

**From Making Things Public to the Design of Creative Democracy:
Dewey's Democratic Vision and Participatory Design**

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Participatory design's (PD) shift from the workplace to civic settings has led to a reorientation of the field's political bearings. Informed by science and technology studies, practice is now often framed in terms of design Things, infrastructuring and John Dewey's concept of 'publics'. Taking the publics concept as a starting point, the present article seeks to contribute by providing a broader outline of Dewey's democratic vision. It is proposed that Dewey's vision may be seen to offer a potentially useful perspective that directly relates the 'publics' concept to the areas of freedom, experientialism and the institutions of government. Linking to contemporary developments in PD and beyond, the vision is seen to carry conceptual and practical implications, which, if borne out, would connect the discipline's capacity to 'spark' publics into being to the processes of policy formation and institutional reform.

Keywords: Participatory Design, Democracy, John Dewey, Institutioning, Design for Policy, Science and Technology Studies

1. Introduction

The last two decades have seen participatory design (PD) shift its contextual focus from the workplace to civic settings. This shift has led to a degree of anxiety over the movement's political bearings, with some arguing that these more limited engagements have led to a narrowing of PD's original, broad-ranging agenda (e.g., Huybrechts, Benesch and Geib 2017). While there have been a number of recent proposals calling for a refocusing of the political in PD (e.g., Teli, Fiore and D'Andrea 2017; Björgvinsson, Ehn and Hillgren 2010), the present article explores the discipline's relationship – actual and possible – to democratic governance.

This exploration is given form and structure through a careful referencing of the

democratic writings of the pragmatist philosopher John Dewey (1859-1952). Dewey's philosophy has long resonated with the PD community (see e.g., Ehn 2017; Telier 2011, 9-10). By returning focus to his democratic writings, I am here aiming to draw out a set of conceptual and practical implications, which point to the potential of a wider political reach for the field. Although no case studies are presented, towards the latter end of the article I link to the contexts and perspectives of frontline practitioner-researchers working in the UK and mainland Europe.

2. Democracy in PD

PD has long been concerned with democracy. The Scandinavian workplace projects of the 1970s and 1980s centred on equality and worker's rights, as well as the belief that those who use a technology should have a say in its design (e.g., Bjerknes, Ehn and Kyng 1987). However, as the project contexts have changed so too have the political parameters. Indeed, recent years have seen the advance of an increasingly complex discourse, integrating concerns relating to power, agency and the existential trajectories of issues. Here, many have been inspired by the theories of science and technology studies (STS), which productively enmesh humans and non-humans, material practices and processes (see e.g., Latour 2005a).

In referencing this work, the PD community has, for the most part, tended to focus on the contributions of Bruno Latour, Susan Star and Noortje Marres. Following Latour's lead, several theorists evoke the Heideggerian notion of 'thinging' as a means of conceiving of the extended interweaving of social and material relationships brought about by design (Telier 2011). 'Design Things', assemblies, are said to come into being as these socio-material relations inform and shape ways of interacting and behaving, allowing for exploration, discussion and debate (see Telier 2011; Björgvinsson et al.

2010; 2012). Linking to this, Star's concept of 'infrastructuring' is also drawn upon to convey the complicated 'performative "staging"' of design Things over an extended period of time. Here, the socio-material *attachments* held by particular groups—i.e., their commitments and dependencies—are identified and mobilised (e.g., Le Dantec 2016) in a process which aims to bring about conditions allowing for full democratic participation (see Björgvinsson et al. 2012, 103-105).

In addition to the above, another Latourian contribution emerges through his call to 'make things public'; that is, to find ways of mobilising socio-material things as matters of concern (Latour 2005b). This is complimented by the work of Marres who has formulated a theory of 'material publics', which acknowledges the role that things, animate and inanimate, play within the political process (e.g., Marres 2012). In both cases, the term 'public' is a reference to the work of John Dewey – in particular, his 1927 text *The Public and its Problems*. Through Marres and Latour, both the notion of 'making things public' and the Deweyan publics concept have become established points of reference within PD (e.g., Björgvinsson et al. 2010; Le Dantec 2016).

