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Evidence, interests and argumentation: an environmental policy controversy in a small New Zealand town

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Introduction

‘We won’t create [the] future by looking backwards’ (Former Prime Minister Helen Clark, 2000).

‘I walk backwards into the future with my eyes fixed on my past’ (Rameka, 2016)

- 1 In this article we study the enactment of politics in an environmental dispute in a small coastal town in New Zealand over the degradation of a river-mouth estuary caused by catchment management works built in the 1950s. The estuary and surrounding wetlands had historically formed a rich food basket for local Māori tribes. However, flood protection and drainage infrastructure built in the mid-20th century diverted the river directly out to sea, bypassing the estuary. This diversion led to a dramatic decline in the ecological health of the estuary and destroyed a place of cultural and material significance for Māori. Since then there has been an ongoing struggle between those in the local community who sought the restoration of the estuary and those who profited from the status quo. While a hyper-local case, it is thoroughly political, providing insights into political practice and argumentation dynamics in a specific site of conflict.

- 2 The case study allows the assessment of the conduct and outcome of arguments – spanning economic, indigenous and environmental concerns – in a distinctive cultural and political context. Drawing on the analytical categories of pragmatic sociology (Boltanski & Thévenot, 1999; 2006; Lamont & Thévenot, 2000), we focus on the forms and types of evidence that were deemed valid, the time formations that were invoked, the forms of proof that were proffered and the kinds of people who were judged as being qualified and worthy of consideration. Our analysis assesses the relative weight and credence given to distinct arguments and also the sorts of arguments (and, therefore, the sorts of proof/evidence; the qualified objects and beings; the time formations) that were most aligned with forms of cultural-economic power during that period. We draw on pragmatic sociology's 'orders of worth' (Boltanski & Thévenot, 2006) framework in an analysis of the dynamics of argumentation, particularly of the way disputed histories inform different specifications of (1) problems and aspirations, (2) what counts as credible evidence and (3) who counts as authoritative and worthy of being heard.
- 3 The case study presented in this article invites us to assess what factors allowed for different constellations of orders of worth, or 'repertoires of evaluation' (Lamont & Thévenot, 2000), to be heard and to be effective. What cultural norms, economic factors and institutional settings allowed different perspectives, different forms of reason, and different authorised people to exercise influence? The case involves indigenous actors, individually, in traditional groupings, and in new organisational forms, making demands about the estuary. Noting that Boltanski and Thévenot (1999; 2006) derived their orders of worth from highly specific (and Euro-centric) source material, we assess whether the arguments made by indigenous actors (along with the specific forms of evidence and qualified people they draw on) can be adequately understood through this framework. Should these claims be seen as operating within a distinct combination of existing orders of worth, or existing rationalities (Dryzek, 1983, 1987; Bartlett, 1986) or do they possess distinctive features that challenge and confound existing frameworks?
- 4 In the following section we summarise the literature on the role of argumentation in policy analysis and the different forms of argument most commonly made in policy disputes. This section also presents an overview of pragmatic sociology's understanding of argumentation and explains why Boltanski and Thévenot's (1999; 2006) typology of orders of worth offers an appropriate analytical framework for the purposes of this article. The following sections present the history of the chosen case and set out our research methods and methodology. The subsequent Findings section analyses the dispute in terms of the competing sides' presentations of history, their specifications of problems and aspirations and their stipulation of *what* counts as credible evidence and of *who* counts as an authoritative and worthy person. The Discussion section then considers what these findings reveal about the relationship between policy argumentation, technical expertise and cultural-economic power. We refer to the very different way in which this dispute played out twenty years later to demonstrate that these relationships can change across time as well as between countries. Our Conclusion then summarises the contributions and limitations of the article.

