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Truth and power: deliberation and emotions in climate adaptation processes

Vanessa Bowden[a], Daniel Nyberg[a] and Christopher Wright[b]

[a]Newcastle Business School, The University of Newcastle, Australia; [b]Sydney Business School, The University of Sydney, Australia

ABSTRACT

As the polarisation of climate politics feeds into 'post-truth' politics, one response has been a call for the reassertion of a previously agreed upon 'reality'. However, it is important to recognise that knowledge has always been contested and contingent. This is particularly salient concerning climate change, where multiple truth claims compete in the media, politics, and social movements. One means of addressing this is through deliberation, where it is argued that emotional interpretations of information and lack of trust in authority can be alleviated through transparent democratic processes. Investigating a case study of climate change adaptation in a regional Australian community, we argue that while deliberation may be the preferred method of building community support, emotions can also be employed to undermine scientific authority and build a shared truth among those who see themselves as victims of the process. To this end, we suggest that more radically democratic models are needed to address climate change.

KEYWORDS Climate change; deliberation; post-truth; adaptation; Mouffe

Introduction

Despite the established scientific evidence of human-induced climate change, it remains a polarising and emotionally laden topic. Pitted against the need to act on climate change are well-funded campaigns aimed at promoting doubt about the science and creating fear that emissions reductions will harm people's livelihoods (Oreskes and Conway 2010). Those who are concerned about the issue, however, point out that climate change threatens major social disruption, which can cause anxiety and guilt. This competition between different types of knowledge illustrates how contradictory explanations polarise communities and disrupt decisive action (Collins 2019, Lynch 2020). This situation has also reignited old academic debates about the social construction of knowledge, with one side arguing for exposing 'bullshit' with 'fact-checks' (D'Ancona 2017, Hopkin and Rosamond 2018) and railing

CONTACT Vanessa Bowden vanessa.bowden@newcastle.edu.au

against what they see as overly relativistic post-structural interpretations (Kakutani 2018, Malm 2018). Others have argued that understanding the social construction of knowledge is more important than ever; if we are to move beyond a post-truth world, it is important to improve our tools for evaluating the spread and legitimation of 'truths' (Jasanoff and Simmet 2017, Sismondo 2017, Prozorov 2019).

Questioning the production of truths is particularly important when it comes to climate change, where arguments about the causes, and even existence, of the phenomenon often receive equal hearing in the media (Boykoff and Boykoff 2004). Representatives on 'both sides' – those concerned about climate change and those denying it – are presented as two equal polar positions, with the assumption being that the truth lies somewhere in the middle (Schifeling and Hoffman 2017). This reported 'balance' creates a space for the social construction of climate denial – whereby climate change may not be directly disputed, but doubts are raised about what is causing it, the effects and possible actions (Norgaard 2011). This can involve emphasising uncertainty about the scientific data (Whitmarsh 2011), the economic impacts of adjusting to climate change (Rosewarne 2003), or shifting responsibilities to others (Norgaard 2011, p. 171–175). The uncertainties about the 'truth' of climate change result in the delay, if not outright prevention, of policy implementation. Climate change is thus caught up in what Brulle and Norgaard (2019) describe as 'social inertia'.

There is an irony, however, that as the debates over the causes and consequences of climate change continue, the disruptive impacts of the climate emergency are already being felt. Often, these impacts are depicted as isolated events, restricted to specific times and locations – flooding, bushfires, coral bleaching – and the link to climate change downplayed. Yet communities in some regions, which are particularly vulnerable to climate change, are recognising such events as a sign for the need to adapt.

While there is a large body of work on climate adaptation, much of this focuses on technological and planning issues. Such work is, of course, necessary. However, just as the climate mitigation debate has been frustrated by competing interests and climate denial (McCright and Dunlap 2010, Björnberg *et al.* 2017), adaptation measures are facing the same challenges (Adger *et al.* 2009, Sovacool and Linnér 2016). It is thus not enough to understand the technical solutions – we must also understand the social dynamics within which such changes are instituted. Our paper contributes to our understanding of how communities make sense of climate change and translate global impacts for local adaptation.

