



The Value Dynamics of Data Capitalism: Cultural Production and Consumption in a Datafied World

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INTRODUCTION

The observation that ‘information’ and ‘data’ have come to the centre of capitalism has inspired a range of descriptive terms aimed at qualifying the broad concepts of “informational capitalism” (Castells, 1996; Benkler, 2006); “digital capitalism” (Schiller, 1999); “surveillance capitalism” (Zuboff, 2015); “platform capitalism” (Srnicek, 2017); or, simply, “data capitalism” (Morozov, 2015). The underlying idea of data capitalism is that data is “the new oil”, a valuable asset to be extracted as a natural resource (World Economic Forum, 2011) in the process of datafication (Mayer-Schönberger & Cukier, 2013), centred on the transformation of social movement in digital space into processable, digital forms that feed on the activity of media users, consumers, and citizens. While many scholars point to the broader, general consequences of datafication for social life

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(e.g. Cohen, 2012, 2018; Cheney-Lippold, 2017; Couldry & Hepp, 2016; Schäfer & van Es, 2017; Couldry & Mehijas, 2019)—transforming everything from jobs, finance, education, and power relations to intimacy and everyday sociality—we are still in need of analytical models to understand the complexity and scale of this techno-social development and the dynamics behind these transformations.

The fact that data capitalism and the principles around data capture and processing have integrated financial services, telecom providers, platform operators, media content producers, advertising and PR, retail, and consumer goods and services, as well as many public sectors that have previously operated in relative isolation from each other, brings with it the risk to mistake this increased complexity for an epochal, qualitative shift in the historical unfolding of capitalism itself. This might, of course, well be the case, but it might also be too early to empirically establish with any solidity. Several scholars have, however, pondered upon whether we are facing a fundamental shift in the workings of capitalism (Couldry, 2004; Couldry & Mehijas, 2019; Kitchin, 2014; Mosco, 2014), or if datafication is more of a myth of “big data” (boyd & Crawford, 2012, cf. Boellstorff, 2013) driven by what José van Dijck (2014) calls “dataism”, or an “algorithmic ideology” (Mager, 2012). Is capitalism moving in the direction of automation, thus privileging “correlation over causation, predictability over referentiality” (Andrejevic, 2013, p. 40) where automated intelligence becomes favoured at the expense of hermeneutical interpretation, or are we witnessing an extension of old models for value generation in new clothing? And, if so, how will these value forms affect other value forms in society? Will the private value forms of the economy suppress or alter public value forms, for example, as José van Dijck et al. (2018) have recently argued? Such questions cannot easily be answered without empirical analysis, but in order to conduct such empirical studies, there is a need for robust analytical models of value—models that can handle complexity and produce indicators for the various dynamics involved.

The need for more elaborated models also stems from the fact that much research into datafication and what broadly could be considered critical data studies is dispersed over disciplines and research fields and has focused on different sectors of the data industries with a variety of methods. However, some major consequences have been established: an ongoing concentration of data capacity in the form of the centralisation of data into data centre monopolies (Rossiter, 2017; Vonderau, 2018); an increased reliance on semantics in computation to produce self-learning

algorithms (Gillespie, 2014; boyd & Crawford, 2012; Kitchin, 2016); an increased metrification of digital culture through the quantifying and tracking of everyday life via apps for information, education, entertainment, health care, and work (Beer, 2016); and the rise of algorithmically based marketing practices that proliferate with increasing intensity (Turow 2011, 2017). However, even if there are new technological arrangements that seem to restructure society in its totality, there are also older power and value dynamics that shape these developments. There is thus a need to develop analytical approaches that can identify the possible rearticulations of value that result from the transformation of business models, technologies, epistemologies, and social life in the era of data capitalism. This also means taking into consideration the historical breaks in previous shifts from market, to industrial to informational capitalism, in order to judge if data capitalism represents a break from informational capitalism, or a deepening of its modes of production. A starting point for such a discussion is to focus on the value forms at the centre of data capitalism and their relation to public value forms (e.g. welfare, health, or equality), in order to contribute to the analytical toolbox of critical data studies.