3. Dewey's Publics and STS

John Dewey was one of the twentieth-century's most prolific champions of democracy (e.g., Westbrook 1991). *The Public and its Problems* can be seen as a plea to revitalise the democratic project at a time when it was both unfashionable and under threat internationally (Narayan 2016, 15). As the title suggests, *publics*, that is, an active, politically-engaged citizenry, are seen as central to this process of revitalisation.

In defining his conception of a public, Dewey works outwards from the position that the communal activities of planning and pursuing goals together will *necessarily* result in consequences; the impact of which may be limited to the initiating group or may extend further to involve other actors. From this, he goes on to propose that, given

sufficient motivation, the latter actors may come to form ‘a group distinct enough to require recognition and a name’. Such groups are referred to as *a public*. Once organised, this public will likely require that its interests be overseen by a set of representatives, who, in turn, will be charged with the general regulation of community life. Such a system of representation, he suggests finally, may be seen to form the basis of government and the political state (LW 2, 257). Later in *The Public*, Dewey develops this quasi-historical overview, giving the concept a modern framing. Here, as will be detailed below, he is concerned with connecting communities, publics, to the institutions of government.

To a large degree, the popularity of the publics concept in PD can be attributed to *Making Things Public*, an exhibition and later a publication by Latour and Peter Weibel, examining how various socio-material formations might ‘spark’ publics into being (see Latour 2005b). In this work, Latour explicitly acknowledges his debt to Noortje Marres’s framing of the Deweyan publics (ibid, 14) and Marres, in turn, is widely referenced on the subject in PD literature (e.g., Le Dantec and DiSalvo 2013).

Marres draws on Dewey’s articulation of the public as a means of developing STS’s ‘issue-orientated’ perspective on public involvement in politics. She argues that the publics concept may be seen to supply STS with a necessary rationale for why a politics of public issues, whether concerning roads or epidemics, must by necessity take the form of *democratic* politics (2007). This opens up a view of public involvement – publics – as ‘being occasioned by, and providing a way to settle, controversies that existing institutions are unable to solve’ (759); public issues, in turn, are seen as resistant to ‘institutional settlement’ (772). This understanding is mirrored by Latour who (drawing on Marres) takes the view that the emergence of a public denotes that

‘something went wrong’, that an issue has emerged which extends beyond the ‘normal routines of action’ and, as such, *requires* participation (2007, 818-819).

A crucial point here is that neither Marres nor Latour (via Marres) represent the positive link Dewey draws between publics and representation, publics and government. In moving to ground the Deweyan public in an STS context, Marres draws attention to what she sees as the necessarily *antagonistic* nature of public affairs. Issues, we are told, are always partially *irreconcilable*. Different groups bring different perspectives; each public ‘distils’ a different aspect of a controversy (Marres 2007, 773).

On this presentation, public involvement is necessarily complex and tense, its forms infinite and its outcomes by no means clear. Most importantly, in losing its positive link to representation/government, it lacks a clear outward orientation, its issues have nowhere in particular to go. In the words of Latour, each new issue ‘deserves its own protocol’ (2007, 819).

4. Dewey’s Publics in PD

In recent PD literature, the publics concept has most clearly come to the fore in the work of three key theorists – Pelle Ehn, Christopher Le Dantec and Carl DiSalvo.

Ehn regularly references the Deweyan public in his discussions of the ‘agonistic public spaces’ of Malmö’s Living Labs (e.g., Björgvinsson et al. 2010; 2012). Such spaces aim to bring diverse groups together to explore ‘questions and possibilities’ in open-ended, small-scale experiments (Björgvinsson et al. 2010). On this account, Dewey’s public points to the ‘heterogeneity and conflict’ that emerges as Things become matters of concern (Björgvinsson et al. 2012, 116).

