Institutionalising participation

The implementation of a civic web platform

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Abstract

Participation is key to understand our contemporary societies. Despite its prevalence, it remains insufficiently theorised in certain context. One such context is crowdsourcing, which has been proposed as a way to resolve so called ‘wicked’ problems. Crowdsourcing has tended to hold implicit rational and universal epistemologies: the more participation the better. Using resourcing theory, we look at a civic platform implemented with the ambitions to change social relations within the city of Madrid. We propose a processual view of participation which evolves in time taking and being given different qualities as schemas are enacted and resources created. The platform we analyse was supposed to engage citizens to become participative members of society in the definition of public policies. When this does not occur, alternative resources are designed to palliate the deficiencies of the platform. We contribute to the literature on participation and urban policies by arguing that participation, however it is designed, will necessarily favour some at the expense of others, challenging its often implicit universalist and rationalist assumptions.

1. Introduction

Participation captures the contemporary zeitgeist. It is everywhere: the online reviews left by customers affect our purchases, a show is cancelled or renewed based on the hype it generated on Twitter, or even inadvertently going about everyday life, we participate to a city's grids of smart systems, which in turn will shape future policy-decisions. Participation is not only an action such as sending a tweet or reviewing a product, it has become a culture (Delwiche and Henderson 2013), and a norm. We are expected to take part and are judged by our participation (Barney et al. 2016).

But participation is not constrained to isolated experiential events, participation has become part of many theories that give sense to our world and our actions. These theories range across disciplines, yet hold in common the centrality of participation in their assumptions and their explanations of phenomena. As such, theories of information asymmetry pre-suppose that a large number of sources of information provision help make more informed decisions (Afuah and Tucci 2012). In management, open innovation often relies on the participation of unanticipated external agents to provide a focal firm with new sources of external innovation (Chesbrough et al. 2017, West et al. 2014). In urban studies, foundational theories such as the right to the city challenge the prevalence of city planning based on financial transactions only (Lefebvre 1967). Indeed, Lefebvre (1967) argues for thinking the city as a "space for meeting, that prioritises the value of use [as opposed to a city based on financial transactions], [...] and that finds its morphological form, its practical-sensible realisation". Lefebvre's insistence on a city thought from its use thus assumes implicitly the importance of participation. Participation, thus, can be instrumental to important changes.

Despite the prevalence of participation, its nature remains insufficiently theorised beyond its tame instrumental use. Current literature across the disciplines has focused on the conditions for participation. In open innovation literature, norms such as reciprocity have been seen as essential for sustained participation to take place (Osterloh and Rota 2007), in urban studies, often following Habermasian readings, participation is conditioned to the creation of an idealised space conducive to effective participation (Arnstein 1969). In management circles, participation has been visualized through social network analysis, positing that the position of people within a network grants them particular access to resources fostering further participation (Faraj and Johnson 2011). In this sense, participation is seen primarily through the structures that permit, facilitate, or encourage it, giving a tinge of stability to participation. The very wisdom of the crowds argument which is often an implicit assumption of studies looking at participation, sees participation as a summative phenomenon: the more participation, the better the outcomes. Participation, thus, is an aggregate function of atomic participations.

But, what is participation? What forms does it take? What does it mean to take part in something or be part of something (Barney et al. 2016)? Lefebvre's own utopian account of the right to the city has been challenged on the grounds that contemporary (digital) participation is co-opted by powerful dominant actors of, leading to uses and development of city resources based on the interests of neo-liberal narratives. Circling back to management literature, the nature of participation in open source projects has been said to change from community ventures by passionate hobbyists to firm-sponsored projects (Daniel et al. 2018).

Our objective in this paper is to propose a processual conceptualisation of participation through the lens of resourcing theory. Using resourcing theory, we suggest that participation is an evolving and conflictual concept, deployed alternatively as a resource or a schema, and involving different types of action or mechanisms. Participation, thus, and what it may come to mean depends on the articulation and deployment of different, possibly conflicting schemas. We argue that organisational change is inherently linked to organisational change and movements of resistance to that change along the composition and configuration of participatory schemas and resources. Two main mechanisms of participation as potential resources stick out: (1) connecting the change to current realities, (2) proposing an interesting departure from those current realities. As such, participation as resources sees organisational change as a dialectical tension that can only be temporarily resolved through the communing of positive expectations and externalities, or the side-lining of concerns to avoid those externalities in the hope that they will become irrelevant in time.

We base our theorisation of participation on a crowdsourcing civic platform called *Decide Madrid* ('Madrid Decides' in Spanish, *Decide* for short). Because resourcing theory is based on social practice and is relative to everyday social interactions, we will focus on a contextual approximation to participation. Specifically, we will study participation as it is presented in the crowdsourcing literature and show that the kind of participation that *Decide* deploys is much more complex, mutable, and nuanced. Drawing from these findings, we will suggest that future crowdsourcing events should be more attentive to the fluid nature of participation and expect changing outlooks from the participants and organisers.

The next section will provide a review of the participation literature on crowdsourcing.

2. Participation in the crowdsourcing in the literature

Crowdsourcing has been defined as a form of labour that relies on a crowd of workers to complete tasks (Bergvall-Kåreborn and Howcroft 2014), usually, but not necessarily, through digital media (Afuah and Tucci 2012). These tasks can be proposed by individuals or groups (Estellés-Arolas and González-Ladrón-de-Guevara 2012), as a time-scoped contest with financial rewards given to the winning individuals or groups (Majchrzak and Malhotra 2016a, Schlagwein and Bjørn-Andersen 2014), or refer to a mode of collaboration close to open source without contests or compensation taking place (Curto-Millet and Nisar 2018). There are many different forms of sourcing environments. Oshri (2015) count three different forms, revolving around how interchange between organisations and solvers happen. Others categorise crowdsourcing depending on whether the contest is organised for an external crowd or an internal one (Zuchowski et al. 2016). Others still, articulate different taxonomies that hinge on knowledge-sharing (Majchrzak and Malhotra 2016a).