The aim of this chapter is to suggest an analytical model where the composition of value can be analysed within distinct societal domains, as they are affected by datafication. In the following I will, first, define the concept of value that I will adopt for the analysis and outline its complexity and dynamics. I will then present a model of data capitalism as constituted by four different sub-dynamics—the economic, the technological, the epistemological, and the social. Following this, I will give some examples of societal domains where this model can be applied empirically before I sum up my argument in the conclusion.

VALUE AND VALUES

The idea of data as the new oil is a widespread trope that gained traction towards the end of the first decade of the 2000s. It was cherished by the World Economic Forum (WEF, 2011) and became a buzz term in financial magazines and trade journals (e.g. Rotella, 2012; Toonders, 2014). A Google image search displays a multitude of slides and illustrations, and it is easy to get the perception that data is the Særimner of contemporary capitalism. In the classic Icelandic saga *The Prose Edda* by Snorri Sturluson (1916), Særimner is the mythic boar in Nordic mythology who was consumed by the Viking gods each night at Valhalla, but who each morning

arose anew for perpetual consumption. It is a mythical belief of endless resources, free for all to grab and use for the benefit of eternal growth. However, the metaphor of data as oil is misleading in a number of respects, and it has been rightfully criticised (cf. Stark & Hoffmann, 2019). But, as Puschmann and Burgess (2014, p. 1699) argue, it evokes assumption that “supports the notion that data is all at once essential, valuable”. And indeed, discussions on data often centre on its value—but what kind of value does data refer to? Before we take on that discussion, we need to say something about the ways in which data differs from oil as a resource.

First of all, data are not something that is discovered hidden in the ground—data, as units of information, are produced and have their root in human activity. While oil is the product of energy bound up in underground reservoirs over millions of years, data is produced in the process of datafication, that is, by the contemporary activity of human subjects. Its value is transient, and real-time processing is, therefore, necessary. Oil is a product of natural processes without the involvement of humans. Data cannot be produced without human activity—both as the generators of data through social action and as refined by statisticians and engineers in human-directed algorithmic calculation.

Second, unlike oil, data is a non-rivalrous good. The use of my data by a company (e.g. Facebook) does not infringe upon another’s use of it (e.g. Google). In order for it to become valuable economically it needs to be restricted, similar to other nonmaterial and transient commodities—which basically mean all digital commodities that are spreadable via the interactive web—music, films, video clips, computer programmes, and so on. The legal regulation of digital commodities is therefore necessary—that which cannot be legally restricted, cannot be charged economic value for. So, what companies capitalise on might be the same data at their origin, but in order for it to become valuable it has to be processed in a way that makes it functional in a market.

Third, and again unlike oil, data will never be exhausted as long as there is human activity. It might in fact also survive human extinction through self-generating, autopoietic systems created through machine learning. Oil as a natural resource will eventually be exhausted. Taking these disparities together, oil is a poor metaphor for describing data as an asset within contemporary data economies, and for understanding the way in which data produces value.

The one thing that the analogy between data and oil captures is that they are both valuable assets. But how can we think about what form of value data (and oil) represent?

In his short treatise *Theory of Valuation*, John Dewey (1939) theorised value as both an essence (what it is) and a practice (how it is arrived at)—that is, both as a noun and as a verb. When we interact socially, we make value judgements on things and practices around us, and in this process of valuation we assign value to these things and practices. We could call this a practice theory of value. This means that value (noun) is the outcome of social negotiation or valuation (verb)—they are “sedimented” valuations (Sayer, 2011, p. 25) or, in analogy to Marx’s labour theory of value, the reified result or product of the labour of valuation. Dewey thought of value as the outcome of all social activities that were not merely a reflex or the result of biological conditioning:

All conduct that is not simply either blindly impulsive or mechanically routine seems to involve valuations. The problem of valuation is closely associated with the problem of the structure of the sciences of human activities and *human* relations. (Dewey, 1939, p. 3)