Following on from Ehn, Le Dantec and DiSalvo can be seen to approach the concept similarly. Le Dantec has explored the extent to which publics may be

constituted through the development and use of technology (e.g., Le Dantec 2016; Le Dantec 2012; Le Dantec and DiSalvo 2013). On his theorisation, publics are constructed around issues, attachments and infrastructure. All three aspects may be transformed as design shifts the parameters of the situation (Le Dantec 2016, 7). He argues that ‘constituting and supporting a public’ requires more than ‘passing encounters with a mediating technology’. A public must also have a role in ‘determining the future use of that technology and the development of legitimate claims to shaping that future’ (Le Dantec 2012, 1359). Next to this, DiSalvo references Dewey’s concept of public in his presentations of community-based PD projects (e.g., DiSalvo 2009). His core argument is that by developing and applying specific tactics – for example, the ‘projection’ of future scenarios – design can meaningfully contribute to the construction of politically-motivated communities (DiSalvo 2009).

Drawing their reference from Marres and Latour, this research foregrounds design’s role in ‘sparking’ publics into being around *local* community issues and controversies. It is my contention (elaborated below) that in following the indeterminate Marres-Latour definition of publics in issue-formation, there is a tendency for these inquiries to remain local. For example, Ehn and colleagues’ work has largely been focused in the city of Malmö. In one case study, they introduce a hip hop community from a disadvantaged area of the city to a variety of specially-designed technological platforms (see e.g., Björgvinsson et al. 2012). Le Dantec and DiSalvo openly acknowledge their smaller scale publics as they detail similar engagements with, for example, a community group working to address post-industrial decline (Le Dantec and DiSalvo 2013). In this case, the design team and participants collectively explored the possibility of developing a sensor-based community radio program to promote the local area (253).

It is beyond question that all of these publics and their issues are genuine, that the processes of issue formation produce distinct benefits and the ‘design Things’ they represent do form novel assemblies. Yet, at the same time, it can also not be ignored that these cases are *contained* at, what Liesbeth Huybrechts and colleagues (2017) term, the ‘micro-political scale’ of PD (150). In other words, the publics and the Things described do not, in the end, appear to extend far beyond their immediate context, i.e., few ‘meso’ or ‘macro’ political developments are in evidence; further, there is little sense that this might (in some cases) be desirable.

Of course, in highlighting the above – both the Marres-Latour and PD appropriations and translations of the publics concept – it is important to recall Marres’s aim. She is seeking to provide ‘argumentative resources’ for political STS in the context of issue-formation. As such, she reconstructs Dewey’s concept in relation to her own concerns.

This reconstructed presentation is clearly of value but we are missing its bearings; as was noted above, the issues have nowhere to go. PD, in referencing Marres-Latour, has little sense of Dewey’s publics *in* context. This context is his democratic vision and the democratic vision, in turn, articulates a Deweyan *why* and *how* for democracy. I believe that it is the absence of Dewey’s *how* of democracy, in particular, that contributes to the containment of PD’s real-world publics at the local and *micro-political* levels (Huybrechts et al. 2017), thus, cutting off the meso and macro and limiting the potential political reach of the discipline itself.

In seeking to counter this at the same time as map out a renewed political path for PD, I will now move to provide an overview of Dewey’s democratic vision. Of course, this undertaking presents a number of challenges. First, there is the broad sweep of Dewey’s original writing. A full appreciation of the breath of the vision requires

extensive cross-referencing, not to mention a sensitivity to the evolution of his arguments. Then, there is the space that opens up beyond the Deweyan vision. This is, by necessity, speculative.

Responding to these challenges, a focused approach is taken through the following sections. In outlining Dewey's democratic vision I refer to three core concepts; namely, positive freedom, creative democracy, and social intelligence, which, together, ground its social, political and practical aspects. From this, I will move to look at the potential implications of this perspective for PD. Here, my focus will be directed towards the emergent areas of design for policy and 'institutioning' (Huybrechts et al. 2017). Linking these to Dewey's vision, I will argue that it becomes possible to frame an opportunity space for PD within the bounds of contemporary practice.