Whichever way crowdsourcing is categorised, the common underlying thread is the centrality of participation. As Boons et al. (2015, p. 717) argue, “getting members to actively participate in tasks on an ongoing basis is essential for the survival of these online platforms”, while Porter et al. (2020) see in crowdsourcing the ability to “generate and sustain engagement”. The importance of participation permeates the crowdsourcing literature which we classify into four groups: participant attraction, participant retention, and participation performance, and how these interrelated aspects are managed.

Participation attraction refers to the capacity of the problem or the contest to initially engage participants (Zhao and Zhu 2012). Participant retention relates to the contests’ or the organisation’s capacity to keep participants engaged in the crowdwork (Ma et al. 2018). Participant performance is the quality of the work done by participants in the contest and depends on a number of criteria such as the design of the contest or individual attributes (Dissanayake et al. 2015). Often, these aspects are related and need to be managed. Boudreau (2011) finds that the higher the number of competitors, the less interesting it is for participants to take part in the contest. However, for the organising firm, it may be worthwhile having more competitors since it increases the likelihood of a solution being viable. Striking a choice between performance and attraction is such a balancing issue.

Thus, the aspects of crowdsourcing related to participation are interrelated, with the design of the contest or the participation platform crucial to its management and coordination. Indeed, one of the objectives of crowdsourcing is often not the proposed solution, but the emerging community that can

act as a source of continuous external innovation for the organisers (Liao and Xu 2020). As such, its design is seen as critical precisely because of its possible impact on participation (Brabham 2013). Unfair organisation of participation or treatment of participants can have an important backlash on the crowdsourcing process (Osman 2014). Creating a community in crowdsourcing requires developing a sense of trust and (possibly partial) reciprocity among contestants and with the focal organisation (Ye and Kankanhalli 2017). A sense of shared purpose must thus be instilled to the participants.

Despite the prominence of participation to the crowdsourcing literature, few papers have taken position with regards to their implicit epistemological stances. As such, participation within crowdsourcing environments is treated similarly to that in other papers by re-invoking different forms of the ‘wisdom of the crowd’ argument. The ‘wisdom of the crowd’ argument is intimately linked to crowdsourcing as it posits that the more participation there is, the better the outcome of that participation will be (Dissanayake et al. 2015). This linear view of participation conjures a number of corollaries: participation is summative and integrative.

Participation is summative when it can be added to others’ previous contributions. Collaboration is an important aspect of crowdsourcing which happens despite the extrinsic interests to compete over others and win the prize. In certain crowdsourcing contests, teams are encouraged to emerge through a number of interface cues, improving their capacity to come up with higher quality solutions (Majchrzak and Malhotra, 2020). Fuger and colleagues (2017, p. 455) find that the user type of collaborators are essential to crowdsourcing in their capacity to “to integrate his/her collected knowledge into his/her ideas, as he submits ideas with the highest potential to be of high quality”, losing if absent, collective intelligence. Sharing and combining ideas is a basic tenet of crowdsourcing (Porter et al. 2020), influencing the design of tasks through their de-composition into smaller pieces and re-aggregation to a whole later (Durward et al. 2020).

Participation is also integrative. Diverse sources of heterogeneous knowledge are brought together and add to the quality and innovativeness of the solution (Porter et al. 2020). This aspect of crowdsourced participation is posited as one possible solution to wicked or ill-structured problems (Gimpel et al. 2020, Majchrzak and Malhotra 2016b). The roles of ‘communitors’ (Liao and Xu 2020), facilitators (Gimpel et al. 2020), and collaborators (Fuger et al. 2017), hold a central position in integrating and putting in common emergent solutions from the community. The diversity of contributions is one of the fundamental elements in which crowdsourcing shines, providing a breadth of expertise that other processes of participation could

not (Afuah and Tucci 2012). The prominence of these roles in the functioning of crowdsourcing suggests that integration is another key aspect of such form of participation.

The consequence of these inherent qualities behind crowdsourced participation is that participation holds particular epistemological qualities, not far removed from ideals of modernity (Beck 1997). The very idea behind designing systems which maximise or optimise the quality of participation speaks to a utilitarian stance. The good participation can be weeded out from the bad one, weighed and compared through proper mechanisms such as incentives or procedures. The very benefits of crowdsourcing are offset by its relative minimal cost to the sponsoring organisations, with the well-being of even the poorest participants is often argued by its advocates to be, on the whole, beneficiaries of such activities (Wexler 2011).

Utilitarian conceptions of participation may lead us further to imbue decisions as based on rational, assuming that we possess the appropriate and relevant knowledge to evaluate crowdsourcing participation, its outcomes, and the consequences of these outcomes. This is especially so if crowdsourcing initiatives imply strategic decisions such as an increase of reliance on crowdsourcing. Inciting or adopting initiatives from the public has been found to conflict with established models of good practice in public bureaucracies (Kornberger et al. 2017). When a decision is made to choose between one solution over another, it is done with the knowledge at that moment. What may be seen as best at one time may not necessarily continue to be so as organisational change implies making sense of that very change *while* implementing it (March 1981).