Underlying all social actions, then, are judgments where a social subject acts on the basis of choices rooted either in experience or in conscious evaluation of the situation. In our everyday lives we constantly value objects and practices in our surroundings. When we, through valuation, assign value to objects around us, we do this in the form of either nominal value (good/bad, ugly/beautiful) or ordinal value (1, 2, 3, etc.). With datafication, most values are translated into ordinal (or interval, ratio) value, because this is the way in which computers work. Datafication is thus also the process of transforming quality into quantity, or, if exemplified with the distinction between private and public value, transforming ‘soft’ value forms such as equality and knowledge into numerical form (e.g. equal numbers or grades).¹

While there is a substantial amount of literature on value as a general category besides Dewey’s account (e.g. Dumont 1908/2013; Graeber, 2001; Magendanz, 2003; Stark, 2009; Lamont, 2012), there is also a

¹Datafication is thus a perfect fit for the administrative rationalities of New Public Management, as the audit culture (Strathern, 2000) of NPM also strives to quantify in order to evaluate managerial processes. The dynamics of the relations between NPM and datafication is well worth exploring further, but outside the scope of this chapter.

number of works concerning value and the digital (e.g. Skeggs, 2014; Gerlitz & Lury, 2014; Bolin, 2011; Gerlitz, 2016). Many studies are, however, empirically limited and/or theoretically restricted to the economic or commercial forms of value. In line with Boltanski and Thévenot (2006), Skeggs (2014), Stark (2009), and Heinich (2020) one can also be sceptical of the common separation between value (as an economic category) and values (as morals) and theorise the economic and the moral as integrated. A separation of value and values is especially problematic in digital economies, since the intangible character of commodities makes the valuation process foundational.

A similar distinction made in valuation studies (Helgesson & Muniesa, 2013) is between valuation (as assessment) and valorising (as the production of economic value) (Vatin, 2013). This distinction, stemming from the distinction in French between “évaluer” and “valoriser”, is also problematic since, as I have shown (Bolin, 2011), the process of assessing value is also the production of value—especially in markets for non-tangible commodities that are almost entirely dependent on the *belief* in value among both producers and consumers. As John Kenneth Galbraith (1970) has argued, economics and economic reason was always founded on belief. Such arguments also underlie Bourdieu’s (1993) analysis of social and cultural fields, centred on the shared conviction among relevant agents in regard to the value of a field’s symbolic assets. These assets—such as money, prestige, and rank—are dependent on the shared belief among those agents competing for the field’s capital. When we act in social fields, we make value judgements, and in this process of assigning value to something, we give it a meaningful and interpretable form. However, we do not assign value randomly, but within a specific *symbolic order*, set up by the field of which it is a part. Things and practices are given meaning within an ordered social context (Couldry & Hepp, 2016). Based on these meaning-making practices and the field of which we are a part, we act. This is not so much dependent on the accuracy of these beliefs, that is, whether they are ‘true’ or not, but more along dynamics laid out in the so-called Thomas theorem: “if men define situations as real, they are real in their consequences” (Thomas & Thomas, 1928, p. 572; cf. Merton, 1995).

By integrating the practices of valuation with its outcome, we could analytically focus on specific societal domains or fields where value is produced in processes of valuation and study the possible rearticulations of value in them. As briefly outlined above, a datafied society integrates

agents that have hitherto acted in isolation from each other. As all kinds of societal production get more integrated into the process of datafication, it makes sense to situate this process historically. This is the objective of the next section.

DYNAMICS OF DATA CAPITALISM

In *The Rise of the Network Society*, Manuel Castells (1996) theorised the turn from industrial to informational capitalism by focusing on the shift in the modes of production. Castells relates these shifts to the technological revolutions—the steam engine, electricity, and computerisation. These were all revolutionary technologies disrupting modes of production, transforming industrial relations, and affecting all interested parties.

