of budget austerity and dwindling financial support for (some) areas of research is not entirely satisfying, however, though it should be part of the explanation why this issue has been so intensely engaged with. There are, after all, phenomenological reasons why digital devices are deemed to be important for political and social inquiry. In introducing a recent collection on digital sociology, Orton-Johnson and Prior note that it is both the ‘pervasiveness’ and the ‘normalisation of contemporary digital technologies’ that should lead sociologists to ask questions about the fitness of their concepts, of its core ideas, but also of sociological imagination (2013: 1–2). Pardo-Guerra (2013: 125) stresses here that global finance ‘stands today as an exemplar of digital life, a system of knowledge, institutions and practices whose very existence hinges on the seamless streams of binary data that intertwine investors, analysts and trading venues across the world’. While sociology must take stock of the entanglement of digital devices with the practices and daily life of transnational finance, it should not embrace the ‘sociological imaginary’ that accompanied it early on, whereby ‘finance was no longer shaped and controlled by the networked elites of yore’ but ‘was now a technological mechanism, spanning across space and cultural geographies, and serving as the homogenising kernel of the increasingly globalised economic world’ (Pardo-Guerra, 2013: 130). What emerges from his findings is that ‘the digital’ ultimately embodies ‘specific mediums for presenting, communicating and working with data’ (p. 132). The deployment of these mediums (or rather affordances, as we suggest here) thus only makes sense in a broader sociological inquiry. Such an analysis examines the modes of interaction between actors in the field of finance and the competencies that they have acquired over time. It further includes a historical perspective embedding the contemporary predominance of digital devices in the longer-term constitution of finance as a socio-technical field, with its competencies, forms of knowledge and styles of reasoning, as well as materialities – paper and ink, as Pardo-Guerra notes, as well as Boards of Trade, pits, telephones and telexes, for instance (e.g. Zaloom, 2006).

This reflection allows us to pinpoint what it is that drives the human, social and political sciences to tackle digital affordances. Claims about ‘the digital’ abound in these areas of knowledge, but such claims tend to locate the digital in a singular and global manner, while evacuating its specificities. In his discussion of the relevance of Pierre Bourdieu’s work when engaging with issues of technology, Sterne (2003: 368) notes:
Academic job descriptions, grant announcements and journal articles joyfully collapse the historically specific instance of digital technology with the category of ‘technology’ itself. In this logic, if you are to care about technology, then your work is supposed to be driven by an interest in that which is new and digital. . . . Comparatively speaking, personal computers have been available on the consumer market just about as long as radio had been during its so-called ‘golden age’ of the late 1920s and 1930s, and somewhat longer than television had been around in its so-called ‘golden age’ of the 1950s. To refer to digital media as ‘new’ technologies is to import the value-system of advertisement into scholarship, where ‘newness’ is itself an index of sociocultural significant and transformative power.

Following up on Sterne’s argument about novelty, it is equally not helpful to limit the analytics of the digital to an account of its historicity as electronic computing. All-purpose electronic digital computers were first put together during the Second World War, in the context of the US effort to develop nuclear weapons (with what was called the ENIAC machine, see Dyson, 2012), and of the British attempts to break down German telecommunication encryption beyond Enigma (with what was called the Colos-sus machine, see Copeland, 2006). Rather than a shift to the digital in later periods, then, it is more relevant to think of transformations within all-purpose electronic digital computing, from commercialization to the growth of personal computing, from the development of networking to the takeover of software over hardware, and so forth (Ceruzzi, 2003, 2012).

While it is important to trace transformations in the genealogy of computing from within, we may ask why some of the scholarship on the digital sidesteps its historicity. This, in turn, has to do with the porosity between academic claim-making and sense-making about digital affordances and the spontaneous sociologies produced by social agents, which are comparatively dominant in the public debate. As Sterne further remarks, then

the force of the ‘preconstructed’ . . . weighs heavily upon anyone who chooses to study technology, since the choice of a technological object of study is already itself shaped by a socially organized field of choices. There are many forces in place that encourage us to ask certain questions of technologies, to define technology in certain ways to the exclusion of others, and to accept the terms of public debate as the basis for our research programmes. (2003: 368)