Evidence, expertise and argumentation in policy analysis

- 5 The notion of policy analysis as fundamentally political, and not a value-neutral technical process, has been long established (e.g., Lindblom, 1979; Kingdon, 1984; Majone, 1989; Stone, 2012). The argumentative turn in policy analysis recognised the impact of the dynamic exchange of arguments in policy development (Majone 1989; Fischer and Forester 1993; Fischer and Gottweis 2013). Arguments are recognised as comprising a composite mixture of facts and empirical evidence on the one hand and, on the other, interpretations and evaluations of that evidence that are shaped by differences in ideological views and interests. The effectiveness of an argument derives not just from its rational propositional content but also from its emotional force and from the status of the speaker (Gottweis, 2007; Durnova 2015; Verhoeven and Duyvendak 2016). Political actors deploy a variety of persuasive techniques to advocate for their interpretations of a problem and a desired solution (Fischer, 2015). Similarly, Stone (2012) sees ‘policy making in political communities [as a] struggle over ideas’ (p. 13) and argues (p. 380) that ‘policy analysis is political argument, and vice versa’. Such analyses of argumentative dynamics have drawn attention to the different ways in which policy arguments are made and the ways in which they are made effective. Debate about the proper role of expertise, however, remains and is evident in the politics around the evidence-based policy movement (Parkhurst 2017) and the debates associated with the label ‘post-truth’ (Jasanoff and Simmet 2017).
- 6 Another element in opening up models of policy analysis from a narrow foundation in technical and economic rationality has been the recognition of multiple forms of practical reason, which can form the basis for policy action (Diesing, 1962). Diesing described five kinds of rationality – technical, economic, political, legal, and social – each marked by three aspects: substantial rationality (applying to individual decisions), functional rationality (applicable to organisations), and principles of order (that underlie all forms of rationality) (Diesing, 1962; see also Bartlett, 1986). Building on Diesing’s typology, Dryzek (1983, 1987) and Bartlett (1986) posited an additional ‘ecological rationality’. Dryzek (1987, p. 59) has argued, further, that this ecological rationality should have ‘lexical priority’ over other forms of rationality, since a viable society and economy – indeed human survival itself – require a stable and functioning ecology. Ecological rationality may be defined as:
- ...a rationality of living systems, an order of relationships among living systems and their environments... Substantial ecological rationality is exhibited when a decision or action [serves to] produce, increase or preserve ... the capacity, diversity, and resilience of the biotic community (Bartlett, 1986, pp. 229-234).
- 7 Crucially, other scholars have pointed to the fundamental link between ecological rationality and social equality, arguing that an ecologically rational polity must have the capacity to heed speech – “warnings or distress signals” – from both humans and non-human nature (Plumwood, 2005, p. 614). For Plumwood (ibid.), ‘an ecologically rational society is unlikely to be found where the kinds of political structures and culture necessary for human justice and communicativeness are also lacking’. This insistence on the centrality of values and ethics to policy argumentation, and on the multiple forms of rationality that underpin policy arguments, are found also within the tradition of pragmatic sociology. Boltanski and Thévenot’s (2006) ‘orders of worth’, for

example, typify effective policy arguments as involving a system of ethics. They suggest that orders of worth are explicitly moral in that they are ‘systematic expressions of the [multiple] forms of the common good ... commonly invoked in today’s society’ (Boltanski & Thévenot, 2006, p. 66).

- 8 The broad project of pragmatic sociology (Boltanski & Thévenot, 1999; 2006) is to assess, within a situation of public dispute, how social actors with competing perspectives justify and stabilise (or critique and disrupt) prevailing social arrangements. This approach ‘takes seriously the justifications provided by people for their own actions, as well as their repertoires of evaluation for the actions of others’ (Wagner, 1999, p. 346). In conscious opposition to the critical sociology of Bourdieu (Wagner, 1999), Boltanski and Thévenot (2006) claim that effective arguments cannot rely on force, deception or coercion. They assume that people are not easily fooled and, therefore, that social actors must show how their positions align with a plausible account of the common good. It is never persuasive, for instance, to posit that “we should do X because it suits me”. Rather, effective arguments must always show how one’s proposal is aligned with a construction of the collective good. Boltanski and Thévenot conceptualise the collective good not as a simple, unproblematic, objective “thing” but as a construction that is plausible to and accepted by a significant portion of the public. Within the *market* order of worth, for example, the market’s “invisible hand” is seen as co-ordinating the individual interests of market so as to promote economic opportunities for all; within the *civic* order of worth, citizens are called to enact common laws that constrain their individual interests and promote equality and collective wellbeing.
- 9 Boltanski and Thévenot (2006) posited six orders of worth: market, industrial, civic, opinion, domestic, and inspired. In subsequent work using that framework in comparative cultural sociology (Thévenot, Moody, & Lafaye 2000), a seventh green order of worth was proposed. A fundamental feature of the orders of worth framework that makes it particularly useful in this case is the insistence that policy arguments consist not just of words and ideas. Within any order, the propositional content of an argument is supported by and aligned with concrete, material things (for example, projects and plans in the industrial order; rules, regulations and policies in the civic order); with appropriately qualified people (for example, elected officials in the civic order, and customers of freely circulating goods in the market order); and with specific temporal orientations (for example, the short-term, flexible time horizon of the market order, and the customary past of the domestic order). It thus offers an appropriate framework for our desire in this article to identify and analyse how competing arguments drew on or critiqued certain forms of scientific evidence and various “experts”. The forms of relevant proof, qualified objects, qualified human beings and time formations that are characteristic of each order are summarised in Table 1 below.

Table 1: The seven orders of worth

	Market	Industrial	Civic	Domestic	Inspired	Opinion	Green
Mode of evaluation (worth)	Price, cost	Technical efficiency	Collective welfare	Esteem, reputation	Grace singularity, creativeness	Renown, fame	Environmental friendliness

Test	Market competitiveness	Competence, reliability, planning	Equality and solidarity	Trustworthiness	Passion, enthusiasm	Popularity, audience, recognition	<i>Sustainability, renewability</i>
Form of relevant proof	Monetary	Measurable: criteria, statistics	Formal, official	Oral, exemplary, personally warranted	Emotional involvement & expression	Semiotic	<i>Ecological, ecosystemic</i>
Qualified objects	Freely circulating market good or service	Infrastructure, project, technical object, method, plan	Rules and regulations, fundamental rights, welfare policies	Patrimony, locale, heritage	Emotionally invested body or item: the sublime	Sign, media	<i>Pristine wilderness, healthy environment, natural habitat</i>
Qualified human beings	Customer, consumer, merchant, seller	Engineer, professional, expert	Equal citizens, solidarity unions	Authority	Creative being	Celebrity	<i>Environmentalist</i>
Time formation	Short-term, flexibility	Long-term planned future	Perennial	Customary past	Eschatological, revolutionary, visionary moment	Vogue, trend	<i>Future generations</i>
Space formation	Globalization	Cartesian space	Detachment	Local, proximal anchoring	Presence	Communication network	<i>Planet, ecosystem</i>

