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Defining transparency movements

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Introduction

Just about any contemporary practice is pressured by claims toward more transparency (Austin and Upton, 2016). However, it is rare that such imperatives of openness originate within governmental policy. The movement toward more transparency is pushed from a multitude of actors with diverse arguments and ideologies. The concept of transparency movements has sometimes been mentioned as a concept of use when talking about this contemporary push toward more openness (Florini, 2007; Shaxson, 2007 Fenster, 2013; Lupia & Elman, 2014). However, so far this concept has not been targeted for serious theoretical treatment. The alternative term of "accountability movements" has also been suggested (Chen and Haynes, 2016).

Increased transparency is universally associated with positive values, but are there negative aspects as well? The current text acknowledges that transparency movements are fundamentally positive in character. However, it is argued that it is vital to distinguish between positions of seeing them as fundamentally positive and as constituting an unmitigated good. Once this difference has been recognized, researchers can explore transparency movements as multifaceted projects that we in some ways also can be critical of.

One starting point for the current article is that transparency has unintended consequences when put into practice (Lord, 2006; Fung et al., 2007; Cukierman, 2009). Therefore, development over time involves transformation of initial values and visions. A second starting point is that even though the ideals of transparency can be traced back to the Enlightenment and the scientific revolution, contemporary transparency movements must be understood as digital phenomenon.

There is a remarkable lack of literature on the broad shift in recent decades that has been called *the transparent society* (Brin, 1996) and *age of transparency* (Sifry, 2011). This is perhaps not surprising as increased transparency has been pursued in diverse ways by separate movements allowing for a wealth of direct and indirect societal impacts. Consequently, various movements appear disconnected from each other, seemingly appropriate objects of study for separate disciplines. *Creative Commons*, *open access* and *open research data* are pursued by information science. Political scientists are interested in a multitude of movements connected to *open government*. Movements such as *open source*, *linked data* and *open platform* are studied by computer scientists and so on. Given the entanglement and cross hybridization between transparency movements as well as their aggregated effects on modern societies, this kind of departmentalized scholarly approach seems increasingly problematic.

The current article is an attempt at defining transparency movements. Social scientists regularly identify new phenomenon and introduce concepts that allow distinction between similar forms of manifestations in order to investigate underlying processes and mechanisms. Transparency movements are in this article understood as concerned with digital resources in the form of *code* (or software), *content* and *data*. As a consequence, 20th-century reflections on movements are today of limited value. The ambition in this article has been to develop a theoretically grounded definition of transparency movements to be used for the critical exploration of a new phenomenon. Through the identification of a complex phenomenon with substantial presence in democratic societies, it becomes possible to pursue research on what problems appear when numerous separate movements are studied with one analytical frame.

Within the boundaries of a single article it is not possible to dwell on presentations of individual movement. The act of describing the phenomenon of transparency movements requires a disciplined broadbrush approach. It is all too tempting to be caught up with the wealth of historical turning points within individual movements. The aim of the current approach is to explicitly focus the larger phenomenon. Information on some of the most notable projects will be introduced when appropriate. Although hundreds of sources on individual transparency movements have been consulted in the writing of this article, referencing will be selective. It should be noted that most previous research has been geared toward strengthening individual movements.

Following sections on previous research on transparency and method, a theoretical definition will be stipulated. This makes use of several concepts that need further deliberation: transnational entities, traditions of reuse, traditions of accountability, datafication and ideologies of openness. These will be dealt with in separate sections. In various sections, additional concepts will be suggested as useful for understanding diverse aspects of transparency movements. The article concludes with a discussion on some overarching aspects of transparency movements as they have come to be defined, followed by the conclusion.

Transparency and transparency movements

The ideal of transparency can be tracked back to Kant and his view of scientific reasoning as providing enlightenment, rooting out ignorance (Weinert, 2009). During much of the 20th century, transparency was tied to the evolving political imperative of freedom of information as well as notions of access to information (Calland and Bentley2013). It has been suggested that transparency with time has become a catchall answer to a wide variety of social, financial, political and corporate problems (Birchall, 2011).

A benchmark initiative of recent years was *Transparency and open government* (White House, 2009, 4685) launched by US President Obama on his first day in office, aiming to enhance "transparency, public participation, and collaboration" and promising to create "an unprecedented level of openness in Government". The Obama administration extended existing statutes concerning freedom of information and E-government. It should be noted that much of the earlier regulation stemmed from the Reagan and Bush administrations of the 1980s, viewing information *not* as a *public good* but as an *economic resource* (McDermott, 2010). This distinction is crucial for understanding the difference between open government and *government 2.0*. In the latter case, government-based data is seen as a platform for reusable resources and economic exploitation (O'Reilly, 2011).