The historical outline and description made by Castells, however, is based in a rather narrow political economy perspective where the conception of value is first and foremost related to its market function (use value, exchange value), although he also points to the dynamic of informationalism as a specific mode of development not necessarily subsumed by economic dynamics. If we want to theorise value dynamics as based in both judgmentally based practice (value as a verb) and value as an object (value as a noun), we need to extend or complement this history by bringing in other perspectives on value formation. As already mentioned above, datafication integrates various production domains in society—financial services, telecom providers, platform operators, media content producers, advertising and PR, retail, and consumer goods and services, as well as certain public sectors. Not all of these sectors are driven by the same valuation principles, and the values at the centres of these domains are sometimes dramatically different. This becomes most obvious when it comes to the differences between industrialised commercial production and the media production generated by everyday media users when connecting on social networking media, uploading texts and images, writing blog posts, or publishing music. Such production, as I have analysed elsewhere (Bolin, 2012), very seldom has economic profit as a motive, and cherishes other value forms (e.g. social or aesthetic value).

The increased complexity of the datafied media landscape has brought with it a large number of individual and collective agents whose motives and interests produce different value forms compared to those of the commercial media industries. The complexity in terms of the number of interested parties also produces a *complexity in relations* and in the outcomes of

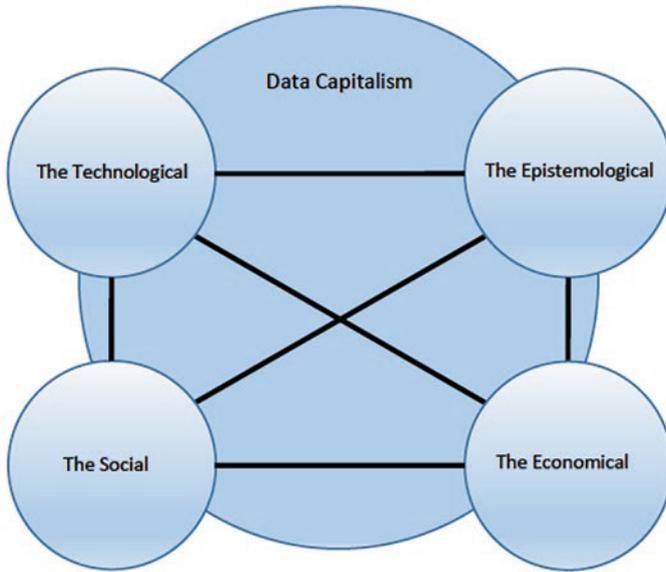


Fig. 1 Value dynamics in data capitalism

the datafication process (cf. Bolin & Hepp, 2017). This means that in this landscape there are several dynamics involved, as illustrated in Fig. 1 and further explained below.

The figure is intended to capture the relations between four different dynamics. Each dynamic is partly within but also partly outside of data capitalism as a system; not all technological dynamics are subsumed by capitalism, and not all social dynamics are drawn into profit-motivated actions (e.g. social relations within the family mainly lies outside of it). The dynamics are also related, and their relations vary if seen in relation to different empiric cases. Below they are explained in more detail, in order to then—in the next section—be discussed in relation to each other.

First and most central is, of course, the *economic dynamic* of data capitalism, the foundational strive towards return on investment, maximum profit, and so on and the constant drive towards perpetual economic growth, based on the legal regulation of private ownership (Cohen, 2019). The profit motive is of course the main motor of capitalism as such and long precedes the contemporary mode of production including its present

form where data has become central. This overarching motive, of course, produces a drive to increase and speed up turnover and expand markets. Manuel Castells (1996) argues that informational capitalism has become the dominant form of capitalism since the 1980s (although the process leading up to this dominant form starts earlier). Informational capitalism is made possible through the rise of more refined communication technologies that can distribute information across society, and the question is whether what we are witnessing in data capitalism today is a deepening of informational capitalism or an abrupt break that introduces an entirely new phase. The economic dynamic can be said to be manifested in the economic dynamics of its *business models* and related financial technologies. A business model, as used here, can be described as the way in which a commercial operator organises its overall strategy for producing surplus value. For the media and communications industries, for example, we can talk of three basic business models: a text-based, an audience-based, and a service-based model.²

The *text-based model* has at its basis the selling of copies of media texts (written, audio-visual, auditive) in exchange for economic value (money). This model can be said to have been born with the market for books, following on from the possibilities of mass production of the written word afforded by printing technology since the mid-fifteenth century.