Source: Thévenot, Moody, & Lafaye, 2000

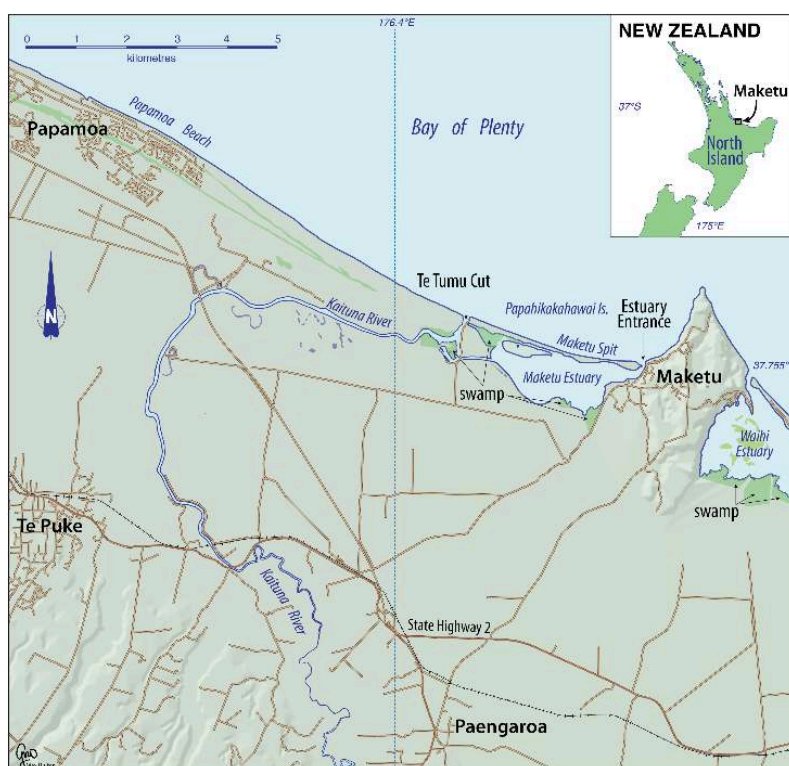
- 10 Justifications using the *market* order, for example, ascribe value on the basis of market competition and price signals. In this order, buyers and sellers are the authoritative judges of worth, and worth is determined on the value accorded in any given moment to goods and services in the market. Justifications within the *industrial* order, by contrast, accord value based on the technical efficiency and competence of projects and plans. In this order, qualified experts and professionals are the authoritative judges of worth, and worth is determined on the long-term success and reliability of those projects and plans. Not all justifications in a dispute fit easily into one order, and the framework allows compromises and overlaps.
- 11 The key characteristics of each order of worth (as stated in the table) serve as the basis for the coding and analysis of the data in this article. Boltanski and Thévenot's framework provides a way of specifying the different types of arguments that were made in cases of conflict and for assessing the different ways in which they relate to forms of scientific evidence and expertise. Each order of worth draws its own boundaries of what counts in establishing authority (Lamont and Molnár 2002). Boundary-work, originally conceived of as the delineation between science and non-science (Gieryn 1983), today is seen as expressing both the demarcation and coordination of science and public policy (Hoppe 2010). The typology of orders of worth distinguishes between justificatory claims that are based on principles of the market,

industrial efficiency, civic equality and so on. The typology can be understood as offering a well-developed theoretical framework for analysing arguments and delineating the boundaries between (a) the forms of evidence deemed credible and authoritative, (b) the sorts of people deemed worthy, authoritative and credible, and (c) the temporal orientation deemed most authoritative.

- 12 Lamont and Thévenot (2000) show how different orders of worth (and different combinations, and different expressions of those orders) predominate in different cultural settings. More specifically, Thévenot, Moody and Lafaye (2000) assess the very different ways in which environmental disputes are conducted in the United States and in France. Their analysis shows that pro-environmental movements in the United States draw primarily on the *market* and *civic* orders to stress the rights of landowners and citizens to enjoy the environment, while similar movements in France draw more heavily on the *civic* and *domestic* orders to emphasise the importance of bureaucratic process and traditional ways of life. The 'repertoires of evaluation' (Lamont & Thévenot, 2000, p. 1) most available in a given dispute vary across cultural contexts and also across time. As such, the arguments that were made on either side of the debate at Maketū Estuary/Ōngātoro – and, more specifically, the arguments that were ultimately successful – can thus be seen as related to the 'grammars of justification' (Jagd, 2004, p. 2) that were most available in mid-1980s New Zealand. Noting the weak theorisation of power in early formulations of pragmatic sociology (see also Wagner, 1999), Bénatouïl (1999, p. 390) insists that 'dominant positions exist within social spaces' that 'authorize their occupants to more easily impose their definitions of reality' and to 'escape the requirements of justifying their actions.'