The very assumption behind crowdsourcing's capacity to solve wicked-problems belies a an assumption of universality that many political theorists would argue challenge (see Mouffe (2009), Wittgenstein's *Lebensform*, or indeed Guattari's (1995) modes of production of subjectivities discussion on the production of subjectivities). Since it is technological platforms that we are talking about, a brief study of the history of IS will find technologists warning against rationalising technology, for fear of rendering it seemingly neutral. Seminal works such as Mumford's (1996) or Checkland's (1985) would argue for the existence of different and possibly conflicting worldviews that no amount of discussion may soothe. Crowdsourcing and its emphasis on diverse participation (with inclusivity not far behind), is the promise of a procedure that can be trusted to bring positive outcomes.

These epistemological assumptions derived from the notion of participation seem to have attracted Habermasian views on the ethics of crowdsourcing (Schlagwein et al. 2019) or Habermasian concepts such as technopolitics and democracy (Aragón et al. 2017), or idealised forms of publics and the

role of procedures (Michels and Binnema 2018). These assumptions, however, can lead to organisational designs of participation that overlook, downplay, or be used to discard certain voices. Indeed, Kelty (2016, 2019) finds that participatory projects, including those who come from the crowd become contested of co-optation the moment they are institutionalised. The abundance of participatory projects and their design based on unquestioned assumptions may lead research in circles with paradoxical findings on the benefits of crowdsourced based participation.

It is not question here to necessarily look for a better alternative than Habermasian views on participation in crowdsourcing, rather, but to develop theories on participation in crowdsourcing that can spark a dialogue with this dominant rationalistic discourse. One reason for this necessity is the increasing use of crowdsourcing beyond tightly scoped and homogeneous contexts that have been up to now the focus of seminal papers. Conjoined with the lack of research on organisational change within public administrations (Pittaway and Montazemi 2020) required to effect such initiatives, to make a knowledgeable deployment of crowdsourcing, we must theorise alternative conceptions of crowd-based participation.

For such theorisation, we rest on specific, but still isolated papers that have challenged the rationalist and utilitarian conceptions of participation (e.g. Orlikowski and Scott, 2015, Future studies paper). We align our approach to these papers, and in particular, to social practice theory which seeks to understand how social orders are created, maintained, and challenged by looking at everyday work processes. With social practice theory as a guide, we develop a processual conception of participation by studying from a resourcing theory perspective. We argue that participation is a complex and evolving resource contrary to the fundamentally static view derived from the literature. By harnessing resourcing theory which is an inherently processual theory, we ask the following research question: *How can participation evolve in time? How do actors try to shape participation in a manner that suits them?*

To develop such a processual account of participation, the following section will introduce resourcing theory, which is based on social practice theory and how we came to rely on it to explain an inductive and longitudinal research on a civic crowdsourcing project. We hope to contribute to the literature on crowdsourcing by showing that there are multiple, different, and possibly conflicting expectations behind participation, with each of these participations needed different resources to be enacted.

3. Resourcing theory

Resourcing theory provides a social practice take on resources which are seen as mutable, living objects that articulate and guide organisational change. Originally developed by Feldman (2004), a resourcing take on resources invites us to understand the constitution, sustenance, and change of social order and organisational processes through the study of everyday practices. It is through the engagement in everyday practices that actors make sense of changes or promote changes in resources which, in turn, help them resist or promote further change. In this regard, actors develop mental models called schemas about their role within the organisation and reflect on the organisation's purpose.

Change under the perspective of resourcing theory happens when actions are taken to create or adapt resources according to a schema. These resources, in turn, can affect or even become schemas that are enacted by actors to further create change to an organisation's work processes. These changes are continuous and cyclical because the creation of resources influences what kind of schema can be enacted further on and which cannot. As such, this cyclical view of incremental change places a great emphasis on the baggage of early choices, and how difficult it is to "steer" back once initiated.

The 'resources' in resourcing theory have generally been studied within organisations (e.g. Feldman and Quick (2009), Feldman and Worline (2011), Pentland and Feldman (2008)), with RBVF taken as a departing point for Feldman's (2004) early theorisation. The main postulate of RBVF is that competitive advantage is found within the organisation and not in its environment. This competitive advantage is centred on the resources found within associated to the particular and unique know-how to use the fruitfully.

Crowdsourcing studies, however, often highlight the importance of the environment for finding sources of innovation and developing competitive advantage. Often, the reason to engage in crowdsourcing contests is precisely that there is insufficient innovative capacity within the organisation to create innovative solutions inside.

At the same time, the crowdsourcing literature has increasingly recognised the importance of managing the external environment from within. Roles such as community managers and facilitators have sprouted, providing additional evidence of the need for knowing how to relate to the external environment (Bacon 2012). Indeed, one of the tenets of open innovation is the capacity of a focal firm to manage the flux of knowledge coming in and coming out. As such, the internal environment remains critical even if it

used to relate to or adopt elements from the external environment. We conclude from this that crowdsourcing initiatives rely on the development and adaptation of internal resources and schemas to manage external resources and their value to the focal organisation.

At the same time, due to the location of many important resources being outside the internal environment, the mechanisms used by actors to make sense of those external resources and create or adapt to changing schemas is likely to be different than completely internal work processes. We aim to contribute to resourcing theory by explaining the complex, mutable, and processual nature of the notion of participation, and how actors have used and developed schemas to enact changes to resources that they thought better aligned to their organisation's purpose. Because it is in a crowdsourcing environment, such enactments

4. Methodology

We centre our case on *Decide Madrid* (Spanish for 'Madrid Decides' or 'You Decide Madrid', *Decide* for short). *Decide* is one of the foremost civic participatory platforms in the world and is used in many cities in the world, including Porto Alegre, Paris, and New York. It has gained international recognition after having won the UN Public Service award in 2018, one of the most prestigious recognition of public service in the world. In keeping with its grassroots and technological activist background stemming directly from the Spanish Occupy Movement (known in Spain as the 15M), *Decide* is a Free software project (i.e. the code can be modified and shared with the same Free licence). The main purpose of *Decide* was to change social relations between citizens and their administration through bottom-up participation. As one of the project coordinators involved with reflecting on *Decide* said: "I believe cities can develop a different policy agenda and a new type of politics with the help and collaboration of social movements and empowered citizens"(Gutiérrez 2016, p. 169). Participation in that policy agenda was the way this challenge to dominant discourse would form and act.