On a final note, as will become clear, some points of alignment can be seen to emerge between the above proposals and existing perspectives in PD. Accordingly, when appropriate, I will aim to highlight any such parallels.

5. Dewey's Democratic Vision

Perhaps the key to understanding Dewey's democratic vision lies in appreciating the distinction he draws between democracy as a political system and 'democracy as a way of life' (Narayan 2016). Though Dewey acknowledged the role of political institutions, he argued that, firstly, democracy must be seen to originate in conduct of everyday affairs and the advance of community interests (e.g., Dewey LW 14, 224-230).

In pursuing this agenda, he gradually came to develop a set of core concerns focusing on: the relationship between the individual and society; the quality of communication and cooperation among groups; and the particular methods and techniques by which democracy could be enabled, sustained and enhanced. These concerns can, in turn, be seen to underpin the conceptual structure of Dewey's

democracy vision. Here we encounter positive freedom, creative democracy and social intelligence.

5.1 Positive Freedom

For Dewey, each individual can be understood to form an ‘association’. What a person does, what their experiences consist of, he argues, ‘cannot even be described, much less be accounted for in isolation’ (LW 2, 353). This life of association can be seen to both constrain and support the individual – the accompanying social and legal structures both impose limits on action and guarantee certain rights. While Dewey takes no issue with imposing limits on action, he argues that simply guaranteeing certain rights (e.g., the freedom of speech) is not enough. ‘There can be no greater mistake,’ he wrote, than to treat such freedom as ‘an end in itself’ (LW 13, 41). Rather, he believed that societies should instead seek to effect a ‘positive freedom’ (LW 2, 340). This expression points to the enabling of society through the institution of conditions, which allow creative action to flourish (LW 11, 41). Inevitably, such a vision requires support structures; that is, an environment which allows individuals to grow and develop as they participate within community life. Unsurprisingly, then, Dewey discusses the concept in terms of education. On his view, when appropriately constituted, education should aim towards a ‘freedom which is power’. Herein, students would be equipped to ‘frame purposes, to judge wisely, to evaluate desires by the consequences which will result from acting upon them’, as well as ‘select and order means to carry chosen ends into operation’ (LW 13, 41). It is this sense of positive freedom, this sense of enabling, of opening up possibility and potential, which sits behind Dewey’s concept of creative democracy.

5.2 Creative Democracy

As was alluded to above, Dewey believed that political democracy and ‘democracy as a way life’ pointed to two distinct aspects of democratic organisation and activity. The former aspect is seen to concern the commonly recognised manifestations and characteristics of democratic governance, for example, universal suffrage, parliamentary representation, free speech and so on. The latter aspect extends much further and deeper, focusing in on the fine-grained complexities of the community-level interactions. Dewey believed that it is through the enactment of these interactions – as individuals become involved in group activities and cross-group exchanges occur – that the quality of democratic life is framed and defined.

Democracy then is not ‘an alternative to other principles of associated life’ but rather ‘the idea of community life itself’ (ibid, 328). It is here, along this baseline, that he locates the foundations of political democracy as expressed in his formulation of the publics concept outlined above. Fundamentally, and in contrast to the Marres-Latour STS account, his concept of the public is seen to act as a means of charting a connection between community-level interactions and the institutions of government – not merely an indication that an issue has escaped the ‘normal routines of action’. The question of how to *maintain* such connections was, for Dewey, ‘the problem of the public’ (ibid, 365). Indeed, it was an issue he explored at length throughout his career. His frequent response was to sketch out the ideal of ‘creative democracy’ as the ultimate aim of democratic life (e.g., LW 11, 348-350; LW 14, 224-230). In this ideal scenario, multiple publics would have an equal opportunity to contribute to the deliberation and formation of social policy. At the same time, democratic government would enable new publics to interact with old publics (i.e., established political groups), and through this reform, reshape and remake its institutions in response to the currents of social change (see

Narayan 2016, 37-38). Such a vision, Dewey proposed, could only be achieved through social intelligence.