Deliberation is seen by many as a constructive means of overcoming the polarisation in debates about climate change governance (Dryzek 2000, Hobson and Niemeyer 2011). Our research investigates a case study of climate change adaptation in the local government area of Lake Macquarie,

Australia, where the council engaged in an extensive deliberative process with the community to plan for climate adaptation. We use the case study to examine the potential for and limitations of engaging in such a process. The study shows the role of emotions in interpreting information, mobilising particular sections of the community, and influencing the outcomes of the deliberation process. We find that the prominence of a broader post-truth dynamic enabled the spread of climate denial by some participants in the deliberation process, and suggest that while there are elements of deliberation that are useful, in this case, the emphasis on consensus and appeasement of hostile community members led to a process where the centrality of climate change was disregarded. While this is a specific case study, we suggest that it provides a window into an important question – how can we act on climate change in a post-truth world?

Unpacking 'the truth'

While newly popularised – and contested – as both a concept and description, 'post-truth' can be seen to incorporate a range of elements which have become prominent in controversial political debates in recent years. These include the creation of 'alternative facts' by politicians and media outlets, an extraordinary growth in the availability of different forms of 'information', and the tendency to consume information which supports pre-existing views (Mair 2017). While the notion of 'post-truth' suggests an unravelling of a previously agreed upon 'reality' (Prozorov 2019), the nature of 'truth' and 'debates about public facts have always also been debates about social meanings' (Jasanoff and Simmet 2017, p. 752). Truth claims are contingent, value-laden, and based on 'emotional salience' (Kelly and McGoey 2018, p. 2).

As such, truth claims reveal power relations – what is and is not accepted, and by whom, who is listened to and who is silenced – that have the explanatory potential for understanding the ways in which knowledge is produced. What is interesting about these debates is not necessarily the ability (or not) to determine a 'singular truth', but what the 'work' in producing facts or truth reveals (Sismondo 2017). A primary frustration over the prominence of post-truth dynamics, however, has been that these debates are increasingly drawn out. As Collins, Evans and Weinel (2017, p. 582) suggest, disputes over climate science have been 'misleadingly maintained for the consumption of policy makers and the public'. In this case, then, it is useful to document 'the sources of resilience that sustain controversies' (Lynch 2020, p. 54).

It is well known that the fight over climate change knowledge is several decades long (Urry 2011) – much longer than the use of the term 'post-truth' as a descriptor for our political circumstances. There are influential works tracing the ongoing efforts by the fossil fuel industry to counter climate

science (Oreskes and Conway 2010); how the American conservative movement has attacked scientists and environmental advocates as a means of undermining concern for climate change (McCright and Dunlap 2010); and, how national governments, to varying degrees, use a range of strategies including denial, scepticism, shifting measurements, and claims they are meeting their international targets in order to delay responding to climate change (Young and Coutinho 2013). These truth claims about climate change compete with climate science and more progressive movements in media and politics. This body of research provides insight into the institutional sources of climate denial, yet further work is needed in understanding the process of how these claims build salience in communities, and how they come to influence policy and planning.

Climate change and deliberation

If shared values and trust in information sources are key to agreement on issues such as climate change, a number of advocates have suggested that deliberation may be able to break the impasse (Dryzek 2000, Hobson and Niemeyer 2011, Forsyth 2014). The process of deliberation, through building shared knowledge and trust, may be one means of overcoming the distances created between experts and non-experts, and allowing participants to move beyond existing viewpoints (Eckersley 2004). With democracy at its core, deliberation is often cast as a means of overcoming existing forms of domination and a way of empowering communities to engage in their own governance (Hammond 2019). More often, it takes the form of a mini-public – 'deliberative events that are designed purposively to set up deliberation on a certain policy or issue among a representative group of ordinary citizens' (Böker 2017, p. 20–21). However, empirical case studies investigating the efficacy of deliberation in terms of outcomes for climate change find that they are often 'weak', for several reasons (Dryzek and Pickering 2017).