The Case: Maketū Estuary/Ōngātoro

Figure 1 – Location of Maketū Estuary/Ōngātoro



Source: The Authors

- 13 Maketū township sits on Ōngātoro, the estuary at the mouth of the Kaituna River that flows from Rotorua, through lowland plains and to the coast. Ōngātoro was the traditional landing site of the Te Arawa waka¹, and its name remembers the navigator/ancestor of that canoe. The estuary, river and surrounding wetlands were valued as highly productive by the indigenous Māori and served as Te Arawa's foodbowl. Once New Zealand was colonised by the British, starting in 1840, however, this Māori understanding of productivity was increasingly at odds with the sort of productivity demanded by the settler-farmer-state. For farmers and the colonial government, wetlands were swamps: wastelands of disease and discomfort. Rather than richly productive and diverse ecosystems, wetlands were seen as problems to be cleared so that commercial-scale food production could commence (Park, 2013). More generally, the deep connection to nature that is fundamental to Māori communities (in Māori cosmology, the natural world is the space that was opened up between Ranginui (the Sky Father) and Papatūānuku (the Earth Mother) and Māori relate to nature as ancestor and kin) was at odds with a colonial idea of nature as a problem: something to be cleared and "broken in". In the area around Maketū, a series of officially sanctioned and funded drainage works (conducted as public works) turned the wetland area – often confiscated from Māori – into dairy farming pasture. In the wider Bay of Plenty, only 1% of original wetland area remains (Cromarty & Scott, 1995; Park, 2013).
- 14 One crucial moment in the "development" of the Maketū Estuary/Ōngātoro was the construction in 1956 of the Te Tumu Cut. Decided on by the local drainage board that effectively gave voice to public officials and landowners, the Te Tumu Cut directed the river directly out to sea. It was designed to reduce flooding of farmland on the lower Kaituna River during high flows, and it effectively cut the estuary off from the river

flow. The results for Ōngātoro were predictable (and indeed were predicted at the time by opponents of the Cut): stagnation in the estuary and, in the absence of the scouring flow of the river, substantial sedimentation. In response, the local community organised and agitated for the river to be re-diverted back through the estuary. In this article we analyse the competing arguments made in the mid-1980s when this agitation crystallised into a well-defined public dispute over the best way forward.

- 15 The dispute centred on the struggle between those who wished to see a full (or at least a substantial) return of the Kaituna River through the Maketū Estuary/Ōngātoro, and those who were sceptical that this option was achievable or desirable given technical, legal and financial considerations. The argument *for* the return of the river was articulated most prominently by members of the local community, largely under the auspices of the Maketū Action Group (MAG), led by spokesperson Barrie Wilkinson. It was offered support by some of those associated with the Commission for the Environment (CFE) in the process of its inquiry into the case in 1984. The argument *against* the return of the river was articulated most prominently by the experts and officials associated with the Bay of Plenty Catchment Commission (BOPCC) and with some local farmers whose lands relied on drainage works developed since the 1950s.
- 16 The CFE Report was commissioned by the Minister for the Environment 'in response to increased public concern' over the state of the estuary. It responded to its brief of 'documenting public opinion and reviewing available information' (CFE, 1984, p. i): the Report was prepared by a social anthropologist and based on an inclusive, participatory process with extensive involvement with the local community and other stakeholders. The CFE began by assembling an advisory group representing a wide range of stakeholders and convened a participatory stakeholder workshop where interested parties were invited to hear the relevant issues, discuss alternative options, and, ultimately, to select and suggest ways of implementing a preferred option (CFE, 1984, p. 6). The final Report was deliberately not a technical document and – crucially – the CFE had no formal jurisdiction to enforce or fund its recommendations. It acknowledged that its work would need to be supplemented with additional 'technical and other investigations ... undertaken by other better-placed agencies' and explicitly stated that 'the initiative now lies with the local authorities' and, especially, the BOPCC (CFE, 1984, p. i).
- 17 The BOPCC Report (prepared by KRTA Consulting Engineers) was commissioned by the BOPCC to 'clarify the facts relating to the siltation of the Maketu Estuary' and to 'assess the effects' of a full or partial return of the river to the estuary (BOPCC, 1985, p. 1). It refers somewhat patronisingly to the earlier CFE Report, stating that while that report may have been useful 'as a means of drawing out public opinion', its utility was limited since it had no 'specific technical studies' available to inform its conclusions (BOPCC, 1985, p. 3). The Report was asked to look only at technical, scientific questions (BOPCC, 1985, p. 5) and tasked with arriving 'at a solution ... [able] to balance the hydraulic, sedimentation, environmental and economic aspects of the issue' (BOPCC, 1985, p. 9). Its brief was to assess the effects of re-diversion on 'flora and fauna, ... on the river control, flood control and drainage works, ... on water right holders, on [future] sedimentation' but - pointedly - not the effects on the local community and their rights and interests. Nowhere in its brief were the BOPCC or its consultants directed to take social, cultural or spiritual factors into account, or even to interact with the local community (BOPCC, 1985, p. 5). Consequently, the report was based entirely on

professional expertise with no meaningful input from the local community. The BOPCC had formal decision-making power and was conscious of budgetary constraints.