In an influential resolution by the UN General Assembly (1996), public administration and development was connected to "transparent and accountable governance". Elaborating on this, Armstrong (2005) suggested that three different complementary concepts have been used in discussions on public administration: integrity, transparency and accountability. According to that argument, it becomes meaningless to spearhead transparency without also upholding accountability and vice versa. Similarly, integrity, involving impartiality, honesty and fair practices, should be seen as a precondition for transparency. In recent years there have been some attempts at updating the accountability tradition with digitalization in mind (Ananny and Crawford, 2016; Diakopoulos and Koliska, 2017). As stated earlier, all transparency movements are in this article understood as fundamentally digital, making much of early reflections within the accountability tradition of modest use.

During the recent decade, there has been some discussion on the "limits of transparency", mostly with an emphasis on the complexities of commodification of transparent resources (Cukierman, 2009; Crain, 2016) or on ideological aspects of transparency driven cultures (Strathern, 2000; Garsten and Montoya, 2008).

Lord (2006) and Fung et al. (2007) have in different ways argued that transparency is an ideal that undergo fundamental transformation when implemented in practical projects. Such discussions within previous research focus either on specific concepts or individual transparency movements. In what follows, a considerably broader approach will be taken.

Crucially, Birchall (2011, p. 61) notes that development of the Internet, data storage and access has created possibilities "on an unprecedented scale". Building further on this insight, transparency movements will in the current text be understood as projects either made possible by digitalization or transformed when resources are "born digital".

Method

The act of defining a new phenomenon is fundamentally a matter of construction, tying together previously non-associated concepts, allowing interesting patterns to emerge. The following attempt at identifying, demarcating, and defining transparency movements as a major contemporary phenomenon involves usage of numerous concepts. Each main concept will thereafter be discussed separately.

The development of the definition was an iterative process starting with an attempt to identify all substantial movements currently active on a global basis. Several were easily identified such as *open government*, *open source software* and *Creative Commons*. Other movements were recognized as the literature review expanded. One strategy was to seek out movements labeling themselves with either the word "open" or "transparent". Another strategy was to pursue linkages that emerged when reviewing individual movements. Finally, numerous searches were made for movements that actively used the concepts "transparent" or "transparency". Many texts were written by movement actors, others by researchers investigating or supporting individual movements.

This inventory led to a list of, at the most, 31 candidate movements. Thereafter, 13 were discarded for various reasons. Filtering proceeded initially through the theoretical starting point that transparency movements were to be understood as profoundly digital in character, mobilizing some form of code, content or data. Movements such as the *transparent workplace*

(cf. Bernstein, 2014) and *open society* (Soros, 2000) were therefore discarded as they appeared not to mobilize any form of code, content or data.

There are numerous movements associated with open data and some of these are seen as notable enough to include; linked data, open research data and government 2.0. However, open data can also be seen as a label for numerous trends within data-driven innovation concerned with measurement of human activities. Such *social media metrics* (Baym, 2013) can use open data for *influence metrics* (e.g. Klout, Researchgate), *performance metrics* (e.g. *quantified self*-oriented apps) as well as for other purposes. Trends within social media metrics were discarded as they appeared to lack substantial conceptual development. This was also found to be the case with *radical transparency* (Goleman, 2010), *ultimate transparency* (Kirkpatrick, 2010), *sharing economy* (Slee, 2016) and *open patent/patent left* (Ménage & Dietrich, 2010). All of these can be seen to be part of the larger movement of open data.

Wikimedia Foundation, clearly dependent on the licensing system of Creative Commons is, nonetheless, so important that it is seen as a separate movement involving mobilization of content (Quiggin, 2006). However, the many projects utilizing *Wikimedia Commons* as platform (for instance *Wikipedia*, *Wikidata*, *Wikinews*, *MediaWiki*) are not included. There is a wealth of movements connected to Creative Commons and linked data that are not included.

Finally, some candidate movements could be seen as overlapping another movement such as *open business*, closely tied to *open innovation* (Chesbrough, Vanhaverbeke & West, 2014). Others have been swallowed by another emerging movement as *open content* gave room for Creative Commons (Wiley & Gurrell, 2009).

Once the 18 movements were identified, they were explored with a focus on identifying common traits, overlaps, development over time, key notions, inner conflicts, clashes with market actors and ideological features. As the definition slowly emerged, the various movements were also classified according to both tradition and form of organization.

A theoretical definition of transparency movements

This section stipulates a definition intended to be useful for a critical understanding of transparency movements:

Transparency movements are transnational entities emerging from unfinished ideologies of openness as well as methods of datafication to mobilize a clearly articulated kind of digital resource in the form of code, content and/or data for purposes of reuse and/or accountability.

This definition highlights a few central notions that need further introduction and discussion:

- Transnational entities,
- categories of reuse and accountability,
- methods of datafication,
- ideologies of openness and
- "unfinished" ideologies of openness.