First, the prominence of climate scepticism is well entrenched in particular sections of society (McCright and Dunlap 2011, Tranter 2017), making agreement on responses difficult. While a study by Hobson and Niemeyer (2011, 2013) on climate deliberation found that it can result in small shifts in scepticism, there are limits to its efficacy; for example, those who are most committed to climate denialism become more belligerent during deliberation, with some participants removing themselves from the process altogether. In climate change communication, Moser and Dilling (2011) clearly outline the difficulties: more and better information has no effect, fear of the consequences does not lead to support for adaption, and the authority of science has limited bearing on public acceptance. For these reasons, normative aspirations for deliberation to discover 'the truth' are known to be problematic (Rostbøll 2009).

Second, the time taken for deliberative processes may be an issue for climate change (Few *et al.* 2007). Co-learning and capacity building are time consuming (Tschakert *et al.* 2014), especially when situated within a broader context of post-truth politics. Even if there eventually is a social consensus on the urgency to act on climate change, by then the impact of the climate catastrophe is likely to have disrupted much of civil society.

Third, the polarization in debate on climate change is entrenched within economic interests and power (Oreskes and Conway 2010). While deliberation can be a useful means of overcoming polarization, there is potential for coercive forms of power to shape the deliberative process in favour of certain actors and interests over others (Wright and Nyberg 2015). This raises questions as to whether the political problems over climate change can be 'resolved'.

In contrast, agonistic democracy theorists have argued that 'conflict does not obstruct politics but constitutes it' (Machin 2020, p. 161–162). Because conflicts are embedded in peoples' different 'ways of being' (Machin 2020, p. 163), it is not always possible to overcome them within a process of deliberation. Rather, the suggestion of agonistic democracy is that these conflicts are acknowledged and brought to the fore in order to recognise the political. This would incorporate an understanding of 'the crucial role, played by passions and emotions in securing allegiance to democratic values' (Mouffe 2000, p. 10). As it relates to climate change, such a practice has the potential to recognise competing values and priorities, and in so doing, may also identify any gaps in policy development processes.

While we note that some deliberative theorists have recognised these issues (see in particular Curato *et al.* 2017, p. 31–32), we seek to elaborate on the dynamics of deliberative processes of policy development on climate adaptation. We use a case study in what we term a 'climate hotspot' – a region which is at the forefront of risks from climate change, and where there is already contestation over how to respond. Our study follows the growing awareness by local regulators of the need for climate adaptation, the ways in which this is interpreted by different groups of actors in the community, and how the community develops shared knowledge in order to plan for a climate changed future.

Methods

Case study context

The region of Lake Macquarie is a local government area on the coast of New South Wales, Australia, which is built around a tidal lake. In 2009, a report from the Federal Department of Climate Change identified the area as being among the top six local government areas in Australia most vulnerable to sea level rise (Department of Climate Change 2009). Following the policies

developed by the state government and based on international climate change modelling, Lake Macquarie City Council implemented guidelines requiring new dwellings to be built at 2.85 metres above ground level. Independent experts then developed a more detailed flood management plan, the draft of which was released to the public in late 2011. Upon its release, council notified approximately 7,000 residents whose properties were identified as being most at risk to sea-level rise and included an invitation to participate in workshops for future planning.

The community mobilised against the policy measures, specifically citing doubts about the scientific information used to develop the policy and concerns that discussion about vulnerability to flooding was impacting their property values. Residents were assisted by several real estate agents and local property developers, who also mobilised well-known climate sceptics to come and speak to the community (Goffet 2012). Those opposing the measures also drew support from a neighbouring residents' group which had a similar experience and was successful in having the policies removed. Objections to the policy were highlighted in ongoing media coverage in the local paper – the *Newcastle Herald* – as the council moved through the first stage of its consultation process, which primarily involved those who were concerned with the plans. Despite this, the adaptation plan was released in early 2016 to much acclaim. Indeed, the council went on to win several national awards for its consultation process.

Data and analysis

Our research sought to understand the adaptation process as experienced by those involved. To that end, the study made use of 385 media articles and council documents on the issue published between 2007 and 2019 to identify key groups and individuals involved in the consultation process. Potential participants were identified through the public documents and contacted via email, seeking their consent to participate in a face-to-face interview with the researchers.

Forty-three participants were interviewed. Interviewees included: 11 business leaders; 3 state government staff members; 3 expert consultants; 7 current and former politicians; 10 current and former council employees; 10 resident group members; and, 2 media representatives. The interviewed residents had been involved in the consultation process with the council, largely on a self-selected basis, and the council assisted us in contacting them. Interviews lasted between 30 and 90 minutes, with questions focussed on participants' experience and involvement with the policy development, their views of other stakeholder groups, and opinions on climate change more generally.