Decide was made public in September 2015, a mere six weeks after the projects had started. The platform originally focused on debates, but was rapidly added important functionality such as participative budgeting (topping 100€ distributed among projects), and perhaps more importantly, proposal-making. Proposal-making was one of the most daring bets made by the administration. With this functionality, any citizen of Madrid could make a proposal, and if voted in by one percent of the population (some 27000 votes) through the platform, go to referendum. If the referendum was successful, the government would adopt the proposal as their own, voting it in through the local parliament. This mechanism of unfettered direct power

was unique in the world and effectively gave any citizen a city-wide voice to create or change policy.

Decide is an interesting case because of the central role that participation has in articulating change, as well as the power that is given to citizens to make any decision they so choose. Without massive participation and adoption, little social relations within the city would have likely stayed the same. As such, the promoters of *Decide* had expected an “avalanche” of participation as told by an observer and “massive” as reported by one of the leaders to us directly. Throughout the project, understandings of participation change depending on what resources are developed, that guide the actors to take different actions.

We studied the efforts creating a participatory citizenship through *Decide* inductively. Although our case centred on *Decide Madrid*, our analysis followed different stages on the reflection between the platform and its relation with and to the city, the kind of changes that it promoted or did not promote as well as expected. It is those moments of reflection that we followed. In some of them, we were participants, actively thinking about the role of *Decide* in shaping the city, city-politics, and participation. In others, we were spectators, attending conferences in which *Decide* attracted large numbers of presenters who, for example, narrated their experiences with implementing *Decide* in their local government, or how the visual presentation of policy proposals by citizens affected their popularity.

The inductive and ethnographic approach followed the rhythmic punctuations in *Decide*’s life during those two years. These moments and events which impulsed different ideas, put them into practice, and tested. These beats tell a larger story than the everyday shadowing of those involved in the coding of the tool. Our argument from the beginning was to go beyond the code, to follow *Decide* where it lead or could have lead, and to be in those moments where *Decide* could be re-thought, tailored to the city’s asperities and institutionalise a certain kind of participation in the everyday politics of local government. As such, we closely followed the actions of a public laboratory in Spain which was tasked to reflect on *Decide*.

The analysis presented in this paper is the forming interpretation from data still being collected that were sourced from event observation and participation, document and archival analysis, interviews, participation data, and media and social media). The principle hurdle behind the collection of data was putting together an archive from the disparate sources encountered. These sources are qualitatively different, with interviews acting as confirmatory and reflexive elements within our study, while participant observation focused on the reflection in specific moments of the case. Together, these sources help us triangulate data better, giving us multiple take on similar

events and adding to the richness of the data. As such, the assembled archive became a narrative onto itself, creating a topology of the incidents and highpoints of the project's life through 2017—2020. See **Error! Reference source not found.** for a summary of the data sources.

5. Findings

In this section, we show how participation was continuously re-thought and re-deployed throughout *Decide*'s inception. In particular, we show three principal moments in which different schemas were enacted as a result of repeated evaluations of the *Decide*'s creation of participatory resources between the years 2015—2019. The continuous unfolding of the meaning of participation and the different resourcing needs that each of these concepts of participation required shows how much participation is a processual notion that changes in time.

The necessity to reflect on participation suggest that it is a complex notion. We will see multiple kinds of participations conflict in terms of resources and how well these enact the schemas that enacted them. The enactment of schemas is not obvious to the people behind *Decide* who, despite having been involved for years in *Decide*, but also in social movements where participation took a central role, show surprise when the kind of participation that takes root is not the one they expected. This surprise encourages the City Hall to create an internal body that takes *Decide*'s proposals as input, and creates more procedural and manageable internal processes of participation. This process is summarised in Table 1.

Schema	Action	Resources	Data example
<i>Participation for all: Changing the city through massive and emergent participation</i>			
Inherited schemas from the 15M: democracy does not work for everyone. There needs to be a redistribution of political power to citizenry to avoid disenfranchisement and corruption	Design a representation-free platform	<i>Decide</i> is built without coordination mechanisms but free from lobbying or traditional representative entities	<ul style="list-style-type: none"> When we ask ourselves why the actual situation leaves a lot to be desired, for example, in the areas of equality or the ecology, we usually complain about public policies, but perhaps we should look at how these policies were made. Could we decide in another way? [...] We think that decisions are made according for electoral purposes and without considering long term real needs, and when decisions are taken, there can be hidden interest [...] we do not trust public policy, not necessarily because of the elected politicians, but because of the framework within which they act. (<i>Decide</i> leader, conference, from notes) But we cannot be auto-complacent and we have to reflect on what participation is. What do we mean when we say “el gobierno de todos?” [Spanish for everybody’s government] We have to dismember the institutional power of the authorities. In participation lies ... hope, but we understand how to do what... Governments need to be ready of citizens. Citizens evaluate what we do, the institutions need to accept dismemberment... (<i>Decide</i> leader, conference, from notes)
<i>Evaluating Decide’s participation resources</i>			
Everyone can propose almost anything	No requirement for proposal-making	Potential power redistribution, but problematic proposals	<ul style="list-style-type: none"> How to channel all of these proposals that were made? Few proposals end up successful. <i>Decide</i> can resemble a garbage bin of proposals, but this garbage bin has a lot of value. It is a big data of the city’s preoccupations. (Project leader, focus group, from notes) We start by listening to what Madrid has to say. To this end, we open this digital <i>Puerta del Sol</i> [Madrid’s historic square where the Spanish Occupy movement concentrated], where the people of Madrid can meet to debate and share everything that we want. [...] Very soon, we will open the section on citizen proposals, where anybody can propose and, if they win sufficient support, will be adopted by the City Hall. (Early <i>Decide</i> web interface)
<i>Internalising the external participation: Creating the Citizen Observatory</i>			
<i>Decide</i> does not reach	Change <i>Decide</i>	Create the Citizen Observatory	<ul style="list-style-type: none"> Proposals on <i>Decide</i> Madrid have not regularly managed to reach the established consultation threshold. In fact, only two proposals have done so, while the rest expired before reaching the more than 27,000 necessary endorsements. Why should a proposal reach a minimum threshold in order to be put to a vote? The answer is simple: a proposal must be legitimised in order to justify the resources and time that will be dedicated to holding a referendum on it [...] But what if there was a better way to legitimise decisions about voting? A citizen jury, chosen randomly, can serve to approximately represent a sample of the city; an approximation perhaps more representative than the almost 28,000 citizens that are needed to activate a vote. (Project report, <i>Future Democracies: Laboratory of Collective Intelligence for Participatory Democracy</i>) We are very enthusiastic with the City Observatory. It is a fundamental element to revitalise democratic participation. (<i>Decide</i> leader, conference, from notes)