The *audience-based model* was then born with the advent of advertising when media producers started selling their reader's attention to advertisers (and others) who wished to reach audiences with commercial (or political) information. Many newspapers also combined these two models and based their revenues on a certain quota (say, 25% revenue from advertising and 75% from copies sold) (Gustafsson, 2009).

The *service-based model* is related not to the mass media and content-producing industries but to the telecommunications sector, where telephone companies (and, before that, postal services) traditionally offered a service for customers to communicate with distant others through their communications networks for a fee or for a subscription, or a combination of the two.

In the pre-digital world, the text-based and audience-based models, although sometimes operating in combination, were always operating independently of the service-based model. They worked on separate

² See Bolin (2011, chapter 3) for a more elaborate discussion of these three models and how they merged in the wake of digitisation.

markets, and there were no incentives for them to cooperate since their operations could not benefit from one another. Cinema screening, music distribution, television viewing, or print journalism could not be combined with telephone calls in any economically meaningful way. The major change that digitisation brought with it was that these three models merged. When all types of distribution of media content and all communication services such as text messaging or voice calls happen through internet networks, it becomes possible to take advantage of the user data and extract economic value, and suddenly the culture and media industries found an essential need to cooperate with the telecom business, since this is where control over the IP numbers can be found. This was necessary in order to be able to tailor advertising to consumers on an individual level. This development was what was needed for developing new business models based on consumer data.

Second, data capitalism and the datafication of society presume a technologically driven process centred on the “quantification and potential tracking of all kinds of human behaviour and sociality through online media technologies” (van Dijck, 2014, p. 198). Technological advancement has, naturally, always played a major role in the shifts in capitalism over the years: market capitalism was intimately tied to new means of transportation and navigation, industrial capitalism was centred around the invention of the steam engine, and informational capitalism built on the ability to process and disseminate information. We can of course debate how technologies are born and developed, to paraphrase Brian Winston (1995), and whether invention or societal need comes first, but there is no denying the centrality of technology for capitalism’s developments as a system. Technology is, however, not only subsumed capitalism, but has its own *technological dynamic*, driven by functionality and efficiency. Technological dynamics have been central to human development since the invention of the wheel, which means that technology precedes capitalism. In the words of Heidegger, technology is also intimately related to knowledge and truth through the Greek notion of *technē* (τέχνη), that is, art or craft, and *-logia* (-λογία), that is, the study of something: “Technology is a mode of revealing. Technology comes to presence [West] in the realm where revealing and unconcealment take place, where *alētheia*, truth, happens” (Heidegger, 1954/1977, p. 13; square parenthesis in original). Technology and knowledge are thus intimately related (cf. Braman, 2012), and knowledge has always been a central feature in the advancement of capitalism across its many modes.

Third, and related to the technological dynamics of data capitalism, knowledge follows an *epistemological dynamic* which is centred on increasingly sophisticated means of gaining intelligence about social subjects as consumers of products and services, including media and cultural products. Epistemology, and ways of gaining knowledge, has always been a central component in the development of new techniques for controlling the environment and enters the scene with the turn of the Second Industrial Revolution in the mid-1800s (Castells, 1996, p. 34), a point after which scientific knowledge becomes one of the main drivers of technological and commercial development. One of the most important developments in this area is the advancement of statistical technologies (Hacking, 1975/2006; Porter, 1986) which facilitated more refined ways of controlling the environment, including mapping social behaviour and attitudes to anticipate future events. The increased interest in gaining knowledge about consumers and media audiences intensifies with the rise of consumer society in the mid-twentieth century when economists such as John Kenneth Galbraith (1958/1964) observed that advertising interferes with traditional economic explanation. These ideas are picked up and further developed by, among others, Jean Baudrillard, who, in a series of books in the late 1960s and 1970s, discussed the rearticulated value forms that come into view alongside consumer society, when design components and symbolic features add to the exchange value of commercial commodities (Baudrillard, 1968, 1970/1998, 1972/1981, 1973/1975). Baudrillard proposed the concept of sign value to add to the already existing use and exchange value in political-economic analysis. When consumption, rather than production, becomes the motor of capitalism, as Baudrillard argues, knowledge about consumer behaviour, attitudes, tastes, and lifestyles becomes increasingly important.