All interviews were fully transcribed and imported into NVivo software, where transcripts were coded thematically to identify the political context, including differing and similar views, conflict and conflict resolution, community consultation, and attitudes to climate change. Within participants' discussion of these topics, we noted that their descriptions were often emotive, particularly in their responses to other participants in the debate (for example, residents talking about the council and vice versa), the influence of the policy (fear of property prices being impacted), and their descriptions of historical events (public meetings). Therefore, we conducted a second round of coding, focusing on the differing ways these emotions were expressed.

Findings

Participants described two influential and contradictory primary truth claims in the process of formulating the climate adaptation policy: i) climate change would have a serious impact on properties in the region and it was the Council's responsibility to plan for it, and ii) the Council's actions were outside of its responsibility and detrimental to property prices in the region. These claims were consistent with particular values, sources of knowledge, and emotional responses to the consultation process. This set up a hostile framing of the ways in which participants approached each other as well as the deliberation process. In this way, the transference and projection of emotion had a decisive impact on the deliberation process.

Rational, responsible, environmental leadership

Council staff and the elected councillors (with one exception, who was opposed to the plans) presented their role as being a rational and responsible outcome of the information given to them. They argued that the guidelines they developed made use of the best available scientific evidence – from the IPCC (Intergovernmental Panel on Climate Change) right down to local expertise:

> The Federal Department of Planning, had come out with some assessments indicating that we were one of the top five or six local government areas around the country that are likely to be affected by sea level rise impacts, within our built environment. So around about 2008, we came out with a policy position which basically said that we needed to incorporate sea level rise impacts in our development assessment process. We adopted a policy at that time, which was based pretty closely on the IPCC projections for Australia. (Emily, council employee)

The policy was further supported by the New South Wales state government's sea level rise benchmarks. Although these benchmarks were

withdrawn following the election of a conservative state government in 2011, the planning measures at this stage were part of the growing recognition of the science of climate change, and the notion that responsible governments needed to respond to this.

In addition to the scientific rationale, council staff and the councillors argued that they also had a legal and economic responsibility to act upon the information provided to them:

> . . . there was legal advice coming in, saying – well given that you know about this new risk and given that there's good, credible information about it – there will come a time when, legally – if you don't do something about it, you will be breaching your duty of care. (Cameron, former council employee)

Senior council staff also argued that they were concerned about the economic value of properties in the region:

> . . . if something happened, just in case it was true, what happened? The land values would drop, people get really concerned in NSW about land values beyond the ordinary, they are crazy about it. I did a non-academic, very basic calculation, and I worked out it would cost in lost value, for want of a better word, billions for the society of Lake Macquarie of 200,000 people, just for those properties around the lake to lose value. If you said something about that, people would be up in arms about it, so you didn't say it as such, but you understood it. (Adam, former council employee)

From this perspective, it was clearly the responsibility of local government to take into consideration the impacts climate change would have on the future viability of properties in the region, as well as avoiding the threat of financial damage should the council fail to fulfil its duties.

It was also apparent that these scientific and economic issues were filtered through a lens of environmental concern. As one participant noted, the local government area and council itself had a reputation for focussing on environmental issues:

> Lake Macquarie Council, it's a little bit more idealistic and a little bit greener in their ideals and they're an elected council, so most of the people in Lake Macquarie tend to be a little bit more conscious of their surroundings. They're green, and I don't say that derogatory. (John, property valuer)

During the process of implementing both climate mitigation and adaptation policies, the council's environment department grew tenfold. This was partly funded by specific project grants, as well as the environmental focus of the council's staff. One former senior staffer described trying to shift the environment department from doing 'the cute stuff' to 'dealing with the real issues' and going 'from a human-centred world to a systems-centred world' (Adam, former council employee). In doing so, the council was taking on a leadership role not only in the community, but more broadly in the area of local government.