Claims about the effects of digital devices on politics and society are indeed not only, and by far, academic. Such claims work hard to locate ‘the digital’ within specific understandings of how societies are, and should be, ordered – and it is in identifying what power stands for, where it is and should be, as well as how individuals and collectives ought to behave, that they can be considered political. Technologists and Google executives, Eric Schmidt and Jared Cohen, for instance, outline the vision of a social and political future where ‘global connectivity continues its unprecedented advance’ driven by the proliferation and ubiquity of digital devices, and where, as a consequence, ‘many old institutions and hierarchies will have to adapt or risk becoming obsolete’, as communication technologies work to ‘help reallocate the concentration of
power away from states and institutions and transfer it to individuals’ (Schmidt and Cohen, 2013: 17–18). As spontaneous sociologies, they are characterized by a narrative of linear progress and radical break, of newness and obsolescence, articulated with claims about the existing and desired location of authority. We find here shared characteristics with some academic discourses about ‘the network society’ or ‘the information society’ ‘where the digital is held to eclipse everything that came before it’ (Savage, 2013: 140). The discourses intone the ‘familiar epochalist refrains such as the rise of post-modernism, the risk society and so on . . . but actually reproduce traditional modernist conceptions of linear time (‘then’ and ‘now’) which do not do justice to the profundity of the digital embrace’ (Savage, 2013: 140).

Not all technologists are of a single mind, of course, and there is controversy among the spontaneous theorizing found in their writings. Self-professed ‘contrarian’ Evgeny Morozov (2011), for instance, writes about the (his own) ‘net delusion’ by investigating the way in which digital technologies affect political change, and democratization in particular. His account is striking in that it reaffirms the limitation of a question that became a staple of media and popular discussions following the 2011 uprisings in North Africa and the Middle East: ‘Does the Internet promote democracy?’ That an entire book should be written to reassert the need to understand ‘Internet technologies as they are situated in the socio-technological world’ (Morozov, 2011: 340), rather than treating them as a driver of change in and out of themselves, signals some of the key issues in analysing and theorizing the digital in politics and society.

Ultimately, then, spontaneous sociologies among technologists (enthusiasts or contrarians) deal with the proliferation of digital devices as a singularity, the harbinger of an epochal shift in the organization of social, economic and political relations. The most radical version of these spontaneous sociologies takes singularity very much literally (Kurzweil, 2005), and frames it as a moment of exponential acceleration in technological progress, when increasingly intelligent computing systems would develop the capacity to self-improve and design ever-more intelligent and self-improving systems (Robitaille, 2008: 70). The singularity narrative is embedded within the realm of posthumanist discourses of the ‘extropian’ variety, whereby references to ‘the digital’ are articulated with claims about the inevitability of technological progress, human self-improvement and convergence among the technosciences – computing, genetics, and nanotechnology among others (Hayles, 2005; Thacker, 2003).

Analysing ‘the digital’ is thus a necessity for social and political science insofar as social agents not only engage in practices mediated by digital devices, but also actively produce claims articulating their reliance on and use of digital devices with the ordering of political collectives and societies. The path followed by all the contributing authors to this special issue, in this regard, is one that leads away from the digital as singularity to the digital as specificity. For instance, Aradau and Blanke (this issue) tackle the claims made about ‘Big Data’ by conceptualizing it as a shift from within governmental assemblages already concerned with prediction and from within a context already characterized by the increased volume, velocity and variety of data, the proliferation of digital devices, and the quasi-ubiquity of computing knowledge for the purposes of governance. Likewise, Bellanova (this issue) speaks to the issue of data protection by distinguishing between practices and devices of computing and digital affordances, and discussing the
latter as a shift within the former. For Leander (this issue), digital affordances constitute a change within contemporary regimes of visibility and invisibility. This understanding supports her attempt to locate DAESH recruitment videos alongside their commercial online equivalents. Dean (this issue) demonstrates how social media enact and redeploy practices of political acclamation rather than changing the way in which publics are constituted. Opitz (this issue), finally, scrutinizes how methods of pandemic simulation establish a ‘peculiar form of self-observation’, a new relation to the social from within the social.

In so doing, the contributions draw upon insights which have developed across the social, political and human sciences and their cognate fields. The field of security studies, which is the focus of Aradau and Blanke’s article, for instance, has of late been much concerned with making sense of the digital mediation of practices of policing, social control and war, while avoiding the twin pitfalls of technological determinism and instrumentalism (Amicelle et al., 2015; Benbouzid, 2015; Bonelli and Ragazzi, 2014). Recent contributions invite scholars to consider the digital as ‘an artefact, a piece of equipment or an instrument made or adapted for a particular purpose, as well as a plan, method, trick or intrigue, and finally a design or motif’, calling for ‘the simultaneous consideration of object, purpose and effect’ (Amicelle et al., 2015: 294). But findings in security studies also reflect more widely scoped discussions in sociology, among other fields. In his response to Pardo-Guerra (2013) and van Dijk (2013) in the Digital Sociology collection, Savage usefully summarizes his sociological insights: on the one hand, ‘digital information is webbed back into social and cultural relations in ways which doubt the view that the digital works mechanically and strips economic and political transactions out of their context’ (Savage, 2013: 144), and, on the other hand,

digital networks do not operate through a logic entirely of their own...Rather, they fold into numerous field-specific relationships which pre-exist the digital. We are thus given a way of understanding how the digital interfaces with enduring forms of social inequality, in the process providing new twists and directions to field-specific contests and dynamics. (Savage, 2013: 145–146)