Table 1: Cycles in the enactment of schemas and the resulting resources

5.1. Participation for all: Changing the city through massive and emergent participation

Decide launched in September 2015, a few months after a civic political movement called *Ahora Madrid* (‘Madrid Now’ in Spanish), won the local elections for the City Hall. *Ahora Madrid* was in large part composed of activists or people from social collectives such as housing associations. Some of these were long-time hackers and prominent personalities from the Spanish Free and open source software culture movement and closely aligned with the 15M and Occupy movement. These movements and personalities had come to put great stock on the potential of participation as a way to redistribute power to the citizens. As one of *Decide*’s leader later said in a conference:

What's normal in people who run governments is that citizen participation is perceived as something good but that can become uncomfortable after they get voted in.

(Decide leader, conference, from notes)

It is these personalities who, to “give back this power to the citizens once they entered office”, formed a new governmental area specifically tackling participatory matters. Symbolically, this area would be placed at the same level of importance as the more traditional areas of security and economic affairs. This focus on participation had been a central promise in its electoral programme with participation seen as a way to foster important changes to urban politics and the role of citizens in shaping them:

A city council that values the know-how of its technicians and put them to work with the people. A city council that listens and knows how to integrate citizen knowledge.

Ahora Madrid's electoral programme, 2015 (authors' translation)

The ambitious role for the citizenry and the city administration is expected to have far reaching consequences: it proposes a city that capitalises on the knowledge of people, effectively treating them as local experts and capable of “defining, managing, and developing fundamental policies” of the city. The citizens as potential participants are thus inherently capable people and local experts. Citizens are potential peers to technical administrative staff who will be put “to work with the people”. To give this power back to the citizens and enact this modern citizen who ended up electing them, *Decide* is designed with the intention to:

[...] create new digital participatory institutions so that it can be “us who really govern” and in which reside the technopolitical hypothesis [of Decide].

Project report (Padilla and Malo de Molina 2018)

The most powerful functionality implemented is that of the citizen proposal. A proposal is a piece of text accompanied by a title that states a desired change for the city. The proposal, if voted by one percent of Madrid's population would become part of Ahora Madrid's programme, the party in charge. The design of the interface and the display of proposals is ordered based on Reddit's algorithm, where proposals decay over time depending on popularity and competition from other proposals. Once the proposal is submitted, it cannot be modified (to avoid later changes to the proposal to which supporting citizens of the original may not agree with). As such, the functionality is limited: create a proposal, support a proposal, and debate a

proposal. The advantage, as one person tasked by officials to analyse *Decide* told us, is that almost anyone can use *Decide*.

Of particular interest is that membership to *Decide* is restricted to individual citizens. Thus, collectives cannot register to the platform, whether charities, non-governmental organisations, or corporations. This does not mean that proposals cannot be endorsed by collectives. Indeed, one of the two successful proposals was backed by 400 organisations from the ecological sector who promoted it and gave it legitimacy in the media.

However, the inability for collectives to incorporate themselves to *Decide* is more consequential than a simple branding or coordination matter. By not being present within *Decide*, a space is created with no representation, originally empty of any points of pressure or lobbying, any vector of meaning traditionally present in the traditional political space. That newly created space is an original vacuum of political meaning except that which citizens are willing to create and make emerge between themselves. *Decide* as the resulting resource of trying to make any citizen capable of freely participating is an empty canvas to be filled by participating citizens.

The lack of functionality supports a radical space that is free of any group that may determine or guide proposals, that may pre-suppose collectives (Guattari 2009). The collectives that may form in *Decide* are thus temporary; too much so according to some. Two activists that were asked to reflect on the reason why *Decide* did not attract more participation concluded that the space may be “too smooth”, thereby making “participation too abstract”:

To undermine the space of representative politics, a 'striated' space (asphyxiated by patterns that repeat, routines and codes that must be followed), Decide Madrid tried to build a 'smooth' space (indetermined, casual, of direct experiences, of routes without references in which values are determined on the way, by the doing). From the point of view of this research, this space is so smooth that it offers a too abstract relation between citizenry and power (or between the citizenry and its capacity to do politics).