5.3 Social Intelligence

The experimental method, with its emphasis on process, change and continuity, was central to Dewey's philosophy (e.g., LW 1, 339). He saw it as supporting a particular attitude, which aimed towards active problem-seeking; remarking that, through the experimentation, 'very new question [becomes] an opportunity for further experimental inquires – for effecting more directed change' (ibid, 81). For Dewey, social intelligence referred to the *communal*, society-wide adoption of the experimental method, linking communication to cooperative action and the exercise of collective judgement.

It was Dewey's proposal that the practice of social intelligence be adopted in the consideration of, and response to, emergent political and moral concerns. Publics and experts would work together to develop experimental policies and proposals (LW 2, 362-365). These policies and proposals would be 'treated as working-hypotheses', subject to 'well-equipped' observation and potential revision (ibid, 362).

In terms of impact, Dewey believed that the practice of social intelligence within daily life would support a constant, ongoing cycle of 'discussion, debate and persuasion' amongst disparate groups (ibid, 365). This, in turn, would allow for the exploration and possible resolution of moral conflicts and disagreements (LW 11, 56). Additionally, from an institutional perspective, it was also held that an embedded social intelligence, i.e., an official commitment to cooperative inquiry, would bring about the ideal of creative democracy; that is, the possibility of government reform through an experimental response to the emergence of new needs (LW 2, 256, LW 11, 182).

6. Some Implications of Dewey's Vision for PD

Dewey's democratic vision was framed in the early twentieth century, at a time of extreme political turmoil – fascism and communism were on the rise, the future of liberal democracy was under threat. Although our contemporary situation differs in many ways from Dewey's, it is arguable that the concerns he was addressing, whether relating to political ignorance, apathy or corruption, have echoes in our own time.

Returning to this article's original context – looking from PD's current appropriation of the public's concept to the possibilities of Dewey's wider vision – we may now ask what can the discipline learn from any further exploration of Dewey's democratic writings. At this point, it is important to note the fact that Dewey was not presenting a prescription for action, but rather philosophical argument to aid reflection and promote change. Indeed, as Robert Westbrook cautions, it would be 'a mistake (and most un-Deweyan) to recommend an uncritical and wholesale recovery of Dewey's philosophy' but he does merit 'another, closer look' (1991, 552). This is the spirit in which I approach the work here.

In particular, in this section, I would like to suggest that two horizons emerge through the interrelating of the public's concept, contemporary PD practice, and the trajectories of Dewey's wider democratic vision. The first is a *why* of democracy presented in the concept of positive freedom. The second is the initial outline for a *how* of democracy, found in the dual concepts of creative democracy and social intelligence. The former, *why*, may be seen to link to and enrich the existing conceptual context of PD as practiced. The latter, *how*, on the other hand, opens up a set of possibilities for practice. I will now explore both in turn.

As we have seen, positive freedom refers to the institution of conditions, which strengthen an individual or group's ability to frame and evaluate the means, ends and consequences of action, supporting their growth and development in the longer term.

Ultimately, this concept may be seen to function as a grounding orientation within Dewey's vision, a necessary undergirding for creative democracy and social intelligence, as well as an end in itself.

In drawing a link to the existing conceptual context of PD, I would like to propose that this has implications for the notion of infrastructuring. As presented by Ehn and colleagues, infrastructuring is said to denote the democratically motivated consideration 'of conditions that enable proper and legitimate user participation' (Bjögvinsson et al. 2012, 103) across contexts over time (Telier 2011, 171). I take the view that while this usefully points to the extended enabling of *participation* within PD, it does not properly capture the potentially transformative effects *of these forms of participation for the participating individual, group or public.*