These will be dealt with, in turn, in the following sections.

Transnational entities

Transparency movements appear as global rather than national phenomenon. Frequently, they emerge as commonsensical and nonintrusive at various national contexts, bypassing national regulation. In that sense, transparency movements frequently serve as mechanisms for regulating on a global rather than national basis. As development of common rules through traditional international legislation is slow, and frequently inefficient, transparency movements can operate in a certain power vacuum. In many cases, national legislation worldwide are attempting to catch up with the opportunities and challenges created through diverse transparency movements.

Transparency values often receive solid political acceptance given that the lack of citizen engagement in the institutions of democracy is often seen as a fundamental problem (Bertot, Jaeger and Grimes, 2010). The various technological platforms developed have also eluded licensing systems and demands for self-regulation. Rather, transparency movements often promote internally developed ideas for licensing and standards of openness in a way that supplements existing national legislation. The transnational character of licensing systems such as the General Publishing License for software adds further legitimation. The ubiquitous mass appearance of transparency movements at localities worldwide serve to corroborate the importance of a new movement.

In order to understand transparency movements as transnational entities it is also vital to characterize the diversity of organization. Seemingly, all movements must have organization. However, 10 of the projects identified appear to have no organizational body. This does not mean that they lack transnational power, quite the contrary. The absence of a worldwide regulating body can be a prerequisite for transnational influence. Overviewing the 18 movements identified, three organizational types can be recognized: *centralized*, *decentralized* and the disembodied *ideological*. These will be discussed in turn.

Centralized organization

Only two examples of a centralized organization was found in this material. The first of these is the Open Source Initiative (Raymond, 2001) which forked away from the Free Software Foundation (FSF) in the late 1990s. There were numerous reasons for the rift within FSF; one of them being that discussions on "free software" alienated the business community (Wiley & Gurrell, 2009). It was argued that open source software (OSS) should utilize the community to drive innovation in a manner superior to commercial software production and be less of a commercially antagonistic social movement (Raymond, 2001). OSS is centralized and does not have local chapters. However, it is affiliated with other transparency movements such as Creative Commons and Wikimedia Foundation (Open Source Initiative, 2017). OSS was not only inspired by mobilization of open code but also by the enhancement of quality supplied by peer review of academic papers, as well as transparency in government (Raymond, 2001).

The second centralised transparency movement is *WikiLeaks*, formally situated in Iceland (Sifry, 2011). It appeared initially as a movement mobilising open sources for journalists and as a watchdog organization within open government. However, in recent years it has been entrenched in global geopolitics, accused by US intelligence to be a covert Russian operation (Office of the Director of National Intelligence, 2017). Notably, WikiLeaks has in recent years shifted from mobilising content to releasing code. In the case of the latter, various classified surveillance software developed by CIA has been released through what is called "Vault 7" (WikiLeaks, 2017). Two centralised transparency movements are described in table 1.

Transparency movement	Constituting document*/influential text	Resource mobilized	Organization and headquarters	Core concept
Open source software	Raymond (2001*)	Code	Open source initiative (Palo Alto)	Open source
WikiLeaks	Sifry (2011)	Code, content	Sunshine Press (Iceland)	Open (journalist) sources

Table 1: Two centralized transparency movements, influential texts, involved resource, headquarters, and core concepts.

Decentralized organization

Within the decentralized organization power is distributed to numerous local actors worldwide. Even though the headquarters of FSF is situated in Boston, there is a multitude of chapters worldwide. The setup is identical for five other movements. It is important to note differences between, on the one hand, organizations such as Creative Commons, owning an intellectual asset in the form of their licensing platform, thus with clear ownership over a niche area, and, on the other hand, Open Knowledge International (starting around 2005) attempting to be the transparency movement not only of open data, but also open educational resources, open research data and Government 2.0 (also known as *open government data*). For instance, projects involving open data have in recent years generated a strong interest from actors such as the G8 (2013) and OECD (2015). Six decentralized transparency movements are described in table 2.

Transparency movement	Constituting document*/influential text	Resource mobilized	Organization and headquarters	Core concept
Creative Commons	Lessig (2003)	Content	Creative Commons (Mountain View)	Commons
Free software	Stallman (1985*, 1999)	Code	Free software foundation (Boston)	Free
Linked data	Berners-Lee, Hendler & Lassila (2001*)	Data	World Wide Web Consortium (San Francisco)	Web
Open data	Open knowledge foundation network (2005*)	Data, code	Open knowledge international (Cambridge,	Data

			UK)	
Transparency international	Wang & Rosenau (2001)	Content	Transparency International (Berlin)	Corruption
Wikimedia	Rosenzweig (2006)	Content, data	Wikimedia Foundation (San Francisco)	Collaboration

Table 2: Six decentralized transparency movements, influential texts, involved resources mobilized, headquarters and core concepts.