In sum, then, this special issue rests on the claim that ‘the digital’ is best understood and examined in terms of folds within existing socio-technical configurations rather than as an external driver of epochal disruption or change. This amounts, as we have already hinted at above, to considering ‘the digital’ in terms of its specificity rather than as a singularity. The next section further details what such a move entails by mapping the affordances of ‘the digital’, which are then used to further explore the manifold relationships between ‘the digital’ and politics in the final section. These analytics broaden the perspective on ‘politics and the digital’ by also pointing to the politics of ‘the digital’.

‘The digital’ as a set of affordances

Theories of the digital that acknowledge and explore its formative powers are crucial. However, as pointed out above, many of such theories subscribe to the idea that the
digital is an exterior driver for change and thus also to a certain extent ‘self-evident’ (Gitelman and Jackson, 2013: 2). Tracing how the digital ‘shapes eyes and ears, and creates perceptual habits at many levels’ (Blanchette, 2011: 1055) is an important part of making the digital available for critique. Yet, questioning its apparent ‘transparence’ (Gitelman and Jackson, 2013) – the idea that the digital is a neutral and given piece of numeric information – means describing its characteristics, affordances and ambiguities in detail. More importantly, it means showing how such characteristics are to be thought of and analysed in relation to social context, and how the algorithms which find, edit and present digital information to us are also a social product. What follows is thus neither a critical analysis of digital practices and their influence on politics and society as something that merely needs to ‘get better’ at whatever it does – whether that relates to efficiency or ethics. Nor do we suggest a condemnation of the digital per se, but we attempt to describe some of its characteristics in order to understand what ‘the digital’ affords and how societal and political processes and ‘the digital’ shape each other. Such an analytics of specificity will need to take account of the digital’s affordances, its abilities that, in mutual influence with human practice, begin to transform the manifold relationships between politics and the digital.

To begin exploring the dimensions and affordances of ‘the digital’, it is intuitive to point to one of its most commonly invoked characteristics, even if we will soon see that it is by far not exhaustive: the numeric. The digital is frequently conceptualized in terms of digits, numbers, countable units, more specifically it is described as a binary code, that is computer processing instructions of ones and zeros, or on and off. This is also what distinguishes digital from analogue forms of information transmission. Analogue devices compute ‘by means of an analog between real, physical, CONTINUOUS quantities and some other set of variables’ (Wilden, 1980: 156, capitalization in original): a thermometer would be an analogue computing device. Digital computing devices, by contrast, ‘involve DISCRETE elements and discontinuous scales...Any device employing the on/off characteristic of electrical relays or their equivalents (such as teeth on a gear wheel) is a digital computer’ (Wilden, 1980: 156, capitalization in original). By this account, then, an abacus could be an example of a digital – even though not electronic – computing device. While much can be said about the theory of the two associated and yet oppositional states of one and zero, digital information is thus most commonly conceptualized as numeric, which means that it can be counted and computed. Accumulated calculable material serves as the very basis for digital operations, which is why it is through accumulation that digital information acquires its apparent value. However, Hovland reminds us here that numbers themselves are not a given, but they are ‘symbols, and their meanings only exist through the processes they are part of’ (2011: 21). Furthermore, the file formats and software – the languages and interfaces which determine the digital (Lupton, 2015: 25; Manovich, 2013; Sætnan et al., 2011) – are equally the outcome of socio-technical processes. The creation and calculation of digital information are not guided by ‘neutral’ mathematical values, but are the product of complex decisions, creative ideas and, as we will return to later, ‘constituted by codes of commerce, entertainment and government’ (Lyon, 2013: 100).

The association of the digital with mathematical functions, diagrams and graphs, however, leads us to the general precept that digital information is ‘abstract’ (Gitelman
and Jackson, 2013: 6). Digital information seems to ‘escape decay’ (Blanchette, 2011: 1043; cf. Hayles, 1999) and as ‘pure information objects, unfettered by matter’ (Paul, 2009: 19), they lack ‘the noise problem’ (Mayer-Schönberger, 2009: 57). The numeric affordance of digital information is thus what inspires those global and singular claims about the digital that this issue would like to challenge. Reducing the digital to its numeric, coded, abstract character is too simple. To that end, several scholars have argued that the digital is not an abstract object, but an artefact. This also applies to electronic digital information. Not only do the retention and manipulation of electronic digital information require material expression (Gitelman and Jackson, 2013), but Blanchette even argues that digital information ‘cannot exist outside instantiations in material form’ (2011: 1042). He follows Drucker’s observation that, rather than being immaterial, information moves ‘from one material condition to another’ (2009: 147).