Threatened, angry and fearful

The actions of the council in terms of planning for climate adaptation were intensely controversial – residents' groups, business owners, and the local media at the time saw the council as going beyond its responsibilities and interfering with residents' control over their property. Within this context, they questioned the scientific rigour of the predictions of sea-level rise, the related impacts of this on the lake and flooding, and climate science in general.

Residents' group members argued that they had bought their properties near the water knowing that they might occasionally have to manage flooding and they were prepared to live with those conditions. There were concerns that the planning restrictions would impact residents' ability to make changes to their properties with minimum government intervention, an issue which was framed as being an attack on 'property rights'. Perhaps the biggest concern was whether people might be forced to move as a result of 'planned retreat':

> Council can't tell me that I can't be here. I'm not going to retreat from here. There's no planned retreat plan from anyone in the suburbs. It's not going to happen. They can go whistle, so you'd better get ready to adapt council because we're staying. So, that's my approach. That's my view. (Sarah, residents' group)

In addition, residents were concerned about notations on their planning certificates which indicated that their properties were vulnerable to flooding. While this was a legal planning requirement, residents saw it as a council imposition which, in addition to other measures, would have an ongoing impact on future property values and insurance costs. As one member of the residents' group put it:

> We were genuinely concerned, and I think rightly so, that there would be an attempt to downgrade those areas that would impact on property value, not so much it would drive it down but it wouldn't naturally increase at the same rate as others. (Kyle, residents' group)

Indeed, it was argued that the very fact that the council was talking about climate adaptation and vulnerability to flooding would have an impact on both the existing and future value of properties in the affected areas.

Members of the residents' group were angry and mobilised within the community to protest the implementation of the measures. They made use of their own networks to organise public meetings and rallies, organised petitions, and liaised with the local media to increase the coverage of their concerns:

> … they [Council] were effectively saying this area is going to go underwater and we're going to abandon you. That got residents a little bit uptight, and they had a meeting where they had hundreds of residents came along, and the

> Mayor came along, and there were votes of no confidence in mayors and all the rest of it. So there was a lot of anger and angst at that stage. (Christian, residents' group)

Amongst themselves, residents shared stories of dramatic insurance cost increases, people not being able to sell their houses, and individuals under extreme stress as a result. They described feeling upset and fearful for what the changes would mean for them in the future. As one participant – a former councillor who was supportive of the plans – put it:

> . . . they just picked it up and basically said, 'look council is going to – you know - your insurance is going to go through the roof, council are not going to let you build anything, they're going to take your land off you'. It was a real campaign of fear and it spread quite quickly. There were a number of outspoken people in the community and they campaigned hard against it. (Noah, former councillor)

An important part of the discussion was the role of sceptics questioning the science of climate change. After hearing from sceptics at the public meetings, the idea that the changes were for no reason became prominent. As one councillor said:

> Climate change was very much the hook that people were fed. The hook was 'you don't need to do this because this is all crap, this is all crap. Why have you got to adapt? The water level hasn't risen. . . . You don't have to do this' - that whole thing about scientists wanting to get their research dollars, that sort of crap that they go on with. (Joseph, councillor)

This gave rise to a clear narrative – that the actions of the council were unnecessary, that climate change was not a concern, and that the policies were having a negative impact on the community. By contrast, residents viewed themselves as victims who were hurt by these actions and had little power to respond.

Polarisation and mistrust

With residents feeling threatened and angry, their attention was directed towards various grievances with council staff and councillors. At the same time, the council became frustrated with residents, as well as the way the media reported the issue. Residents argued that the council was mismanaging infrastructure in the area, and that this was a major cause of previous flooding. The imposition of further restrictions was seen as an affront to residents, who expected better use of their rates:

> we've got 70-year-old infrastructure in this suburb . . . the same drains, same water supply, sewerage waste system, and intensification has grown . . . When you look at the funding arrangements and the financial statements of the

> council, how much is put away for waste and drainage, suburb drainage? Zero. Zero, zero, zero, zero, zero, zero. (Sarah, residents group)

Council concerns about sea-level rise were thus presented as an excuse to limit development and therefore the council's infrastructure costs.