As becomes obvious when reviewing the 8 centralized and decentralized transparency movements, there is a substantial US dominance. Four of the movements have their headquarters in the US and three of these are positioned in the San Francisco/Mountain View/Silicon Valley region. The transnational aspect of transparency movements should therefore also be understood as a strengthening of US worldwide dominance over transparency discourses. Notions of transparency are, perhaps to a surprising extent, developed within the same cultural sphere that produces the dominating commercial applications. Seen in this way, transparency movements can also be understood as a form of imperialism as it is the dominating economic and military power in the world that supplies norms and standards of transparency for other countries.

No central organization

Ideological transparency movements do not develop a unified central organization. Rather, well-developed ideas and rhetorical devices inspire change within organizations worldwide. This means that specific challenges of openness are handled locally at various organizations worldwide. Among these organizations we find several combining different kinds of resources: Government 2.0, open science, and open research data. Notably, in the case of open research data empirical materials and scholarly publications are connected, thereby combining open data sets with open access (data and content).

The 10 substantial ideological transparency movements identified in this article are described in table 3.

Transparency movement	Constituting document*/influential text	Resource mobilized	Core concept
Blockchain	Nakamoto (2008)*	Code	Transparent transactions
Government 2.0	O'Reilly (2011)	Content, data	Reuse
Open access	Budapest open access initiative (2001*)	Content	Access
Open educational	Seely Brown & Adler	Content	Reuse

resources	(2008)		
Open government	Popper (1957)	Content	Transparency
Open innovation	Chesbrough (2006*)	Content	Crowdsourcing
Open platform	West (2003)	Code	Standardization
Open research data	Molloy (2011)	Content, data	Reuse, accountability
Open science	Fecher & Friesike (2014)	Content, data	Accountability
Open standards	Chesbrough, Vanhaverbeke & West, 2006	Code	Standard

Table 3: 10 ideological transparency movements, influential texts, involved resources mobilized and core concepts.

The US dominance is less apparent in transparency movements with no organizational body. That said, ideological transparency movements tend to mobilize resources that favor actors with substantial technological and economical power to make the best use of resources mobilized. Once again, this leads to a globalized system in which the powerhouse IT corporations situated at Silicon Valley are allowed privileges.

Reuse and accountability

In the process of reviewing transparency movements it became obvious that there are three separate traditions: accountability, reuse and accountability/reuse. The *accountability tradition* can be said to have *open government* as an umbrella concept. Movements associated with this tradition are focused on mobilizing content and notable movements are *open government*, *open science,* and *Transparency International*. There is, furthermore, an emphasis on countering corruption and enhancing democratic practices, thereby increasing efficient practices of institutions. In an influential text, Popper (1957) suggested that the liberal democratic state has to invite transparent discussions in order to ward off totalitarian tendencies. Open government is also closely associated with the ideals of freedom of information. Such regulation became widespread within Western democracies during the second half of the 20th century (Ackerman & Sandoval-Ballesteros, 2006).

The *reuse tradition* is focused on mobilizing code, content or data and linked to the advancement of computing, particularly Internet technology. Notable movements are *blockchain*, *Creative Commons, free software movement, linked data, open innovation, open platform, open source software, open standards* and *Wikimedia Commons*. From a legal perspective, reuse is crucially defined as distinct from semantically similar concepts such as theft, intellectual property infringement and piracy. For the purposes of this article, reuse is understood as being concerned with the *mobilization of a digital resource within some kind of commons, strategically detached from struggles of both ownership and confidentiality*. Obviously, this is a tricky legal area, susceptible to becoming entrenched in discussions on sharing economy, file sharing and free culture. There are also issues of privacy as well as resources withheld by corporations and governments. Different ideologies of openness have

led to a multitude of transparency movements involving reuse of code (*open source software*), content (*Creative Commons, open educational resources*) and data (*linked data*).

The concept of "open" is central to both traditions of accountability and reuse, although with different emphasis. For the accountability tradition, open is linked to transparent and trusted institutions that serve citizens symmetrically and without corruption (Bertot, Jaeger and Grimes, 2010). For the reuse tradition, open is a way of talking about access to resources (Stallman, 2001). As "reuse" is precariously related to "stealing", there has been a strong interest in defining concepts, articulating what is allowed and what is not. Typical for the reuse tradition, Hilton *et al.* (2010) stipulated the "four R's of openness": *reuse*, *revise*, *remix* and *redistribute*. Such attempts at defining "open" within the reuse tradition are aimed at creating regulation regarding *who can do what with which resources in specific situations*. The main tool for regulating resources has been licensing, more specifically the General Publishing License (GPL) for code and the Creative Commons (CC) licensing platform for various forms of open content. It is a curious and vital observation that discussions on regulation are largely missing within the accountability tradition. '