This does not mean that we can always see them with the bare eye. Digital data matters precisely because we do not see it: ‘The less we are aware of them, the more powerfully they can determine our expectations by setting the scene and ensuring normative behavior, without being open to challenge’ (Miller, 2009). Without acknowledging this materiality of the digital, we find ourselves in the ‘awkward situation of resorting to theories that account for embodied subjects situated and interacting in environments curiously lacking specific material constraints’ (Blanchette, 2011: 1055). The numeric and the material characters of the digital are by no means contradictive, then. Rather, the fact that both the numerical make-up and the materiality of the digital are constructed (‘made by human skill’) and filled with various meanings, constitutes the influence of the digital.

The materiality of the digital becomes even more palpable when one considers its storability. It illustrates that the digital is both durable and volatile at the same time. Digital data is difficult to delete as some data residues always remain. File formats, for example, enable or disable ‘specific kinds of computational manipulation’, they structure digital data and work as ‘powerful constraints on mutability of bits’ (Blanchette, 2011: 1045). Digital code is thus not ‘eternal play’ because not all transformations are reversible, nor are all transformations achievable (Kirschenbaum, 2008: 149). The digital is then not only structured by its users, but also by the infrastructures and the companies that offer the related services and devices to transfer and store digital information. The digital cannot be divorced from the infrastructure that instantiates and shapes it. Materials and languages, which are developed and defined in response to particular problems, pack, code, construct and constrain digital information. Each of them brings their ‘own characteristics to the performance of these operations, including susceptibility to interference, frequency of mechanical failure, relative lack of speed, resistance and attenuation, and, of course, cost’ (Blanchette, 2011: 1047).

The storability of digital information is one condition for making digital information searchable. The searchability of the digital is directly related to its informational value: The digital is information that is in-formation (Dillon, 2000), meaning that by subjecting digital information to searches, new contents are ascribed to the digital. Not only is digital information re-conceptualized with every query it is subjected to, but in providing information, it also triggers the formation of societal and political discourses and practices. Digital information is commonly subdivided into content data and metadata.
While it seems that content data is what matters most to digital political and societal practice, metadata – ‘data that provides information about other data’ (Merriam-Webster, 2015), is that which enables most analytic processes, because it is associated with context information. And as we shall see later, these analytic processes enabled through metadata are what continuously ascribe new contents to digital information. Metadata describes the origin of digital information and assists in its re-use. It establishes relationships of understanding, often, however, without really explicating the very theory that informs data generation and its classification according to existing standards or knowledge, even though such theories are relevant to the conclusions drawn from collected information (Li, 2013).

In the electronic digital setting, metadata also allows digital information to travel and to establish digital communication in the first place. For example, Internet Protocol (IP) enables the transfer of information as it logs the time, the size, as well as the source and the destination of the digital information and identifies different routes from sender to receiver. Similarly, Hypertext Transfer Protocol (HTTP) was developed to send information, tailor contents, track information and capture any activity on a website through query strings. Through the development of metadata and respective protocols, digital information has become transferable. Isin and Ruppert (2015) point here to the specific speed and reach of digital interactions. Digital information instantiates its own temporality as it allows for the fast compression and sending of information that can expand the present, on the one hand, but also – due to its availability through storage – create new relations between past, present and future (Kaufmann, forthcoming). Opitz in this issue writes, for example, about the way in which digital information creates a present future, a space of the contingent. The transferability of digital data furthermore redefines spatiality. Dependent on the context in which it is being put to use, the digital can also mediate space as it expands and shrinks spatial experience and interaction, as well as allowing for remote control (Kaufmann, forthcoming). In the same way that digital metadata provides for transferability and connectivity, it also instantiates a specific dis-connectivity as it ‘lists’ the social: it takes any socially embedded item out of context by placing it on lists and digital units – it dis-embeds these items and makes them distinguishable – in order to allow for their various reconnections (Stäheli, 2012a).