Project report (Padilla and Malo de Molina 2018)

As such, giving back power to the citizenry through the use of participation had to circumvent typical representative bodies found in the normal democratic space. The result is a platform which works in a different space and where almost anyone can participate to propose anything. The lack of functionality afforded to existing groups provided few risks of recognised groups co-opting citizen participation in this new political space. *Decide* was a new realm of possibilities.

5.2. Evaluating *Decide*'s participation resources

The possibility for anyone to make a proposal about anything is initially liberating. There are very few requirements for posting a proposal (and none at all to comment or debate). In *Decide*, a proposal can be made by any person registered in the city above the age of 16. Only later, with the abundance of duplicate and very similar proposals becoming an overhead for participants that certain guidelines are displayed to try to reign in the chaos.

The lack of requirements to participate leads to an initial massive amount of participation from citizens. As Figure 1 shows (see the red line), the first few months of the platform see more than a million of submitted proposals. It is in these first few months of 2015 that two proposals will eventually be voted in and carried to referendum. Although the overall numbers will quickly decline, until 2017, participation in terms of submitted proposals will remain in the range of 70.000 per month during the less popular months, with punctuated peaks reaching the 200.000. These peaks coincide with another functionality of *Decide*: participative budgeting, which started running in the first few months of every year. Participative budgeting involves citizens pitching for their projects at specific dates of the year and resulted in the recurrent attraction of new and veteran users who would find a reason to visit the platform again.

Figure 1: Participation in terms of proposal-making in Decide throughout 2015-2020

Since no functionality for formalising collectives was created within *Decide*, participation necessarily overspilled from *Decide* into other spaces such as Twitter or Facebook, where individuals could better coordinate and collaborate. The proposal, as the main unit of articulating civic participation, and embedded in *Decide*, could only tell part of the story of the proposal. What brought people to create a proposal and support it? The context, background, rationale, could easily get lost:

By not having observed all that happened, [...] you have lost very important information about whether this proposal is the idea of one minute, or if it is a proposal that has been worked on during 12 months. [...] A single platform cannot give you all the information that you need.

Interview of an expert on citizen participation and open city data

Decide and the way it was designed to avoid the formation of enduring collective could not capture all the participation that happened during the participatory process. As such, the learning process experienced by those involved in proposal-making was lost and could not be told or evidenced to future supporters or collaborators. The participation created through *Decide* did not show the possible richness of the participative process that participants would have engaged in.

What kind of participation does *Decide* create then? During a meeting composed of people set to reflect on *Decide* to which we participated, a debate ensued about the disposition from which citizens could or should propose:

Participant 1 (P1): We need to focus on the strength of citizens, and their strength resides in affective participation. What do they feel should change?

Participant 2 (P2): What about an intellectual relation to the city. People can think and decide for themselves. The average person could be intellectual too.

P1: Citizens are individual participants that meet in deliberation. Their fit and capacity to bring things are different so yes it could be intellectual and affective. But even bad proposals can be a springboard for good ones, ones that are more reflected.

*P2: We need to study how successful proposals come out. It is about an intelligence of networks, of building virtual communities around projects. Even crap proposals could pass if they have network skills. Is it about the brand? About the persuasive arguments? The ways it's laid out? What is the citizenry that wins in *Decide*?*

(Focus group, from notes)

We interpret this discussion to be about participation as a specific, contextual resource that is the outcome of a particular and questioned process. *Decide* in particular, is good at creating affective participation. What kind of city would ensue when affective or intellectual participation is promoted over the other? No option is necessarily the best, but the question does interrogate certain conceptions we hold about democracy and decision-making as a reflective and serious business. In some ways, perhaps it is too serious, and behind the deep frowns, eloquent (or otherwise) rhetoric, a large amount of participation, a different kind of participation is lost. The kind one may

find in the bars, more mundane perhaps, but invisible, as reminds us someone who has worked on an open data project for the city connected to *Decide*.

Participation exists: people who join together in the plazas, in the bar, and discuss things, [...] but these discussions in the plazas, in the bars, in social places, doesn't go beyond because there isn't an explicit description of what was discussed.

Interview of an expert on citizen participation and open city data

Should participation in pubs be captured? What kind of value does affective participation have over a more intellectual kind? These sorts of questions became common and recurrent throughout the project, with sometimes conflicting positions between *Decide* leaders in charge and those in charge of coordinating projects reflecting on participation in the city and the role of *Decide*. For example, one participant in a workshop on radical democracy said about *Decide*:

Participation is very chaotic; it amounts to nothing. In a welfare society, I don't want to lose my time on something that doesn't work.

(Participant workshop, from notes)

On the contrary, a Project specifically designed to gather local participation from neighbours qualified affective participation as key:

The pilot project Fuencarral.Decide is fed through initiatives and projects of the local administration as much as of the society in movement. The objective is to make the digital tool Decide Madrid more accessible and to bet on the reconstruction of the social fabric as necessary condition for making the participative a field of affective possibilities that improve the material and symbolic environments of our neighbourhoods and cities.

(Final report, Democratic Futures)

Decide ended up creating participation resources filled with affective undertones and whose legitimacy was recurrently called into question by the media, the participants themselves, and the technical administration. In addition, as we will see in the following cycle, participation slumps after 2017, which pushes the decision to create a new resource that is thought to meet the criticism to *Decide*: a procedural take on *Decide* which ensures through the involvement of the technical administration of the City Hall, that proposals are judged and worked on by informed citizens.

5.3. Internalising the external participation: Creating the Citizen Observatory

One of the most important moments of *Decide* comes surprisingly after its most successful event. In February 2017, two citizen proposals are voted in during a referendum in which close to a million votes are cast by 214000 people (there were other City Hall sponsored initiatives to vote on in addition to the two proposals). The success of this “first citizen voting” as it was often called, is evoked repeatedly by government officials who highlight the idea that participation is now normal way of life for citizens in Madrid.