The *accountability/reuse tradition* is as an expression of convergence between two quite separate approaches to transparency. Notable examples are *blockchain*, *government 2.0*, *open access*, *open data*, *WikiLeaks*, *open educational resources, open research data*, and *WikiLeaks*. From the vantage point of the current text, it is a problematic tradition concerned with rhetorical use of arguments from the accountability tradition to produce economic value through reuse. This tradition involves mobilizing resources with *a combination of code and/or content and/or data for purposes of accountability and reuse*. The dominating presence within the accountability/reuse tradition is open data which is concerned with reusing code on openly available "big data". As noted earlier, this leads to a wealth of transparency projects too numerous to mention. It should be noted that although the reuse tradition has successfully promoted licensing platforms for code (GPL) and content (CC), no such legislative framework has so far been possible for open data. However, the European Commission (2017) has started to outline legislated notions for a "data economy".

Given that there are three separate traditions of mobilizing resources, why is it necessary to group these together under the heading of transparency movements? There are four reasons that motivate the broad scope of this article. *First*, some movements deal with more than one kind of resource (code, content and data) thereby creating overlaps with each other. *Second*, all contemporary transparency movements deal with the challenges relating to digitalization, particularly in the form of datafication (see further below).

Third, there are aggregated market economy and democracy effects as many corporations, governments, citizens, and professionals need to deal with the impact of several transparency movements in their daily life. In that sense, transparency movements actively produce a range of opportunities and requirements for private as well as public conduct. As various movements introduce separate forms of asymmetrical effects, the aggregated impact on professionals and their organizations can be substantial.

Fourth, there is a complex connection between various movements; scholarly studies therefore become skewered when single-mindedly studying them individually. Given the restrictions of this article, it is not possible to extensively deal with the complex nuances of how different movements are connected. However, there is an urgent need for development of concepts to describe linkages and a few suggestions can be made.

- *Forking*: one movement can split into two (e.g. free software/open source).

- *Platforming*: new transparency movement can build upon and exploit resources mobilized by an earlier movement (e.g. open standards/open platform/open innovation).
- *Parenting*: an older movement can serve as an umbrella for new movements (e.g. open science/open research data).
- *License parenting*: an older movement can supply regulatory framework for newer movements (e.g. Creative Commons/Wikimedia).

Given such complex linkages, there is a need to give attention to transparency movements as a broad phenomenon that disrupts a wide range of national institutions. The building blocks of the "transparent society" must be scrutinized by representatives from a range of research disciplines.

Methods of datafication

Although some movements have roots from the 20th century, the phenomenon of transparency movements is here understood as connected to digitalization of everyday life (Yoo, 2010). The concept of datafication was suggested by Mayer-Schonberger and Cukier (2013) as a way to talk about how analog phenomenon could be made into a format suitable for quantitative processing. For the purpose of this article it is useful to build upon the broader approach to datafication suggested by Lycett (2013) which in turn is inspired by a framework developed by Normann (2001). This involves use of three concepts also useful for understanding transparency movements: *dematerialization*, *liquification* and *density*.

Transparency movements of the 21st century primarily deal with dematerialized resources in which the information aspect of the resource is divorced from physical manifestation. This allows for liquification as the dematerialized resource can be manipulated, repositioned, morphed, combined etc. in ways that were not possible as long as the resource was fixated in material analog form. Such manipulations also allows for an optimal combination of liquefied resources crammed together for value creation (density). Such original combinations can lead to new transparency movements.

The 20th century forerunner to the accountability tradition was linked to the public availability of key documents on paper. However, contemporary transparency movements are based on the materiality of digital technologies and cannot properly be understood as ideologies concerned with paper-based resources. Almost all relevant resources are dematerialized and mobilization of resources enables liquification. Seen in this way, the eruption of a wealth of new forms of transparency movements in recent years is only partly a result of new ideas or values. They can each be seen as representing a particular form of density, combining dematerialised and liquefied resources.

As stated initially, three different kinds of reuse are at stake within transparency movements: *code* (or software), *content* and *data*. Perhaps the most important reason for the lack of overreaching research on transparency movements is the great variety of resources mobilized and combined. Code, content, and data are easily connected through liquification. Thereby, transparency movements appear increasingly to involve value creation as density, i.e. combining, for instance, resources in the form of content and data. When this happens, the character of the transparency movement changes and new political, ethical, and economic dilemmas appear. Arguably, liquification involving convergence between different kinds of

resources increases risks of disruptive effects on the market as well as for democratic institutions.

The difference between data and content is sometimes difficult to articulate. For instance, meta-data appears to uphold attributes of both. Given the development of datafication, access to all forms of resources tends to go through well-developed code. Liquification drives convergence between various forms of mobilized resources, thereby involving separate types of density. This is a problem that, at least in these terms, has not been explored by previous research.