More complex kinds of digital metadata are enabled through cookies, which track the website contents that have been visited, and tie these contents to a specific user’s browser. JAVA Script again logs a user’s engagement with a website to determine animation and the display of the page elements. Tracking logins, in turn, can relate the websites visited and the contents retrieved across different websites and devices. As such, digital metadata is the origin of most digital analytical practices, because it allows for the relation between contents and users. It makes it possible to make networks from and between different pieces of digital information – even though the metadata itself and the relations it enables can be defined and interpreted differently. Bowker and Leigh Star’s (1999) argument about how invisible decisions and criteria that guide the definition of categories, relations and classifications in fact create valorization and advantage, but also silencing and suffering, is here an early critical evaluation of such trends. At the level of concrete digital practices, boyd and Crawford write, for example, that ‘measuring tie strength through frequency or public articulation is a common mistake: tie strength – and many of the theories built
around it – is a subtle reckoning in how people understand and value their relationships with people’ (2012: 8). Through metadata, the digital has not only become networkable, and to a certain extent social information (as argued by Dean, Aradau and Blanke, in this issue), but it is also traceable information. A central aspect of digital practices is the reconstruction of the ‘relevant trail’ of information (Andrejevic and Gates, 2014: 187) in order to calculate the most effective interventions.

Traceability, however, does not mean that one follows a naked piece of information. Digital information is never raw or universally accessible, but is always fabricated and interpreted. It does not just exist, it has to be ‘generated’ (Manovich, 2001: 224). Digital information is produced, not merely discovered: ‘Data need to be imagined as data to exist and function as such, and the imagination of data entails an interpretive base’ (Gitelman and Jackson, 2013: 3). Or, as Bellanova argues in this issue, the design of digital information is ‘ambiguous’ and ‘protean’. Imagining digital data is always situated. It follows its own norms and standards, methodologies, and structures of practice, whereas their classification and processes of ‘cleaning’ (boyd and Crawford, 2012) always obscure ‘ambiguity, conflict, and contradiction’ (Gitelman and Jackson, 2013: 9). Digital information thus needs to be ‘understood as framed and framing, understood, that is, according to the uses to which they are and can be put’ (Gitelman and Jackson, 2013: 5). Digital data generation can thus be regulated by the market, law, social norms, architecture, or a code (Lessig, 1999). This also means that a change in the instruments that generate digital information implies a change in the way we work, theorize, and make knowledge (boyd and Crawford, 2012: 4–5). Lev Manovich describes how the process of producing knowledge by mapping and visualizing digital information is also always a creative, yet ‘anti-sublime’ act of ‘rendering phenomena that are beyond the scale of human senses into something that is within our reach, something visible and tangible’ (2002). Leander and Dean in this issue further explore how digital information in turn has come to influence notions of visuality and visibility through videos and social media.

While the characteristics and affordances of the digital have been critically described as numeric, countable, computable, material, storable, searchable, transferable, networkable and traceable, fabricated and interpreted, it becomes clear that the digital cannot be divorced from the social. Each of these abilities and affordances is the result of the meshing of human action with the digital over time and for specific purposes. The digital thus always includes the non-digital, as Bellanova in this issue elaborates on. The characteristics of ‘the digital’ and its use, its owners’ and creators’ intentions, its infrastructure and its algorithms influence each other. How Leander in this issue writes about ‘collage’ in digital videos and Opitz about the mix of the biological and social within the digital further illustrate this point.

Politics and ‘the digital’: A relationship of specificity

Instead of arguing for an epochal shift that is introduced by ‘the digital’ from the outside, this final section illustrates the need for situated accounts of politics and ‘the digital’. As a development that comes from within sociotechnical arrangements, the relationship between politics and ‘the digital’ is one of specificity, afforded by the manifold characteristics of the digital. The most discussed level of this relationship is the ways in which
political practices are increasingly organized through and influenced by digital information. What comes to mind is the way in which digital infrastructures are put to use for the gathering of collectives and crowds (Stäheli, 2012b) for various political acts and activities. The digital can, on the one hand, give room to movements with a common cause and enable digital citizens to enact the claiming of rights while ‘transcending the straitjacket of electoral politics’ (Isin and Ruppert, 2015: 3; Katz, 1997). On the other hand, ‘politics and the digital’ also invoke more repressive images, for example, those tied to practices of digital surveillance and censorship (Andrejevic, 2013; Bauman and Lyon, 2013; Lyon, 2013; Mathiesen, 2012). The relationship between politics and the digital has been described as characterized by both instances of sharing and instances of surveillance (Andrejevic, 2009). That political acts and the digital stand in a relationship of mutual transformation does not mean that digital information experiences universal access. In fact, the Internet as the most prominent instance of ‘the digital’ is a network with highly selective connections (Graham, 2013). Gender, age, territory, and the very configuration of digital infrastructures constitute multiple and constantly evolving digital divides (Pick and Sarkar, 2015). The existence of such divides complicates singular claims about the Information Age. What is needed instead is an analytical awareness about such divides, about the various affordances of ‘the digital’ and how they play out in situated accounts of political activity. Such activities also include the non-digital and offline processes.