Fourth, and with consumption and the drive for intelligence about consumers, the epistemological and the technological are directed towards social life, which means that they become confronted with a *social dynamic* emanating from those who generate data at various instances in practices of production and consumption. While digital media since the rise of the interactive web has made everyone a potential producer, although on a different level and on a different scale compared to the global media and communications giants—traditional mass media corporations as well as online platform companies—the social becomes tightly integrated into those practices of production and consumption, becoming a fundamental feature of data capitalism. The domain of the social, however, is not

primarily driven by the endeavour to maximise profit or economic value, but is centred on social values such as belonging, recognition, identity, and sociality. One can regard these as two types of productive activity, where the traditional professional media are producing content and services within a market economy based on a profit motivation, producing surplus value, whereas the production made by everyday media users is non-profit motivated, and within a social and cultural economy, resulting in social difference and identities (Bolin, 2012).

The four dynamics described above are each based on their specific *value regimes*, centred on a specific value form (e.g. economic, social, aesthetic, or technological). The value regimes, the type of order that is produced by the common social belief in the same value forms, are what constitute these areas as societal domains, with their own internal dynamics. A societal domain with its own value regime is, in a way, similar to social fields as theorised by Bourdieu (1993).

Fields are also centred on a common value but, in contrast to societal domains, a field is a space for competition over the central value, or capital, as Bourdieu defines it. A societal domain is more than its competition, although competition also exists in the domains. The domains discussed above, such as technology, cannot be considered a field, since its main value form—functionality—cannot be competed over. The same goes for the domain of the social. Rather, domains are areas of social life that are assembled through a common evaluative regime. Sometimes these domains work harmoniously in relation to one another. But sometimes there arise tensions between them when the specific value regimes are conflicting or incompatible. The following section will set out to describe these tensions.

RELATIONS BETWEEN VALUE FORMS

In order to empirically study the specific relations between value regimes, one has to operationalise them into specific societal domains, for example the domain of cultural production and consumption, or the domain of education, both of which involve relations between epistemological, technological, social, and economic value forms.

Firstly, within the domain of cultural production and consumption, knowledge about the social behaviour of customers and media users is central and results in lifestyle segmentations and audience profiles and the development of personalised recommender systems that serve individually

tailored recommendations on films, books, news items, and other cultural commodities based on previous use, geographical location or access through connections on social media, and so on. In a datafied society, the combinations of such technological advancements with new forms of business models have significantly expanded on the ways in which the systematic tracking and mapping of audience behaviour occur for the purpose of automated personalised targeting to the benefit of capital accumulation and corporate profits. Take, for example, the personalised recommender systems that many platforms for the distribution of media content build on. Recommender systems are at the heart of platform services such as Spotify, YouTube, Netflix, or Amazon and direct the user towards specific types of content depending on previous choices. The most obvious are in the form of overt recommendations—“Customers who viewed this item also viewed”—while other recommendation types work in subtler ways. Recommender systems build on filtering techniques of different types, where the two main techniques are “content-based filtering” (recommendations based on the similarity of content) and “collaborative filtering” (recommendations based on similarities in user profiles) (Burke et al., 2011; Hildén, 2021).

Recommender systems are at the heart of the datafied economy’s business models and they build on the ability of large-scale data processing where different types of proximity between content and behaviour are analysed. Its present uses are invariably profit-motivated. However, if we trace the invention of recommendation systems back to their original formulations, we see that the main driver of this invention is not capital accumulation, but the technological ability to measure document proximity in large databases in order for people to be able to make “serendipitous discoveries” and “to give users a greater chance of finding documents they did not know to look for” (Karlgrén, 1990, p. 1).