This is regrettable as there is clear evidence for the presence of such a value in contemporary accounts of PD (see e.g., Iivara and Kinnula 2018), including the cases highlighted above. For example, in discussing their engagement with the post-industrial community group, Le Dantec and DiSalvo note: 'the design team worked with the group to develop means by which the group could communicate their desires and challenges to others'. This included 'working to *improve* participants' skills in developing compelling descriptions of their project through both narratives and physical artefacts' (Le Dantec and DiSalvo 2013, 256, italics added). Here we observe the strengthening of particular skills. Through these interventions, participants are being supported in their efforts to frame the means, ends, and consequences of proposed action. As Le Dantec and DiSalvo make clear, these capacities were developed in the hope they would be *transferable* to future situations (257).

Thus, by aligning such instances with Dewey's concept of positive freedom, we may give form to an existing dimension in the design Things/infrastructuring/publics

complex and, further, extend our understanding of the possible scope of practice. Additionally, it may be that, where appropriate, the concept can function as a motivational principle in the infrastructuring of design Things – a guiding Deweyan *why*.

Turning then to the dual concepts of creative democracy and social intelligence, we encounter what I consider to be the *how* of the Deweyan democratic vision. Here, with reference to creative democracy, I call attention to Dewey's belief that publics should, as a matter of course, be invited to contribute to the formation of social policy, as well as the process of institutional reform. Next to this, social intelligence – the broad-based adoption of experimental action – provides the outline of a method. Taken together, both concepts point to the desirability of opening up a creative, experimental linking of publics and institutions, policy formation and reform. As noted, this extends further than the Marres-Latour presentation. By joining up the publics, creative democracy and social intelligence, Dewey is suggesting that in some cases, issues *might* have somewhere in particular to go, that a *contingent* protocol might be devised.

Returning to the context of PD, then, what does this distinct Deweyan contextualisation mean for practice? I believe that a possible forward path may be traced through the areas of *design for policy* and *institutioning*.

6.1 Design for Policy

Design for policy offers us an initial outline of how, through collaborative design practices, citizens might play a role in social policy formation. The practice has emerged through a series of government-sponsored programmes undertaken in countries such as Denmark, the UK, and France (Kimbell 2016, 1). Operating across various levels of government, these programmes have trialled collaborative, design-led

approaches to policy formation, which, at least in part, draw on the legacy of PD (e.g., through the technique of prototyping, Kimbell and Bailey 2017, 215). Though research into this area is limited, a growing body of literature has begun accumulate around the subject. Across this work, one may detect a definite sense of ‘promise’ (e.g., Bason 2014; Kimbell and Bailey 2017) but, equally, the occasional expression of disquiet regarding design’s role within this space (e.g., von Busch, Otto, and Palmås 2016).

The UK’s Policy Lab based at the Cabinet Office in Westminster is perhaps the most widely studied design for policy programme (e.g., Kimbell 2016; Kimbell and Bailey 2017; Bailey 2017). Established in 2014, it aims to offer a ‘neutral space’ in which civil servants can engage with the public and specialists to explore ‘key policy areas’. To date, project subjects have included ‘policing in a digital age’, family mediation and ‘the future of aging’ (Government Digital Service 2016).

In a study of Policy Lab’s work, Kimbell (2016) concludes that the lab has successfully demonstrated the viability of applying design approaches to central government’s ‘live policy issues’. Alongside this, she also observes that design holds the capacity to question ‘the regular way of doing things’ in policymaking (12).

In other writing, however, a less a positive view emerges. Kimbell and Bailey (2017) suggest that the notion of participation remains a significant challenge in such contexts; while traditional policymaking ‘limits engagement with publics to avoid unwanted attention, contestation or politicisation’, design may open it up (222). Bailey (2017) goes further. Reflecting on her experience as a practitioner in Policy Lab, she argues that ‘at present the negotiation of issues and inclusion of publics... is highly selective, and dictated not by those publics, but by the politicians and policymakers in charge’ (6-7).