Methods

- 18 We gained access to the history of argumentation and orders of worth through an electronic archive of scanned and recorded documents consisting of over 1,200 files on the Maketū Estuary/Ōngātoro case. The archive was provided by the Bay of Plenty Regional Council as a part of a wider study of the participatory processes initiated in the early 2000s to resolve the dispute. It included river maps and drainage plans from the late 19th and early 20th century, but most of the documents were related to the Kaituna River catchment management and controversies associated with the Maketū Estuary/Ōngātoro from the late 1970s. These included publicly available reports of central and local government inquiries, engineering and biodiversity management plans, public consultation plans, impact assessment reports, flooding, drainage and erosion assessments, media monitoring files, meeting notes and correspondence, internal planning documents, copies of briefs for consent hearings, plans for consultation with tangata whenua², correspondence with stakeholders, consultation summaries, and consenting proposals. We have drawn on this archive to develop a descriptive history of the case which provides the basis for this analysis. In our analysis we rely most heavily on (a) the BOPCC and the CFE Reports since they are the best developed and most comprehensive statements of the arguments made by the opposing sides, and (b) media coverage from the time, since they show how the opposing blocs made their arguments in a public forum.
- 19 In line with Patriotta et al. (2011) and Gond et al. (2015), these data were analysed through a systematic content analysis. This was a form of directed content analysis where the initial codes were based on Boltanski and Thévenot's (2006) typology to determine the orders of worth (including the relationships between argument and evidence) that emerged and that were dominant in the dispute. The analysis was carried out manually to enhance sensitivity to argumentative strategies and language use by the competing blocs as they made statements for or against calls to re-divert the river through the estuary. The key source materials were the reports put out by organisational and government bodies, public statements on the dispute, commissioned reports and media coverage. Our analysis of these texts focussed on the types of justifications used by actors as they made claims and defended their positions. Using the analytical framework provided by pragmatic sociology and its "orders of worth", the analysis below identifies the different ways in which arguments of justification and of critique articulated what things (for example, historical ties, environmental health, or economic competitiveness) and what people (for example, scientific experts, those in official positions of power, or those with historical connections to the area) were worthy and valued. Representative quotes showing how the competing actors constructed their justifications and critiques is offered as Appendix A.
- 20 We approached the task of categorising the justifications offered by the various actors holistically, assessing how arguments for or against returning the river to the estuary aligned with the overall logic of one or more orders of worth, as set out in Table 1. We referred to keywords associated with each order of worth (as listed in Patriotta et al.,

2011) as a check on our coding but, drawing on Gond et al. (2015, p. 337), this sort of keywords-based approach ‘did not replace [our own] interpretation’ of the data. The lead author conducted the initial analysis and provided samples of statements coded as representing different orders of worth to the other authors for independent verification. The analysis proceeded iteratively, with all three authors discussing the data and its analysis throughout, to maximise the rigour of the analysis.

- 21 In the Findings section below, the competing arguments are analysed in terms of (1) the respective sides’ representation of history (related to their respective temporal orientations); (2) their specification of the central problem (which implied a set of aspirations threatened by that problem); (3) the evidence that they accepted as valid and authoritative; and (4) the people counted as authoritative and as worthy of inclusion and consideration in planning decisions.

Findings: disputed histories

- 22 A fundamental point of difference between the CFE (1984) and the BOPCC (1985) Reports is found in the different histories considered relevant. In setting out the history of the estuary, the CFE Report begins by discussing geological activity over the last 140,000 years and, importantly, gives significant emphasis to Māori history in the area, noting the significance of Maketū Estuary as the landing place of the Te Arawa canoe (see footnote 1 above). Both Māori and settler history in the area is discussed and the CFE Report emphasises the crucial difference between Māori and settler understandings of productive land. Māori saw the estuary and the surrounding land as highly productive (as the food bowl of their local area) while European settlers saw land that was potentially fertile but that was currently ‘swampy and prone to flooding’ (CFE, 1984, p. 3). The Report notes that this dispute was resolved in a specific way, with an extensive programme of drainage and flood protection conducted to facilitate European conceptions of productivity.
- 23 The BOPCC (1985) Report, by contrast, simply describes the current course of the Kaituna River before taking one particular perspective as definitive: on the Report’s first page it is baldly stated that the river’s ‘flood plain was swampy and prone to frequent flooding’ (BOPCC, 1985, p. 1). No weight at all is given to Māori habitation of the Estuary, or how they understood the productivity of the area prior to the 1890s. In the Report, the swampy nature of the land is simply accepted as a current problem in need of solving so that European-style farming could proceed in the present and into the future. In noting that the initial drainage works failed to solve the flooding issue, the Report states that, by the 1950s, ‘the plight of the settlers was now severe’ (BOPCC, 1985, p. 2).
- 24 In terms of the preferred temporal orientations of these competing renderings of history (see Table 1), those arguing *for* the return of the river to the estuary accorded respect and weight to the ‘customary past’ time formation valued by the *domestic* order of worth, while those arguing for a continuation of the status quo adopted a future-focussed orientation: the short-term time formation characteristic of the *market* order of worth and the long-term planned future valued by the *industrial* order. These conflicting temporal orientations influenced how problems and aspirations were defined. Those who insisted on the primacy of historical memory, on connection to place and on the centrality of indigenous knowledge typically valued the health and

productivity of the estuary as an intrinsic good. In contrast, those who focussed on constructions of problems in the present and the future tended to accept economic activity and market competitiveness as primary. They viewed problems and aspirations in terms of the needs of settler farmers for “productive” farmland, and the need of the settler state for macro-economic growth. When the BOPCC (1985) Report invoked the supposed ‘plight’ of settler farmers in the 1950s, for example, it offered no acknowledgment of the plight of the indigenous people whose productive swamps and wetlands had been confiscated and/or drained since the 1890s.