To an extent it seems that such views drew on pre-existing narratives about the 'cultural elite' which suggests that many people in public positions of power – whether politics or the public service – did not understand the concerns of 'ordinary' citizens. When coupled with an environmental agenda, this assessment became particularly scathing:

> They were like a bunch of environmental zealots pushing their dogma onto others, just trying to spread it through their own city … I think they just had a leadership that was extremely arrogant and misguided and incompetent … You see it in all sorts of bureaucracies and political spheres where these types of personalities, they get to the top and you know they love the power. (Ian, journalist)

At times this criticism was grounded in an ideological position – in line with the complaints about council interference with what people could do on their properties – articulated here by a developer in the region: 'I don't like governments of any description interfering with people's lives. Governments should get out the way of people. They should be smaller. They should be as little as possible' (Phil, property developer). These narratives fed into residents' views that the council was unnecessarily imposing restrictions on them. As one member of the residents' group describes it:

> The people that work on council and state government, they look at you like, 'hey'. … it's really like talking to an alien when you talk to those people. They just believe what they're doing is holier-than-thou; they've got it right and 'you poor citizen'. (Sarah, residents' group)

At the same time, those in the council working to implement the policy argued that residents were ill-informed and self-interested: 'They were part of the Galileo movement or something I think they call themselves. The flat earth society.' (Noah, former councillor). These types of comments revealed frustration with the claims in the community that climate change was either exaggerated or not happening at all. Rather, residents' concern was seen to be more about their individual property value than an intention to allow those implementing the planning process to be based on good policy: 'you have people there that own five houses and are really aggressive towards you and it's really unfair from a social perspective' (Jasmine, state government employee). Those working within the council suggested that the most vocal residents had narrow economic interests and a powerful network to draw upon:

> There were a couple of agents and a couple of locals who had waterfront properties and they're the sort of people who stand up to be counted. Initially, really angry that this is even being raised and 'how dare you interfere with my life' and 'oh gosh I'm going to lose money' … You'll always find that those people will rally the resources and so they did. They started finding really loudmouth people, one from down this way, [name] or something like that. He was visceral. (Adam, former council employee)

The sections of the community who were vocally opposing the policies, then, were largely seen by those in government as narrow-minded and only focussed on short-term property values – the issues they saw affecting them personally.

Conciliation

While the council had already planned to consult with the community, the established dynamics which came out of the initial policy measures made the process particularly difficult. Existing differences had been displayed publicly, in person and in the local media. Public meetings and rallies were presented by both sides as tense affairs:

> It was incredibly hostile. I remember council staff attempting to get up and speak and being shouted down. It was – there were a lot of unsavoury comments being made towards [staff member] from council and a number of other staff members. It was about as full-on as you would ever – it was just short of violence. … I was waiting for someone to smash a schooner [beer] glass in the back of my head. (Noah, former councillor)

Professional mediators were engaged to develop a deliberative process, bringing council staff and residents together, to co-design and agree upon future plans. It was decided that the group would focus on two of the affected suburbs in order to make it more manageable, and that the process would be rolled out to other suburbs in following years. In addition, council staff chose a region which was seen as defendable from rising water levels in order to defuse concerns about retreat.

To a large extent, then, the deliberation process became about repairing the relationship between the community and the council. Council employees emphasised the need to build consensus on a more detailed plan of adaptation:

> … we decided that we would have what's called a collaboration … Collaboration is basically you work together to come up with a decision. So we decided on that, … partly because we thought that, unless we had the community – a level of community understanding and support for the final outcome – it was just going to continue to be a political headache forever, and that wasn't going to be a good thing. (Cameron, former council employee)

However, given the differing priorities and perceptions of each other, and the heightened state of emotion brought about in previous interactions, the deliberative process did not lead to mutual understanding in relation to climate change. While the council sought support for developing its climate adaptation response, residents' concern about risks to property values made the first step in the process difficult. Early discussions centred on whether climate change was happening, impacts of the climate adaptation on property prices, and what the council should be doing in terms of infrastructure. The discussion about climate change was hindered by the involvement of key figures in the climate denial movement and residents doing their own analysis of the data, arguing that the information the council was using was wrong. Council staff responded in a number of ways – from shared education and resources, to referring inquiries to scientific organisations, and trying to speak to the more vocal sceptics away from the rest of the community. One member of council staff describes the early approach:

> They just expressed general disbelief about the science. Some went as far as to kind of pull it apart and unpack it, and that forced us to try and address that science angle a little bit more. (Eric, council employee)

As deliberations continued, discussions about the detail of the science began to be left behind. One former council employee explained that they could not come to an agreement around climate change: 'We just said, 'we're not the scientists. If you don't agree with climate change stuff, write to the CSIRO [Australian federal government agency responsible for scientific research]'. This resulted in council staff and councillors supportive of the policy taking what one participant called a 'two-pronged approach' – meeting with those who were sceptical separately, and removing the emphasis of discussion on climate change from the deliberation planning process:

> We tried to take the whole sea level rise, whether you believe in it or not, out of the argument and it was about, look this is just planning for the future. If this happens, whether it happens or not, this is what we're trying to do. (Noah, former councillor)

This shifting focus in the deliberations – from climate change to flood management planning – dampened some of the more difficult topics, however, as we discuss below, it also removed the central issue of climate change from the adaptation plan.

It was during consultation that participants from both perspectives describe a shift away from climate adaptation and towards 'future planning'. As such, residents identified other problems related to infrastructure as being more important than dealing with climate related sea-level rise:

> The residents were almost talking about we've got this drainage problem, and the council is talking about we've got this sea-level rise problem, and without saying okay they are all … issues and they can all be resolved (Christian, residents' group)

In order to overcome previous hostilities, council acceded to resident's demands to revisit the ways in which infrastructure programs were implemented. As one senior member of council staff recalled:

> we did things like went on drain audits with the community, so they could tell us. … So we did a bit of work internally in trying to re-prioritise some of our maintenance expenditure so that people felt heard. You know, because we've got a long list of stuff to do, and from a you know, completely city wide, to the trying to be objective approach, you wouldn't necessarily prioritise this work. But because we were trying - we wanted to just give people some confidence that they were heard, that we were listening to them and trying to respond to some of their requests for service. (Emily, council employee)

Thus, in addition to withdrawing from the debates about climate change, council staff also shifted priorities in infrastructure spending as a means of placating residents. While this alleviated community resistance, the resultant plan focussed on the idea that no action needed to be taken until certain signs of sea level rise and climate change were evident. As of writing, the plan, which took a number of years to develop and won the council numerous prizes, has no funding allocated and has not been put into action.

Discussion

Our findings highlight some key issues within deliberative processes for developing climate change policies within a post-truth dynamic. It shows that emotions can be used as both a means of mobilising alliances and shifting the focus of deliberation. In what follows, we unpack the process of how these deliberations ignored the scientific consensus on climate change in order to build social consensus and negotiate outcomes. The findings show some of the challenges of participation, broader public discourses and social movements that, in this case, are brought into the deliberative process. Finally, we argue that on polarised issues such as climate change, what is needed is further elaboration of the social systems and institutional practices leading to constructions of truth, rather than argumentation of fact.

While the council was guided by values often seen as objective – in particular in responding to scientific, economic and legal guidance – they also viewed themselves, and were seen, as environmental leaders. However, the council's policy plans, and even intentions in relation to deliberation, were met with suspicion from the residents involved in the process, who were primarily those with properties deemed affected. These residents argued that their own values and interests were threatened, which were

expressed through anger and fear within the community. While Brulle and Norgaard (2019, p. 2–3) suggest that climate change itself constitutes cultural trauma in terms of the 'profound symbolic challenge' it poses 'to the existing social order', in our case, the disruption was established by the act of talking about climate change, which was seen as a threat to property values. Property owners, developers, real estate agents, and others encouraged this fear in mobilizing and building a coalition to oppose the plans.