Filled with joy because of the citizen voting. 214.000 people have sent us a clear message: the road to participation is irreversible.

Manuela Carmena 27th February 2017 (from a tweet)

Yet, despite the “irrevocability” of participation, as shown in Figure 1, the number of created proposals will decrease continuously from then on. Worse, the fact that two citizen proposals were voted in to become government policy will not encourage citizens to vote on existing proposals or to create a proposal capable of winning the required votes to pass to referendum. This will convince the City Hall to experiment and reflect on participation. Multiple projects will be launched to educate about *Decide* and its possibilities, or to create enduring proponent communities outside of the platform and consisting of technical experts and interested citizens. But one project in particular will catch the attention of the City Hall, with one of its highest members declaring in a conference that “it will be the most important project of the government’s area of participation” (*Decide* leader, conference, from notes).

The project in question is called the City Observatory (CO). Composed of 49 citizens picked through sortition, the CO would look at *Decide*’s most popular proposals, discuss it between themselves, and choose through a vote whether to modify it, ascend it to parliament, or reject it entirely. This body was composed of citizens chosen through sampling Madrid’s population according to key demographic criteria: sex, age, and district (as independent variables). These criteria were said in official documents to make the body representative of Madrid’s society:

Chapter two regulates the composition and functions of the City Observatory, which is formed by a president, a vice-president, the vocals [the randomly selected citizens], the secretary, and the speaker, whose functions are set in the Plenary. The vocals will be composed by up to 49 citizens and a list of 49 possible citizens in reserve, randomly selected and who offer a demographically representative sample of the population of the city of Madrid.

Organic laws of the City Observatory approved by parliament on 29/01/2019

Sortition is key to the CO's capacity to convincingly judge, promote, and if needed, modify citizen proposals. It imbued the participatory body with a legitimacy to represent through small and manageable numbers the entirety (or at least, a great part) of the citizenry. This representative capacity acted as a complement to *Decide* and the recurrent difficulty to gather enough votes for a proposal to pass to referendum. This body, in essence, was as a proxy for the entire population of Madrid.

This scaling of participation through proxy is not without its complications precisely on the issue it had to resolve: what kind of participation is scaled? The kind of resource that ends up being the CO depends on the key criteria chosen. A pilot initiative for the CO to test the idea of such a body becoming an institution within Madrid tested for more variables: political affiliation, mixing sex and age distributions (as dependent variables), education profiles, and nationality. In other words, depending on the selection criteria deemed to be relevant, a different body of participation will act as a resource for the entire population of Madrid. The CO thus artificially creates a sociological sample of the population from the top-down in comparison to *Decide* which was necessarily representation-free and bottom-up, and where anybody could participate.

The selection of the sample can have deep repercussions to the kind of subsequent resources will be enacted. As resourcing theory tells us, resources can turn into schemas. The CO, itself a resource in this cycle, could have represented schemas later on through which participation resources would be derived. These subsequent schemas would uphold the reductive demographic cut and cement them as those sufficient representative qualities of the citizenry in Madrid. Once enacted into resources (such as laws describing the function and set up of the CO), this representative sample could become more entrenched, normalising these criteria used to create a proxy of the entire population of Madrid. As time goes by, this schema, if not adapted to further changes will continue to perpetuate and further normalise this view despite potential changing realities of the sociological composition of the city. As a result, an artificial relation between those represented by the proxy and those who are not.

Once the complexity of participation is reduced through statistical means, another of the CO's purpose can be achieved: to create informed decisions or turn proposals into informed ones. The untameable nature of the crowd and the multiplicity of contexts found in the external urban environment could, through sortition, be brought into the administration, to be managed and framed within the institutions of the City Hall and its information systems. Within the institution and through rules and technical norms, the administration can insure a certain control regarding the quality of participation through processes of deliberation that would also increase certain democratic qualities of the proposal.

The process for making CO participants informed citizens is a curious mix of bottom-up and top—down approaches. Citizens of the Observatory are asked to decide what information they need to make an informed decision on a specific proposal. It is then the task of the civil servants to find the sources for that information and to choose ways to present it. This, as we could see, was no easy task with people close to the project arguing that the wrong information was presented and that it was presented incorrectly, that unconsciously biased sources could have been used, or that there was little time for citizens to parse through the data to make an informed decision.

I thought the reports weren't... They gave general information, without thinking about the decision they [the citizens] had to take. [...] The answer they should have gotten from the information, for me, would be: "Does it make sense what the proposals says or not?" [...]
So they gave them, one of the data was about the spaces for children's spaces by neighbourhood, but without comparing that data to the size of the neighbourhood or the population. So the data isn't useful even to experts. And to randomly selected citizens, even less so. The reporting of the information, the visuals, need to be worked on; the information has to be both partial, which is one of the biggest challenges for me in deliberative processes and are very complicated, but if the reporting has not been correctly worked out, then they can't extract conclusions [...] It's noise [for the citizens]. To me, it's one of the reasons why they didn't send the proposal to referendum, it wasn't standardised well enough.

(Project leader, interview)

How to present the 'right' kind of information internalises the responsibility for informing from outside to within the institution. Once it is the responsibility of the City Hall to provide such information and not the citizens' through a purely direct democratic system involving only *Decide*, the choices of what information and how information is presented will be scrutinised inside the Observatory and outside. The consequence is an extra layer of complexity that influences participation when the CO was designed as a procedural generation of participation that would hold, by its transparent process, inherent legitimacy.