Ideologies of openness

The notion of an ideology of openness was introduced by Eisenberg and Witten (1987) as a critical description of normative beliefs about openness as an unmitigated good. An ideology can be described as a system of normative beliefs upheld by a certain group. Eisenberg and Witten (1987) argued that demands for increased openness appear as tempting and seductive imperative for many organizations but implementation nonetheless becomes problematic. Eisenberg and Witten (1987) suggested that the promotion of increased openness should be understood as always taking place within complex contexts and already existing organizational tensions. Strategic goals of increasing transparency could therefore be connected to specific economic or policy agendas. An ideology of openness could even serve to undermine an existing culture of transparency. With the creation of formal and transparent communication routes, power brokering would instead be shifted to more informal channels.

The different transparency movements discussed in this article emerge and gain momentum by promoting values of openness as an unproblematic and unequivocal force for good. Powerful rhetorical strategies and a sense of community can be extended from such values. Three different variations of an ideology of openness were found in the material, oriented toward ethics, opportunities and libertarianism. In texts, these could function separately or be combined.

The *ethically oriented ideology of openness* is usually expressed through simple statements about openness constituting a self-evident imperative. An example of the ethically oriented ideology of openness is the following influential statement on open science:

> Transparency, openness, and reproducibility are readily recognized as vital features of science…When asked, most scientists embrace these features as disciplinary norms and values… Therefore, one might expect that these valued features would be routine in daily practice. Yet, a growing body of evidence suggests that this is not the case… (Nosek et al. 2015, 1422).

Building on this ethically oriented ideology of openness, Nosek et al. (2015) suggested 8 different transparency standards to be codified and regulated within research practices, for instance data transparency, analytic methods transparency, research materials transparency and design transparency.

The *opportunity oriented ideology of openness* is built on recognition of changes brought by digitalization. Openness becomes possible and therefore must be pursued systematically and thoroughly. This is demonstrated in the following opening statement on open data from the G8 open data charter (2013, no paging):

> The world is witnessing the growth of a global movement facilitated by technology and social media and fuelled by information – one that contains enormous potential to create more accountable, efficient, responsive, and effective governments and businesses, and to spur economic growth.
> Open data sit at the heart of this global movement.

Here, the leaders of the eight most powerful geopolitical entities in the world utilizes the topics of "a global movement" in order to initiate cost free sharing of data worldwide. However, not spelled out within such accountability tradition rhetoric is that open data supplies gigantic favors to the multinational corporations with the most information resources and tools. As an extension, they are asymmetrically empowered when competing with local small and medium enterprises.

The *libertarian oriented ideology of openness* suggests that digital technologies revolutionize the values we associate with "free". This is a complex and central notion for many transparency movements, connected to the opportunities of dematerialization and liquification. The articulation of "free" within the Free Software Foundation (FSF) has been formative for the way that many transparency movements relate to the economic marketplace. Stallman (1999) suggested that free software should be a matter of "free speech" rather than "free beer". Furthermore, he maintained that in cases where the ambiguity of the English word "free" becomes important, the words *libre* (freedom from restrictions) and *gratis* (free of cost) were useful.

Movements building on the libertarian oriented ideology of openness start out with a concern with libre and not gratis. However, the nuanced differences between the two types of free are seldom well understood or articulated at the outset. However, more complexity needs to be introduced. There are also two aspects of free as gratis:

- community-based labor without cost and
- the mobilized resource itself.

Furthermore, labor as gratis can be both in the form of a community and through digital processing. Labor as gratis evolves as a resource that can be mobilized by commercial actors involving value creation through density. This is most clearly evident in the way that social media practices of millions of users can be seen as the raw material for the production of marketing tools (Fuchs, 2017). This strong trend has followed the lead of Google to commodify user generated content produced at their sites. Labor as gratis can also introduce disruption into stable economic markets, e.g. Wikipedia emerging as competitive force within the encyclopedia business.

Obviously, despite the clarifications by Stallman (1999) in the context of transparency movements these two expressions of free are intimately intertwined. Access to a certain resource (libre) is often of substantial economic value for those who know what to look for.

Unfinished ideologies of openness

Ideologies of openness, regardless of if they are oriented toward ethics, opportunity or free, start out as simple and powerful notions aimed at generating consensus and passion within an emerging community. Transparency movements are concerned with the mobilization of certain resources for specific purposes. However, given the ubiquitous presence of powerful

tools for datafication, taken together with an expressed ideology of openness, it becomes problematic to articulate restrictions regarding usage of mobilized resources. Transparency movements are, in other words, ideologically committed to unbounded openness. As individual movements gain momentum, problems connected to unbounded openness tend to emerge. A critical understanding of ideologies of openness can therefore be developed further through notions of "unfinished platforms" and the "generative pattern" identified by Zittrain (2008, 99) in his discussion of the future of the Internet.