- 25 Divergent approaches to history also influenced the *sorts of evidence* considered valid and valuable and the *sorts of people* considered worthy and authoritative. Within the *domestic* order of worth, ‘the claim of a general value is warranted by personal tie or local attachment, so that personal character or proximity are considered the source or building blocks of universal goods’ (Lamont & Thévenot, 2000, p. 249). Calls to return the river to the estuary insisted that the situated, historical knowledge of these with a long-term connection to place was valid and authoritative. Arguments *against* returning the river, meanwhile, typically ignored the salience of historical connection and customary knowledge. They privileged instead the ahistorical and future-focussed knowledge of scientific expertise, market signals and technical experts. Granting primacy to present problems and future goals in primarily economic terms led them to dismiss the knowledge and authority of those with a connection to place as insufficiently qualified and (thus) as just another self-interested “pressure group”.

Findings: specification of problems and aspirations

- 26 In seeking to disrupt an established status quo, those actors arguing *for* the return of the river to the estuary drew on a wide variety of orders of worth. The relevant problem was often framed, in the *green* order of worth, as an environmental problem: the degradation of a particular ecosystem. While the *green* order typically evaluates the environment not on ‘non-environmental justifications and principle ... but for [its] own sake’ (Lamont & Thévenot, 2000, p. 256), our findings show that the restoration of the Maketū Estuary/Ōngātoro was also seen as important for many other reasons. Beyond strict *green* order concerns, the diversion of the River away from the Estuary in 1956 was also described as creating problems for communal recreation and enjoyment such as swimming, fishing, boating, diving, surfing (*civic – domestic* worth) (CFE, 1984, pp. 8-9); for tourism, commercial fishing and local business (*market* worth) (CFE, 1984, pp. 7-9) and for the customary practices and prestige of the local Māori (*domestic* worth) (CFE, 1984, pp. 8-9). Less obviously, the degradation of the estuary had also led to ‘emotional stress for leaders dealing with bureaucrats’; ‘widespread feelings of impotence [and] cynicism’; and a decline in ‘quality of life’ and any sense of a ‘viable community future’ (CFE, 1984, pp. 8-9).
- 27 Conversely, the return of the river would enable ‘a lot of [*market* order] opportunities for tourism and recreation in the area’ (New Zealand Herald, 1985; BOP Times, 1986a); it would respect *civic* principles of fairness and rights since the river had been ‘taken from the people of Maketu without any form of compensation’ (BOP Times, 1986d); and it would enable the local community to access the *civic-domestic* order recreational and cultural activities that they had enjoyed in the past.

- 28 For members of the Māori community at Maketū, the degradation of the estuary was felt especially strongly and in distinct terms. The ‘decline in shellfish’ was a source of practical concern (seafood was considered ‘essential to augment family budgets’ (CFE, 1984, p. 13) but also as ‘an affront to customary rights’, since kai moana (seafood) was ‘an important ingredient in communal feasts, an important aspect of resource control and had deep spiritual significance as a link between the people, their ancestors and the land’ (CFE, 1984, p. 13).) The loss of access to customary food sources led also to an erosion of the mana of the community. Mana is a complex concept but can be understood as including elements of authority and prestige. Winitana (1990) describes it as ‘a source of both personal and collective strength, pride and identity’ but warns that, ‘mishandled, it becomes the bearer of shame, ridicule and embarrassment.’ The inability of the Maketū community to offer bountiful hospitality created a ‘situation not merely of emotional discomfort, but of spiritual and political degradation that no Maori individual or community wished to fall into’ (CFE, 1984, p. 14).
- 29 Actors arguing *against* the return of the river to the estuary were comfortable with the existing situation of the Te Tumu Cut and its associated extensive flood protection and river straightening works. The aspirations of existing market actors (farmers and other landowners) were to operate competitively (*market order*) and thereby (so they argued) contribute to the economic success of the nation (*industrial order*). The relevant “problem” from this perspective was not the current degradation of the estuary but calls to alter the status quo that they benefited from. If returning the river to the estuary exacerbated flooding issues on the lower Kaituna, then this would represent a problem for those whose livelihoods depended on intensive farming in the area and who had made long-term planning decisions and financial investments based on the existing situation. One farmer argued that ‘severl [sic] property owners ... feared the proposed rerouting would reduce the effectiveness’ of the drainage scheme (RDP, 1984a) and that ‘returning the river to the estuary could put a lot of properties in a marginal position [and some] could become uneconomic’ (RDP, 1984a; see also *Te Puke Times*, 1984.)
- 30 In line with Boltanski and Thévenot’s (2006) dictum that effective arguments must show how they are consistent with the collective good, farmers claimed that the status quo was optimal not just because they benefited from it but also because their competitiveness served national-level goals. The costs of the existing flood protection system were presented as a ‘good investment for the country’ and its goals of economic competitiveness (Basil Parkes, paraphrased in RDP, 1984d). Parkes, the chairman of the National Water and Soil Conservation Authority, further held that the costly flood protection works were ‘increasing the productivity of the land ... [and so] will prove a very good return to the nation so it is a good investment’ (RDP, 1984d).
- 31 In urging caution about the prospects of returning the river to the estuary, the BOPCC (1985) Report presented itself as considered and balanced. BOPCC Engineer Jeff Jones stated that ‘the objective is to arrive at a solution ... [that will] balance the hydraulic, sedimentation, environmental and economic aspects of this issue’ (BOP Times, 1986f). Boltanski and Thévenot’s framework directs our attention here to the aspects that are not considered salient: there is no space within this “balanced solution”, for instance, for the cultural or spiritual values or the ‘personally warranted’ knowledge of those with a long-established historical connection to place (see Table 1). Insofar as Jones’