6.2 Institutioning

Institutioning begins to point to a means by which institutional reform, in the Deweyan sense, may be achieved in the context of PD. The term has been proposed by Liesbeth Huybrechts and colleagues as a means of referring the multiple ways in which the activities of PD researchers and practitioners shape, and are shaped by, institutions (Huybrechts et al. 2017). Challenging PD's micro-level focus (as exemplified by the work of Ehn, DiSalvo and Le Dantec), the group argue that discipline must acknowledge its dependence on meso and macro level institutions (e.g., local, regional and national government). On their view, such an acknowledgement 'enables recognition' of PD's potential to effect direct and indirect changes in institutional policies and practices (155).

The notion of institutioning arose in connection to the TRADERS project, a five-year, pan-European, multi-institution research project, exploring art and design research training in the context of the public realm. The project was undertaken through a series of smaller-scale initiatives, which each focused on a specific theme such as 'Intervention' or 'Play'. Across these initiatives, researchers worked in partnership with a variety of local, third-party organisations (e.g., community centres and schools) to deliver bespoke workshops, events and exhibitions exploring their particular thematic (see Hamers et al. 2017).

Reflecting on the broader project, Huybrechts and colleagues (2017) highlight a number of instances where PD may be seen to have directed institutional change. For example, in two separate Gothenburg-based initiatives, city officials were introduced to new modes of youth engagement and art centres to new research and educational approaches. Further, as a result of the broader TRADERS project, many partner organisations were seen to incorporate participation within their institutional

frameworks (154-156). For Huybrechts and colleagues, TRADERS's successes suggest that the intentional enfolding of institutional change as 'an active and explicit component' of the PD process may allow the discipline to reclaim its 'transformative heritage' (156-157).

6.3 Connecting Publics to Government: PD and Creative Democracy

Returning again to Dewey's vision, we can see how, in immediate terms, these examples link to his *how* of democracy, i.e., creative democracy via social intelligence, conceived of as experimentalism. *Design for policy* demonstrates the possibility of enfolding design and citizen-involvement in the spaces of policy formation, albeit in a limited and problematic form (Bailey 2017). *Institutioning* suggests that recognising and valuing the potentiality of PD's institutional relations, as well as layering in an agenda of change, can produce results (Huybrechts et al. 2017).

Based on these examples, the question now becomes *how might PD progress this work?* If PD practitioners and researchers were to directly explore means by which publics might be connected with government, as per Dewey's vision, how might they proceed?

In the first instance, it is worth pointing out that the above presentation of institutioning may, potentially, be relatable to the notion of attachments as explored by Le Dantec (e.g, 2012; 2016). Here, one might argue that institutioning plays a role in infrastructuring as one seeks to identify the institutionally-bound commitments and dependencies of a group, with a view to instigating beneficial reform.

Beyond this, honing in on Bailey's critique of Policy Lab (2017, 6-7), I believe the key opportunity lies in the experimental exploration of issue-framing and public-inclusion in formal democratic processes. Here, PD would aim to construct of spaces for

interfacing; that is, devise design Things, which bring constituted publics into contact with institutions of government as part of an agonistic exchange; policy recommendations could be sourced and appropriated, and desired future trajectories traced. Such work might involve prototyping, as in design for policy. It might also involve (or evolve) an institutioning agenda – identifying, articulating and realising change in institutions – alongside enfolded or aiming towards positive freedom, a transformative enabling.

While this proposal may, at first, seem abstract, there are some relatable practical examples, which can be drawn upon. In one case, Anders Emilson and Per-Anders Hillgren (2014) attempted to bring together civil servants and grassroots organisations in Malmö to explore the possibility of establishing a city innovation hub. Though, ultimately, unsuccessful, they highlight how, through the inclusion of individuals in the role of ‘intermediaries’, they were able to ‘spot ideas and translate dreams into a language that could be accepted by bureaucracy’ (71). In another case, drawing on the theories of Dewey, Latour and others, Sissel Olander (2014) devised participatory approaches to enabling encounters between citizens and local politicians in community spaces. In this, at the same time as exploring the possibility of establishing new institutional platforms, collaborations between networks and cultural collectives, she also queries local political procedures.