An important issue in understanding this process was who and which groups held the capacity to mobilise support for their position. Those involved in the deliberation process were in powerful positions within the broader community. This is evident not only in their status as waterfront landholders, but their ability to mobilise particular narrow economic interests towards what was ultimately a successful outcome for them. In this way, it is possible to trace the alignment of economic interests, climate denial, hostility to 'elites', and a general anti-government rhetoric. This alignment, or political frontier (Mouffe 1993), was reinforced among those opposed to adaptation planning in constructing the truth-claim that properties were being impacted by the discussion of climate change (Jasanoff and Simmet 2017). This claim became more powerful than the concerns of the council and scientific institutions when it came to the deliberation process. This suggests that there were important factors in relation to who, and what views, were excluded from the process (Machin 2020). Given that property owners were the key members of the community sought for participation in deliberation, then it is perhaps not surprising that protecting property values became a focus. While there have been others in the community who were supportive of the planning, they appear not to have been involved – or, as vocal – in the process. In this sense, the deliberative process failed to 'make sure there are participants from different sides' (Curato *et al.* 2017, p. 33) and allowed the debate to become more about the community opposing the council than about working through the nuances of climate predictions and local planning. This focus, along with the community antagonisms and the mobilisation of climate denial discourse, resulted in climate change becoming a taboo topic of conversation. This is in contrast to Dryzek and Lo (2015), who found that participants in deliberation may remain sceptical about climate science but can still be persuaded to accept some financial responsibility for managing its impacts. This highlights a crucial issue at the centre of climate deliberation – the removal of climate science as an anchor for debate opens up a broad range of outcomes which may or may not be fit for the purpose of responding.

In addition, while there is some concern that mini-publics have a default position of institutional endorsement (Böker 2017), in this case we can see how those opposing the adaptation measures used this to advance their own position. Indeed, as one participant (Jacob, state government employee)

noted, the residents have continued to argue and organise against state government policies, but now cite Lake Macquarie Council as having a positive process in place to manage such issues. While the council attempted to make use of the deliberative process as a means of shifting the situation away from antagonism and towards consensus, it was only able to do this by withdrawing from a key purpose of the process. This process did not, however, embrace a key aspect of pluralistic agonism (Mouffe 2000); while participants recognised each other as adversaries at the beginning of the process, this recognition was sidelined as consensus was prioritised. While the council may have been trying to depoliticise the issue, in so doing, the opportunity to discuss the deeply political issue at hand – that many of the residents view property values as more important than climate adaptation – was missed. Thus, while the outcomes of the process were a success in terms of rebuilding community cohesion making deliberation possible, this was at the cost of rendering the science of climate change invisible. Following Mouffe (2000), we suggest that holding on to pluralistic agonism can open up a space for reviving environmental politics, which Machin (2020, p. 165) argues has been lost in 'apathy and populism'.

Conclusion

This outcome in many ways reiterates the initial question – how can we act on climate change in a post-truth world? The case study provides several potential responses. It is understandable that deliberative democracy might be seen as a potential solution to the current polarised, 'post-truth' political climate. However, our findings support concerns that the focus on consensus as the primary outcome enables vested interests to hold the process to ransom. In increasingly polarized societies, there is a risk that deliberation becomes both the means and the end. It seems that within a process where everyone is 'entitled' to their own facts, deliberation risks further embedding climate denial. While most deliberative democracy theorists recognize the importance of negotiation (Stevenson and Dryzek 2012) and compromise (Steiner *et al.* 2004), a 'balanced' approach to climate change science is a dangerous pursuit (Boykoff and Boykoff 2004).

In order to understand how climate science is denied, we have sought to analyse the ways in which different groupings of participants came to their particular views about climate change (Lynch 2020). In our case, one side relied on scientific expertise and authority, while the other employed economic interests as the basis for their position. It is of note that in this case study, there were few residents involved who were not property owners or who came from a position of concern about climate change. In addition to recognising the economic positions of participants, we suggest that tracing the ways in which alliances were developed through a shared sense of fear

and anger provides an important insight into the ways in which deliberative processes can be disrupted. In being able to trace these elements, it becomes apparent that the mobilisation of emotions which were embedded into the process of policy implementation reveals the means by which climate denial was able to influence the outcome.

The failure of the process to adequately focus on climate change in this case suggests it might be useful to consider a more radical intervention, with involvement from a broader range of social institutions, individuals, and material interests which might broaden, rather than narrow, the frames of deliberation. As difficult as such an endeavour might be, this could build on the existing process, and would ultimately be more democratic than the existing deliberative structures, as well as avoiding the kinds of resistance which might follow simply 'picking sides'. If the existing disruptions of climate change have not been enough to propel us to action, then perhaps disrupting the existing power dynamics of democratic representation will.

Disclosure statement

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