The result of internalising the crowd ends up creating resources of participation which are less based on affects and preoccupation as was criticised by some actors previously. Instead, the CO creates participatory resources which are more in line with a procedural kind. That is, the participation that the CO produces is evaluated from a procedural view: have they respected the rules? What do the rules tell us about how we should proceed? As such, choosing the CO and its design as a solution to *Decide*'s problems is not an innocent decision without repercussions to the kind of participation ends up being produced. The internalisation of participation is the cause of this procedural take on participation, when the original design behind *Decide* was to create a political space primarily free of requirements to participation and representative vectors.

It is the internalisation of participation through the CO that allows an imaginative scaling of support from the population of Madrid. As such, internalising the resource of participation allows the City Hall to manage its scale and the process to ensure that a certain kind of participation with which they are comfortable gets generated.

6. Discussion and conclusion

Throughout the cycles, the resources at the disposal of those who had to participate were questioned and assessed, resulting in change to the schemas enacted and the subsequent created resources. The enacted schemas created participation resources and further schemas that, once implemented, became part of the social order that guided social relations within the city. The enactment of schemes reflect the changing reflection of what participation is or should be as these changes become implemented and used by citizens, technical administrative staff, and *Decide*'s own leaders. Each of these actors develop a certain sense of how they can use participation and why they should use it.

We have focused on the agency of *Decide*'s promoters to show how they processed participation. The ambitious original schema to redistribute power in the city and change social relations took on many forms and the promoters had, through the deployment of projects, to understand how *Decide* as the main participation resource was used. When the use of *Decide* did not create the expected subsequent participation resources (i.e. proposals that go to referendum), an alternative participatory resource had to be added on top of *Decide* that would internalise participation. This internalisation of participation would make it more amenable to the City Hall to manage and ensure

that it could legitimately act as a proxy to redistribute power back to the citizens. As such, it imbued participation with certain qualities that *Decide* could not on its own.

The corollary to understanding participation as a process is that participation is a complex object. The CO was used by *Decide*'s leaders to reduce the complexity behind participation by internalising part of the process (i.e. the deciding process) within the institution. The heterogeneity of participation outside the City Hall was difficult to manage and to imbue with the necessary qualities for proposals to be voted in or to be seen as legitimate by other actors including the participating citizens themselves. This external and heterogeneous participation was homogenised through a statistical reduction.

However, as we have shown, the handling such a complex object as participation is difficult. The internalisation of participation created an added layer of complexity when the City Hall had to inform the citizens about the decision it had to take. The purely procedural component of the CO that lent it legitimacy became murkier by the responsibility of the City Hall to provide information to the members of the CO. What information had to be provided and how to provide it was a contentious point.

Participation is also a complex object because of the possibility of turning (potentially) mutable resources into enduring schemas. Resourcing theory is useful in showing how changes to routine processes can become institutionalised, turn into norms, rules, and in this case laws. This cycle can make certain schemas difficult to change if they settle, making it difficult to contest them. What kind of participatory process becomes adopted? What options were discarded in the process of adopting one process over another one?

The cementation of schemas is particularly relevant in the context of civic tech because of its capacity to perpetuate, change, or render change impossible, certain orderings of social relations by the creation of schemas and resources. These schemas and resources guide how participation is to be later evaluated. Take the statistical sample that produced the CO? What alternative sociological reality could have been promulgated by the CO had a different statistical reduction been carried out? Is such a reduction satisfactory in the changing urban realities? How should the reduction be evaluated in time? If we agree, as did the promoters of *Decide* that participation has the potential to change the social relations within a city, then thinking about what participatory schemas and resources are created is essential to any theorising about the city.

In the same vein as Deken et al. (2018), we contribute to resourcing theory by applying it to the theorising of external resources. Resourcing theory, through its departure from resource based view of the organisation, has mainly focused on internal resources. By showing the process that an institution put in place to allow for the creation of external resources (i.e. citizen proposals), we have extended the application of this theory beyond the boundaries of the organisation. In addition, the difficulty in managing those external resources and the subsequent internalisation process suggests that, in an open world, internal management processes remain relevant.

We also contribute to crowdsourcing by showing that some applications to the crowd are embedded in much more complex environments than in typical firm-oriented contests. We submit that participation and its processual nature is a key notion in making sense of these complicated environments. The evolving nature of participation that is in turn organised (as a resource) and organisational vector (as a schema) provides a focal point for future research for managing participatory processes beyond stable confines.

Indeed, in a world of openness and as an exemplar of one kind of open innovation (Zobel and Hagedoorn 2018), crowdsourcing itself is increasingly used in less homogeneous contexts that must be investigated. Epistemological assumptions behind research on participation such as the prevalent epistemologies of rationality and universality, must be put forward to understand and acknowledge underlining views of the world that affect the development of the concept of participation.

The principal assumptions that a notion of complex and processual participation challenges is the one prevalent in the crowdsourcing literature: the Habermasian tradition. This tradition follows the rational and universal readings of participation as a summative and integrative object composed of parts that can fit into a whole. A resourcing theory reading of participation, on the contrary, emphasises the contextual nature of the development and evolution of different kinds of participation. Had *Decide* experienced a different kind of participation in its early years, would the CO had been created the way it had or for the same reason? Would it have existed at all? What aspect of participation would have been the focus then?

The fact that kinds of participation can be developed with different resources and schemas *at the expense* of other kinds questions the rational and universalist school of thought. As such, it is difficult to conceive of the existence of any, let alone *a*, ‘ideal public speech’ precisely because participation creates or gives voice to specific political bodies. If we agree on this premise, then we may want to consider other political theories to inform our

readings on the organisation of participation that take into account the potential conflicts between polities. Whether these may hold on to modernist dreams of progress (Beck 1997), or instead locate democracy precisely on the agonistic nature of participation to democracy (Mouffe 2009), crowdsourced participation is a performative object whose democratic repercussions must be studied with care.

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