Historically successful digital projects, such as the PC and the Internet, were launched similarly as unbounded, open-ended, and *unfinished* platforms, welcoming worldwide creative contributions by anyone. The unbounded and unfinished platform has substantial advantages when compared to competitors that lock and protect their applications. Proprietary platforms that are launched with finalized notions also tend to involve a limited number of established partners. Contrary to this, unfinished platforms are open for all creative initiatives and unlimited collaboration. This notion of unbounded and unfinished platforms as advantageous is highly relevant for an understanding of transparency movements as well. It would appear impossible for members of the new transparency movement to predict the wide range of datafication projects that the different forms of mobilized resources enable.

Zittrain (2008, 99) identified a turning point for open-ended generative projects as some newcomers "are prepared to exploit the openness of the system to undesirable ends". More specifically, the argument is that on the one hand cyber criminals and on the other hand profit driven business actors develop forms of malpractice. Zittrain (2008, 99) predicted that systematic misuse of an open platform eventually triggers restrictions as "[t]he paradox of generativity is that with an openness to unanticipated change, we can end up in bad – and non-generative – waters".

Arguably, transparency movements can be seen as generative projects that are launched with unfinished ideologies of openness. These movements engage people with inspiring and lofty notions of empowerment, free access and free of cost, frequently allowing communities to see the movement as a platform for innovative and creative work. Nonetheless, successful development involves unanticipated turn of events as various actors with datafication strategies exploit the mobilized resources in different ways. Such negative turning points constitute a kind of crisis and therefore of interest for the student of transparency movements.

Discussion

Through the definition of the larger phenomenon of transparency movements, it becomes possible to investigate a wider range of societal aspects than what is possible if movements are studied one by one as well as by separate disciplines.

It should be recognized that various movements make substantial positive contributions for both the market economy and the backbone institutions of the democratic nation state. Many movements such as Creative Commons, Wikimedia and open standards have now become so entrenched within contemporary institutions that everyday practices would fall apart without them. It should further be acknowledged that actors initiating and pursuing various transparency movements to a large extent are driven by high ideals. That said, common for all movements are that they are developed in societal contexts in which not all actors are willing to use the mobilized resources for the common good. The *intent* of the emerging and conceptually unfinished transparency movement can be to strengthen those who appear

disfavored. However, the *actual effect* once opportunities for datafication emerge can frequently be to further empower those already favored.

A vital aspect of defining transparency movements in the way done in this article is to emphasize them as evolving projects built upon unfinished ideologies of openness. Therefore, they tend to evolve with trusting notions of mobilizing resources for everyone. However, datafication tend to give asymmetrical advantages to those with substantial computing power and skills. Fundamentally, distinct literacy skills are required for use of mobilized resources. Ananny and Crawford, (2016, 7) suggest that to see "inside the system does not necessarily mean understanding its behavior or origins". In other words, it matters little if a certain mobilized resource is freely available for all citizens if only a few well-situated actors know:

- that the resource is available,
- where it is situated,
- that there is value to be found within the resource,
- have the knowledge and technology to extract value and
- be equipped with the necessary resources and skills to dematerialize and liquefy the mobilized resource as a new form of density.

The above-mentioned list can be characterized as a form of *accessibility literacy,* necessary to make the most of mobilized resources. The aim in introducing this concept is to clarify that there is not a simple binary relationship between accessible/non-accessible. Rather, the mobilization of resources is always situated within specific contexts and certain advanced forms of technology. This means that domain specific accessibility literacy and appropriate technological resources are required for use of mobilized resources.

As accessibility literacy is distinctly domain specific, it consists of expertise developed over time. Therefore, when access to mobilized resources is mediated by code, asymmetrical advantages are given to those actors who uphold considerable domain specific accessibility literacy. It is also possible for those mobilizing resources within a transparency agenda to purposefully raise the bar for the necessary accessibility literacy required. This could for instance be done through the dumping of millions of untagged documents into the Commons so that only those with superior accessibility literacy can find anything relevant, i.e. the metaphorical needle in the haystack (cf. Stohl et al., 2016). There is a multitude of ways in which a transparency movement as a democratic service to the many, in the end turns out to be a valuable resource for the wealthy few.

It is possible to supply some broadbrush characteristics of different actors that have the necessary accessibility literacy relevant for a certain transparency movement. First there are the *movement actors* concerned with practical manifestation of an ideology of openness, networking within or without a formal organization. Second, *promoters* who are not active within the movement, but who, nevertheless, strive to increase the influence of particular ideology of openness.

Third, there are *legitimate users* dealing with the mobilized resources according to the intentions of the movement actors. These are the ideal users envisioned when developing the movement. Fourth, *exploiters*, who utilize mobilized resources according to stipulated rules without aligning themselves with any ideology of openness. Instead, they use the mobilized resources to develop social, political, or economic capital. Finally, there are *misusers* who use the mobilized resources in ways that are quite contrary to the original ideology of openness. In extreme cases, these can threaten the agreed-upon conventions of openness or even the very existence of the transparency movement.