The relationship between ‘the digital’ and political acts also brings about new political subjects and subjectivities. Isin and Ruppert (2015) ask how citizens can enact themselves as citizens digitally: who constitutes a political subject by saying and doing things through the Internet? Here, one can first of all point to emerging subjects who perform political acts using digital means, subjects who are understood ‘not in isolation but in relation to the arrangements of which they are part’ (Isin and Ruppert, 2015: 5). Examples of such subjects range from users of social media who ‘like’ and ‘dislike’ (cf. Dean, this issue), to those who disturb established patterns of coded behaviour such as Snowden (Bauman et al., 2014), or even extremist organizations who recruit members digitally (cf. Leander, this issue). Performing digital acts and enacting oneself as a political subject digitally can, but not necessarily has to, include the breaking of codes or conventions, the transgression of expectations, or the making of claims about one’s digital life by being subversive (Isin and Ruppert, 2015). It can also include more mainstream acts of online voting or campaigning.

The notion of political subjects furthermore refers to subjects addressed by politics within the digital realm, who are subjected to (non-)state actors using digital means, to programmers, software and other digital devices that play a part in organizing particular aspects of the subjects’ lives. This includes individuals whose registered personal data is regulated through the principles of data protection (cf. Bellanova, this issue), it includes targeted groups of citizens whose actions are policed through digital prediction tools (cf. Aradau and Blanke, this issue), or whole populations whose movements are organized through digital pandemic models (cf. Opitz, this issue). Digital pandemic modelling, as Opitz argues, is not just a mode of subjecting populations to observation, but is a mode of societal self-observation (this issue). Self-observation signals that the enactment and expression of political subjectivities and identities can be co-constructed by the use of digital means (Dervin and Abbas, 2009; cf. Dean, this issue). Through various social
processes the digital is appropriated to mediate ‘between us and ourselves, in this way transforming the content and scope of our self-dialogues’ (Hermans, 2004: 305). Exploring ‘politics and the digital’ is thus an investigation of how political acts and activities, subjects and subjectivities enter into a relationship of mutual construction, regulation, ordering and dissemination with ‘the digital’.

In particular, this special issue contributes with an investigation of digital acclamation practices in contemporary liberal democracies. Dean discusses social media, one of the most prominent instances of the networkability of the digital, as a platform that – in combination with specific political uses – yields a new public and public affect. Social media acclamations share the scale of mass media, the immediacy and co-presence of individuals and the iconography of public rite. The particular use of the digital intensifies here practices of acclamation that include aspects of ‘political ritual, ceremony and liturgy’ (Dean, this issue). Social media are appropriated for specific practices of deliberation and decision-making, which – despite their digital character – resemble religious worship, public assembly or sports excitement. As such, Dean’s analysis illustrates well how the digital is also determined by the non-digital (this issue). The practice of digital acclamation includes aspects of the non-digital, while digital forms of acclamation arguably also change their non-digital counterparts. A continuative critical question would here address how the computability of the digital and the algorithmic capturing of acclamatory processes could close political deliberation and decision-making down. It could do so, for example, by means of pre-calculated suggestions to ‘like’ or ‘acclaim’ something, that follow the correlative market logic of ‘people who liked A also liked B’. The workings of this prevalent and popular algorithm introduces an important focus of this special issue, namely that ‘politics and the digital’ not only refer to the relationship between the digital and political acts and activities, subjects and subjectivities, but that ‘the digital’ also instantiates its own politics, a ‘politics of the digital’.

Much has been written about the political workings inherent in the digital and its affordances. The process of what Andrejevic (2009) calls ‘digital enclosure’ describes, for example, the commercial capturing of information about populations that is facilitated and mediated by the convenience of digital technology. Even though digital information is used for both humanitarian activities and subversive digital acts, the default tracking of digital moves remains the condition under which one can be part of the most influential digital space: the Internet. This is a fact that changes social relations. Since existing relationships are reproduced through privately owned and controlled platforms, so Andrejevic argues, any digital activity becomes an important asset to the platform-owners and thus a resource to socio-economic life. The ‘digital labor’ (Andrejevic, 2009) performed by the users of such platforms turns their own digital activity against themselves: using digital infrastructure is no longer mere exchange, but it produces value. Online, all digital information is turned into capital and maintaining social relationships is instrumentalized for the data mine. This is a political implication that most digital consumers are not aware of. The digital enclosure thus strips citizens of their freedom to make activities an object of consciousness and will (Andrejevic, 2009) – unless the digital is used to subvert surveillance processes. The special issue further contributes to the analysis of how the digital consolidates and reinforces the place of the commercial. Leander (this issue) describes how it does so through form and processes: website contents follow unnoticed commercial
aesthetics, while she points to commercial forms of circulation that are enhanced by ‘the
digital’, such as encouraged and incited ‘enrolments’, ‘imagination’ and orchestrated
‘contagion’. She argues that these processes promote a transition from the visual to the
visible, which is marked by commercial logics. Most strikingly, these logics percolate both
extremist and classic Western digital video material, especially in the way in which they
re-combine audio, visual and textual elements.