construction of the issue is accepted as sensible and pragmatic, it serves to position competing views as extreme, unrealistic and unbalanced.

- 32 Farmers' and landowners' arguments against returning the river were supported by a set of path-dependencies: decisions that had accreted around the status quo. Since the Kaituna River flowed to the sea at Te Tumu, it had a lower water quality classification than if it had continued to flow through the Estuary. As such, any move to return the River would have required re-negotiating the discharge permits of entities (including meat processing and wastewater treatment plants) who held rights to discharge waste into the River. Given the legal standing of these rights, it was expected that any such re-negotiation would be expensive and protracted (BOP Times, 1983). Additional arguments against returning the River invoked the financial cost of re-diversion. Plans for a partial return of the river to the estuary were described by a BOPCC member as 'costly tinkering of dubious value' (RDP, 1984b), even though the estimated costs were comparable to the original Te Tumu Cut thirty years previously (BOPCC, 1985, p. 2). The more significant costs were associated with the flood protection works associated with a return of the river. Opponents of re-diversion stated that 'raising stopbanks, increasing pumping etc, could cost millions' (RDP, 1984b).
- 33 For Māori, who had seen their land confiscated and their wetlands and swamps drained to create European-style farmland, there was a bitter irony in hearing that the property rights of present-day landowners (including the legal rights of permit holders to discharge waste into the River) were viewed as sacrosanct. There was the further insult of hearing that the costs of returning the river were considered prohibitive, when local and central government had already paid huge sums to make the area viable for intensive agricultural production for private farmers. Indeed, the government continued to provide ongoing subsidies to maintain the viability of the status quo, with farmers arguing that any reduction to this subsidy 'would be devastating for farmers on the lower river' by making 'their land totally uneconomic' (RDP, 1984e; see also RDP, 1984f). The Maketū Action Group (MAG) submission to BOPCC (1985) Report notes 'that although millions have been spent on the Kaituna flood-protection scheme no protection scheme has been suggested for the estuary' (Te Puke Times, 1986b; see also BOP Times, 1986g). The CFE Report (1984, pp. 14, 34) recorded the anger of the local community that no action had been taken despite well-documented evidence of decline in the Estuary's health (see also BOP Times, 1984a).
- 34 In our analysis of the data, the respective specifications of problems and aspirations were constituted not just at the level of words and ideas. The following two sections demonstrate how arguments (and the different orders of worth) are also constituted at the material level of the sorts of knowledge and evidence deemed authoritative, and at the level of the sorts of people accepted as qualified, authoritative and worthy of consideration.

Findings: qualified forms of knowledge and evidence

- 35 A fundamental difference between the competing parties to this dispute is found in the sorts of evidence and the forms of proof deemed credible and authoritative. The BOPCC (1985) Report was squarely situated within the *industrial* order of worth, with its emphasis on technical efficiency, competence, reliability and professional expertise in the service of a long-term planned future (See Table 1 above). This *industrial* order

orientation was hardly an accident. As we have seen, the Report was asked to look only at technical, scientific questions (BOPCC, 1985, p. 5). The BOPCC did not see the Report as working out the means to help achieve the stated desires of the local community but, in a more technical sense, as presenting ‘a technical study to enable politicians to make a decision’ (in *New Zealand Herald*, 1986; see also BOPCC, 1985, p. 4). For BOPCC Engineer Jeff Jones, ‘the findings of the [BOPCC] report were impartial, objective, technical and scientific’ (RDP, 1986b).