The definition outlined in this article also emphasizes the transnational character of transparency movements while at the same time identifying a problem of centralized production of ideologies. Taken together, these 18 movements exhibit a striking US dominance, particularly concentrated to California. It is problematic that the same region that dominates commercial exportation of ICT also dictates values and standards for openness and transparency worldwide.

Even though the development of transparency movements arguably favors US-based organizations, effects are also visible as regards to the standoff between democratic and authoritarian governments. Representatives of "closed governments" can be prolific misusers of transparency movements. It appears problematic that the accountability tradition is developed asymmetrically among different nations. Obviously, notions of open society and open government are resources for the democratic welfare state and a well-functioning economic market. However, even the ideology of open government should be seen as a work in progress, understood in the context of a world consisting of both democratic and non-democratic regimes. The latter may have little interest in appropriating the ideals of open government but can exploit and misuse ideologies of openness active in democratic societies. The Russian intervention in the 2016 US presidential election (Office of the Director of National Intelligence, 2017) raises new questions regarding the openness of mobilized resources given sophisticated practices of misuse on the part of authoritarian nations.

Authoritarian governments aiming to do harm can strategically cherry pick from the mobilized resources of open government to find compromising information and thereafter exaggerate existing problems. With such "active measures" isolated instances of misconduct can be propagated as the norm, and the democratic government can be portrayed as corrupt and evil. Much can also be made of existing practices of secrecy. Even though Western democracies adhere to ideals of open government, they also need to develop asymmetrical positions toward transparency. For instance, the Obama administration spearheaded open government simultaneously with the secret development of surveillance technology as revealed by Edward Snowden (Schneier, 2015). In a sense, such a schizophrenic approach regarding transparent government allows the democratically elected government to take on traits of the authoritarian state. This creates a fundamental vulnerability for attacks of moral equivalency. Important contexts for the authoritarian exploitation of transparency movements are discussions on post-truth (Rabin-Havt, 2016), spreading of fake news by social bots (Shao, et al., 2017) and weaponization of transparency (Levy and Johns, 2016).

This article has identified a large-scale phenomenon of a multitude of actors successfully pushing various forms of ideologies of openness globally. Many of the texts published by movement actors appear to understand activities as being positioned within a world without politics and with no economic drivers. However, once these projects are situated within the messiness of commercial and political context, the basic ideas are transformed in various ways both by external actors and insiders attempting to modify the basic assumptions of the movement.

Most of the movements identified in this article should also be understood as coming out of the Internet optimism typical for the 90s and 00's (cf. Turkle, 1995; Shirky, 2008). At that time, the economic model underpinning the Internet as *surveillance based advertising* (Schneier, 2015) was not well developed nor well understood. However, the further maturity of this economic model involves new challenges for many transparency movements. It becomes problematic when ideologies of openness shift focus from overseeing accountable

governments to, instead, promoting development of radically transparent citizens. It is still unclear to what extent individual transparency movements contribute to such a shift.

Conclusion

This article has attempted a theoretical approach in order to both articulate and define transparency movements as a broad phenomenon. Transparency movements were defined as *transnational entities emerging from unfinished ideologies of openness as well as methods of datafication to mobilize a clearly articulated kind of digital resource in the form of code, content and/or data for purposes of reuse and/or accountability*. This definition was developed through an exploration of 18 transparency movements. These were found to be situated within the accountability tradition, the reuse tradition and the accountability/reuse tradition. Some of these movements were had centralized or decentralized organizational structures. However, 10 of the movements did not have any dedicated organization at all. These were described as ideological transparency movements.

Few transparency movements appear to have lifecycles in the sense that they are born, mature and then experience a lack of momentum, eventually fading away. Such is usually the case with social movements (Fuentes & Frank, 1989). Contrary to this, transparency movements, at least as we observe them in the late 2010s, tend to become more widely distributed, stabilized, and institutionalized with time. They have been, and are likely to continue to have, widespread beneficial effects on the market economy and the democratic state. However, they also have complex and disruptive effects which are easily overlooked. It has been suggested through the approach in this article that it is valuable and, indeed necessary, to look broadly at transparency movements as a collective of projects that have aggregated impacts on each other as well as the marketplace and institutions of the well-functioning democratic nation states.

The current article is a pioneering attempt at overviewing and grasping the broad emerging phenomenon of transparency movements. The approach must be understood as explorative and tentative. The stipulated definition as well as concepts and problems pursued in this article are starting points for further research. Therefore, this article opens up new areas for both disciplinary and interdisciplinary research within information science, political science, computer science, legal studies and economics.

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