The capture of circulating information is another important aspect that illustrates the
politics of ‘the digital’. Anyone who wants to pull information from the digital needs
processing power, hardware, digital and non-digital infrastructures, which are then used
to collect, store and analyse the available information. Such large infrastructures are
generally owned by corporate entities who structure both the access to the information
and the character of the knowledge that is drawn from it (Andrejevic and Gates, 2014;
Blanchette, 2011). These entities thus gain a specific kind of power over the informed
world. As a general rule, those who own such means of knowledge production are few
vis-à-vis those who produce the data (Andrejevic, 2009). boyd and Crawford, for exam-
ple, distinguish here between the data-rich, who can see, control and analyze informa-
tion, and the data-poor (2012: 8). Opitz, as well as Aradau and Blanke in this issue (this
issue), explore more closely how particular methods used to process large amounts of
digital information have an impact on methodology and knowledge production. They
show how the processing of digital information combines technical and social processes,
as well as digital and non-digital data.

This interrelation of the digital and the social underlines how society and those digital
techniques that count, measure and profile it, are mutually constructed (Oudshoorn and
Pinch, 2003). In particular, the traceability and computability of digital information are
put to use for epistemic practices that affect what is ‘made count’ in politics (Anderson
and Fienberg, 1999). With the rise of digital political practices, numbers themselves take
a crucial role in politics and governance, since ‘to quantify is to activate power’ (Hov-
land, 2011: 36), while numbers ‘gain power from their positions’ (p. 35) in the overall
calculatory and regulatory systems that use them. A prime example is here how digital
data is collected in archives (Bauman and Lyon, 2013) so that it can be categorized,
associated, interpreted and evaluated by means of algorithms, depending on which
aspects one seeks to focus on (Lupton, 2015). In doing so, information is not only taken
out of its original context, but it is also re-contextualized through algorithms. This is also
the reason why Andrejevic and Gates argue that digital data ‘gathers beyond its design’:
all data is ‘collected and stored for its future use-value – its correlative and predictive
potential – even if there are no envisioned uses for it at present’ (2014: 187). This re-use
of information originally gathered for other purposes is facilitated by the very storability,
transferability and computability of the digital. Thus, the function of digital information
is the creep (Andrejevic and Gates, 2014). The continuous repurposing of digital informa-
tion is its main power, but also its main weakness. Knowledge created through digital
models not only tends to obscure the influence factors and assumptions that were part of
creating such knowledge, but also reduces the influence of other approaches and contexts
to find out why and how people do, write and make things. This problem is not solved by
augmenting the amount of digital data because it lies within the numeric nature of data
itself and in the act of ‘cleaning’ digital datasets (Kaufmann, forthcoming).
The continuous re-use of digital information is a powerful epistemic practice, because it instantiates change through feedback and patterns. Morozov criticizes the use of such patterns as ‘unpolitical’, because patterns leave no room for political deliberation (2014: 3). Or, to put it differently, ‘the digital’ instantiates its own politics, because it lends itself more easily to algorithmic regulation than to non-patterned, non-numerical deliberation processes. The digital and its algorithmic form of regulation cannot identify underlying explanations, but algorithms ‘simply function’ (Andrejevic and Gates, 2014: 187). The digital methods deployed are ‘not about understanding the data’, but they are ‘about intervening in that world based on patterns available only to those with access to the data and the processing power’ (Andrejevic and Gates, 2014: 190). This feeds into a form of politics ‘whereby the traditional hierarchical relation between causes and effects is inverted, so that, instead of governing the causes – a difficult and expensive undertaking – governments simply try to govern the effects’ (Agamben, cited in Morozov, 2014: 6). A politics that focuses on the cause of problems is replaced by a politics of surveillance and administration. Yet, ‘what counts as an “ill effect” and how to demonstrate it is a key question that belongs to the how of politics that algorithmic regulation wants to suppress’ (Morozov, 2014: 10, emphasis added). This self-evidence associated with digital, numeric information and patterns that is reified by algorithms needs to be questioned (Gitelman and Jackson, 2013).