Recommender systems were thus developed in the early 1990s in order to make it easier to discover texts in large textual archives. At that time, the technology could not be used for commercial purposes. Today, however, the interactive web allows recommender systems to be combined with business models that can generate personalised ad targeting. This is how value regimes sometimes can work alongside each other while also producing conflicting tensions.

A second example concerns the domain of education where epistemological dynamics are confronted with technological (and other) dynamics. The COVID-19 situation during 2020 has, for example, significantly sped

up developments of distance education, with a range of *EdTech* solutions being developed for teachers and school managers working at all levels of the field. As has been observed by many within the field of critical studies of educational technologies (e.g. Breiter, 2014; Selwyn, 2016; Williamson, 2017; Jarke & Breiter, 2019), the digitisation of education brings with it some value registers that have not previously been found within educational systems and that stem from digital management systems as well as from digital learning material. José van Dijck et al. (2018) make important notes on how ‘platformisation’ (including datafication, personalisation, and commodification), in the long term, could transform traditional educational values such as *Bildung* and education into instrumental skills and what Biesta (2010) calls “learnification” and the move from “teacher’s autonomy” to “automated data analytics” (van Dijck et al., 2018, p. 118f). Much of the critical discussion around the datafication of education is policy-oriented (e.g. Williamson, 2017), on privacy issues (Lindh & Nolin, 2016), or build on corporate discourse on EdTech (Yu & Couldry, 2020), but there is yet very little research into the valuation processes related to these technologies or on the actual implementation of educational technologies in schools (but see e.g. Sjöden, 2015). It should, therefore, be of importance for future research to more carefully study the tension between values as they appear in educational settings in order to judge the possible consequences for traditional educational value forms. Such long-term consequences require longer-term studies in order to understand possible rearticulations of value registers, and one can hope that in the near future knowledge about these processes will be at hand.

This is perhaps most important for understanding the tension between public and private value forms. Epistemological dynamics can be beneficial for fostering public values such as *Bildung* and understanding, but can also be used instrumentally for economic ends (i.e. subsumed by the economic dynamics of capitalism), boosting private value such as economic profits. The subsumption of epistemological value need not necessarily foster private value—it can also be subsumed by social dynamics and used as ends for boosting social value forms, such as welfare.

CONCLUSIONS

Critical data studies is a new and rapidly growing field of interdisciplinary research. As all such fields, it seeks its analytical forms and models that can aid in the understanding of the technological, social, economic, and

epistemic complexities of its research object. As researchers approach the phenomenon from their respective vantage points, this means that some will focus on technological affordances, others will focus on business models, while others will look to the social apprehensions of technology and everyday use, just to single out some possible approaches. In trying to gain a holistic understanding of the phenomenon this complexity is a challenge in itself, but it also opens up a space for valuable cross-disciplinary theoretical and analytic syntheses of previous research.

Above, I have suggested such a synthesis in the form of a model for analysing the implications of datafication within the framework of data capitalism, I have specifically argued for the benefits of using the concept of value and valuation practices as a prismatic focus for studying the dynamics of this specific form of capitalism. I have tried to nuance previous research that has, quite naturally, pointed to the implications that the commercial nature of the datafication process has on the social by pointing to the additional dynamics involved for the benefit of future empiric studies. I have argued that one such approach for conducting empirical studies is to regard the various domains involved in the datafication process from the perspective of the tensions that exist between different forms of value that are drawn into the datafication process. To use value as a prismatic focus can lay bare the social dynamics of the various domains involved, as value is both produced and perceived socially in practices of evaluation.

I have identified four types of dynamics, centred on their own value regimes, that underlie data capitalism: the economical, technological, epistemological, and social dynamics. No doubt other domains can be added to this list, and future research will most likely identify these. I then provided some examples of how tensions within specific domains can play out in relation to the interface between different value forms. My examples concerned the meetings between technological dynamics and new business models, and the tensions between epistemological, technological, social, and economic dynamics. Exploring the negotiations of value within various social domains, and empirically studying and analytically theorising value dynamics can also help determine whether datafication is a true game-changer or whether it is merely a slight adjustment to informational capitalism, as theorised by Manuel Castells (1996) and others.

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