Though these examples cannot be described as especially far-reaching, they do offer a glimpse into some of the possible forms a publics-government interfacing might take. The crucial point is that, in line with Dewey’s vision, the *possibility* of connecting publics and government in policy formation and institutional reform is, at least, being considered.

Before concluding, it is worth acknowledging some of the possible limitations of this proposal.

First, there is the apparent gap between Dewey's vision and STS literature. Over the last decade, PD's appropriation of the work of Marres, Latour and other STS scholars has simultaneously reformed and transformed the field. STS renews the tradition's ontological/epistemological positions, offering a productive post-structuralist perspective that opens up the intellectual interrogation of practice. What is proposed here should not be interpreted as standing in opposition to such developments. Rather, the particular Deweyan return I have argued for may be seen to act as a suggestion that latent opportunities are being overlooked; that, in some cases, it may be *desirable* to explore approaches to connecting publics to government. This is a Deweyan thread that Marres-Latour overlook, a creative *how* of democracy. Coupled with the *why* of positive freedom, it offers PD a further political horizon, a conceptual path to the consciousness meso and macro scaling of issues.

Next, it is arguable that broad optimism of Dewey's vision in-the-round is wholly incompatible with the underlying philosophic commitments of the Marres-Latour political perspective. How can Dewey's belief in the possibility of creative democracy via social intelligence stand up against the powerhouse of post-structuralist thought, which, ultimately, would take a far less optimistic view of institutions and their willingness to accept change.

It is beyond the scope of the present article to examine the divide – bridgeable or unbridgeable – between Dewey's philosophy and post-structuralism. However, in relation to this issue, it is possible to argue that, Dewey *was* alert to power in a way that can be seen to align with post-structuralism. Randy Hildreth (2009), for example, calls attention to what he sees as the *implicit* understandings of power and conflict in

Dewey's writing. Equally, in demonstrating Dewey's awareness of malign *political* power, James Campbell highlights his deep criticisms of American democracy and concerns regarding propaganda and manipulation (see Campbell 1995, 249-257).

Beyond this, we must also note that, when assessing the value or viability of Dewey's democratic vision, it is important to appreciate the spirit in which it was originally presented. Dewey did not necessarily think that it was achievable or even possible. He was not an irrational optimist but, rather, a grounded *meliorist* (see MW 10, 181-182). He believed in the transformative *potential* of human action and intelligence, not in its guaranteed success. As such, his vision is offered as a *hypothetical* proposition worth pursuing, something to be tested in practice that may yet yield value.

On a final note, it must also be acknowledged that in offering this proposal, several questions remain outstanding. What issues or publics deserve recognition? How to access power? How would a publics-government interfacing carry any claims to legitimacy? Interpreted broadly, it would seem that these are questions that PD must grapple with regardless of context. In all cases, barriers will inevitably be identified. For example, in exploring the possibilities of institutioning, Lodato and DiSalvo (2018) have recently uncovered a series of, what they refer to as, 'institutional constraints' in relation to Huybrecht's et al.'s (2017) proposals. As such work exemplifies, answers can only be found in practice – in this case, in the experimental mapping out of the space of creative democracy in response to the issues and publics encountered.

7. Conclusion

In considering the potential of PD's relationship to formal democracy, the present article has returned to the democratic writings of John Dewey, via his publics concept

and STS literature. I have argued that in following the STS definition of the publics concept, PD scholarship has lost sight of wider potential of Dewey's democratic vision. By exploring this vision, I identified a series of conceptual and practical implications for the field. Taken as a whole, these call attention to possibility of consciously attending to the transformative aspect of participation in infrastructuring and the potential of developing spaces for interfacing; that is, the construction of design Things which aim to bring constituted publics *into* contact with government. Here, we encounter the publics of Dewey's vision and, in turn, the challenge of the vision for PD.

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