This special issue accordingly draws attention to the way in which ‘the digital’ assists in creating epistemic objects, time-spaces and subjectivities, and how it rearticulates security practices. Aradau and Blanke, for example, explore how the digital reconfigures spaces of interest to security practices. The digital draws attention away from enclosed material spaces towards ‘a different time/space of “between-ness”’, an example of which is the ‘hotspot’ (this issue). As a particular time-space, the hotspot epitomizes the regulatory logic inherent in the digital, namely, to address effects instead of causes. The hotspot stands for interventionary, instead of anticipatory, politics. It elicits a transformation of biopolitics that is no longer characterized by an intensified future orientation, as expressed in the politics of anticipation and pre-emption. But in the context of predictive policing, the networkability and computability of the digital enable the calculation of emergent data points. These spaces of between-ness give content to relations between objects, events, subjects, which again serve as a basis for the governmental logic of intervention, instead of one characterized by a change of milieu. The digital politics of predictive policing are no longer concerned with the governance of ‘docile bodies’ or the population, but with the ever-expanding ‘production of pure relationality, of geometrical connection as simultaneously similarity and difference’ (Aradau and Blanke, this issue).

The politics of patterns and feedback loops that the digital inspires also gives reason to explore the relationship between the digital and societal self-observation: how the social is made known and acted upon. Opitz argues that digital pandemic simulation implements a specific relation to the social from within the social and thus instils a ‘peculiar’ reflexivity (this issue). The digital here influences the way we choose to represent reality or knowledge, social relations, space and temporality. He argues that digital simulation practices change the way we believe in facts, because they do not seek to represent reality, but introduce a doubling of reality. Digital simulation works with a new reality within reality that is characterized by speculative knowledge. The notion of the social is here no longer understood as communication, but communicability. Digital
simulation recasts communication not as mutual understanding, but as circulation which corresponds to the idea of the social as enfolded in different forms of matter and processes. This focus of the digital on circulation also determines the way in which the social is positioned in space: digital simulation recasts the topology of the social as a closed surface on which ‘no location can make itself inaccessible’ (Optiz, this issue). This not only implies a shift from place to movement, but it also reinforces a temporality of the contingent, because digital simulation always charts a series of futures in order to generate a sense for what might happen. As a result of this particularity of digital simulation ‘virtual disease can be more intensely real than actual disease’.

‘The digital’ thus not only stands in a relationship of mutual influence with political acts and activities, subjects and subjectivities, but it also instantiates its own politics, its own regulatory logics and effects. As such, digital information should not be considered a matter of fact, but a matter of concern. It makes the relationship between the digital and politics an object of inquiry. Bellanova argues that this necessarily involves an engagement with the various aspects that make the digital’s ‘dispositif’, which includes the related sets of expertise, various practices, institutions and institutional debates this issue. In order to understand the relationship between politics and ‘the digital’, Bellanova traces the various elements of the data protection dispositif. Most importantly, he also points out how the digital combines the political and the anti-political, by tracing the politics within and outside of digital governmentalities, on the one hand, but also by determining those moments where the digital excludes contestation and forecloses debate, on the other this issue.

**Conclusion**

Together then, the contributions to this special issue explore the relationship between politics and ‘the digital’ as one of specificity. They pay careful attention to the affordances of ‘the digital’ – how being numeric, countable, computable, material, storable, searchable, transferable, networkable and traceable, fabricated, interpreted and non-digital leads to situated accounts of its workings. They move the discussion from global and singular claims about the digital as an exterior force of political change to one that traces how ‘the digital’ and the various relations to politics it inspires grow out of situated social contexts.

What is to be gained from such an endeavour? To answer this question, we should follow those who have argued that the proliferation of digital devices displaces empirical sociology and cognate disciplines from the avant-garde to the margins of methodical innovation (Savage and Burrows, 2007; Burrows and Savage, 2014). We have shown in this article that the indigenous, spontaneous sociologies of technologists about ‘the digital’ compete with and at times colonize social theoretical accounts, and as such should be taken seriously. Demonstrating, as we did here, that claims about digital artefacts are already claims about politics injects frictions into the imaginaries of seamless and cloud-like digital navigation. Our suggested understanding of ‘the digital’ via its specificity and its affordances renders statements about ‘disruption’ and thresholds of evolution less evident. Together with the contributions collected in the following pages, the attempt is here to make it more difficult to produce sweeping accounts and grand statements about our current, digital circumstances in favour of a more circumscribed yet detailed rendering of politics and ‘the digital’.
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