- 36 This strong belief in the authoritative status of technical expertise led those arguing *against* returning the River to denigrate other forms of knowledge and expertise. A local farmer, for example, expressed concern that ‘unqualified opinions’ (clearly referring to the situated and historical knowledge of the local community) might derail the future-focussed *industrial* and *market* order recommendations of accredited agencies such as the Ministry of Works and Development and the BOPCC. For his part, Jones described it as ‘an objective Pākehā study based on research and data’, where the use of the word “Pākehā ” (New Zealanders of European descent) is used to differentiate western scientific expertise from the forms of indigenous knowledge valued by the Māori community at Maketū (*Bay of Plenty Times*, 1986b). The BOPCC presented its Report to the local community on the marae (a fenced collection of buildings and spaces that is at the heart of Māori collective life and understood as a sacred space). This choice was described as respecting ‘the traditional oral, courteous way’ of sharing information. The presentation, however, was conducted along Euro-centric lines as tightly-controlled one-way communication: ‘a chance to present the study’ and explicitly *not* ‘a question and answer session’ that would allow for the sharing of opinions and concerns (RDP, 1986a).
- 37 Perhaps predictably, the local community staged a mass walk-out during the presentation. Jones refused to accept that this display of emotion and anger was a valid contribution to the dispute. He reported feeling ‘insulted’ by the walkout and ‘sent [the local community] a copy of the report ... so the issue can be discussed *in a sane and rational manner*’ (*Te Puke Times*, 1986a, emphasis added). Local MP Ian McLean supported Jones’ view, holding the CFE ‘guilty of a severe disservice in whipping up emotion instead of trying to work towards the best solution’ (RDP, 1986b). This denigration of emotion and the call to address things in a calm and rational manner clearly privileges the *industrial* order of technical expertise over the sort of emotion that might naturally follow from a strongly-held attachment to place. Many times in the data, arguments against the return of the river insisted that supposedly impartial, objective, technical, scientific, rational, reliable data should be prioritised over historically-informed and place-specific opinion, memory and emotion.
- 38 By contrast, the CFE (1984) Report proceeded from a very different set of objectives. Adopting the ‘customary past’ time formation characteristic of the *domestic* order (see Table 1 above), it valued the personally warranted oral accounts of those with an established historical connection to place as authoritative forms of proof. Those calling for the return of the river to the estuary consistently accused the technical expertise of the *industrial* order of over-stepping its bounds and systematically undervaluing the historical and situated knowledge of the *domestic* order. Social anthropologist Terry Loomis argued that while the BOPP (1985) Report ‘was a fine scientific document ... it also contains a lot of assumptions’ and systematically undervalues ‘social, ecological and cultural values’ (cited in *BOP Times*, 1986e). Loomis further notes that parts of the

Report 'were offensive to the Maori people' in that it 'questioned their ability to remember the estuary as it was and took a cavalier attitude to Maori legends and cultural heritage' with the implication 'that *such input was unreliable for planning purposes*' (RDP, 1986c, emphasis added; see also RDP, 1986a).

- 39 MAG denounced the reliance of the BOPCC Report on theoretical, 'objective' investigation (RDP, 1986c). Spokesperson Barrie Wilkinson argued that the Report 'had ignored observations and opinions of local people', adding that 'we also feel that the Māori people have been insulted by the misquoting of our history' (BOP Times, 1986c; see also BOP Times, 1984b). The local community was highly critical of the truth claims of 'technical studies' that posited an objective, universal expertise, claiming that such 'technical studies' are costly, 'only supply theoretical unsubstantiated findings' and 'serve to cloud contentious issues, waste time, money and energy' (Te Puke Times, 1986b). MAG attacked the BOPCC Report's abstract modelling and prediction (*industrial order*), describing it as 'theoretical and a waste of money' and stated their preference – at the level of proof and evidence – for situated observation (*domestic order*), suggesting that the River be re-connected to the Estuary and the flow gradually increased to 'see what occurred'
- 40 The critique of the BOPCC (1985) Report argued not just that it unduly emphasised the technical expertise of the *industrial order* but also that it directed this expertise towards ends defined in primarily economic (*market order*) terms. It was widely accepted on all sides of the dispute that earlier decisions around the Estuary had been based on 'economic considerations' at the expense of 'environmental, cultural and social effects' (RDP, 1984c). Loomis (paraphrased in RDP, 1986c) argued that 'frames of reference for the [BOPCC] study were so limited it was natural [it] would rule out a full return of the river to the estuary [since] the study looked at things only in an economic and technical way.' Loomis accepted that the cost is relevant, but argued that it cannot rule out any other values, noting that 'there are a variety of points of view in the Maketu community, for example the Māori cultural values and tradition' as well as recreational, amenity and ecological values (RDP, 1986c). Wilkinson went further, subordinating the factors of costs to the *civic order*'s insistence on the political rights of citizens and the *domestic order*'s valuation of local-historical knowledge, holding that 'the Maketu people had never been consulted' and nor had 'the effects on the community' of the river's return been taken into account (RDP, 1986d).

Findings: qualified and valued people

- 41 Competing ideas of *what* counts as authoritative knowledge and evidence are clearly related to the question of *who* counts as a qualified expert or as a person worthy of consideration. As we have seen, those arguing against the return of the river drew on a combination of the *industrial* and *market* orders to emphasise the primacy of efficient planning towards the future-focussed goal of economic competitiveness. In pursuit of this goal, the technical expertise of professional engineers, scientists and official agencies was seen as more credible and authoritative than the situated knowledge of the local community, and the economic interests and legal rights of farmers and the current holders of water rights were seen as more important than the aspirations and the well-being of the local, largely indigenous, community. Ultimately, historical and situated knowledge was seen as subservient to a certain form of technical expertise,

with a BOPCC member stating that we 'now have the [BOPCC] report and that is what I will be guided by' (BOP Times, 1986b). A BOPCC member likened MAG's calls for the return of the river to 'being dictated to by a pressure group' (BOP Times, 1984d), while another member imputed a level of bad faith to the local community, suggesting that 'whatever happens these people will never be satisfied' (BOP Times, 1984d).

- 42 There was a degree of condescension in how the local community was treated. While some BOPCC members accepted that the people of Maketū 'were entitled to their opinion', others worried whether they would be able to 'understand the technical reasons why total redirection was not best' and advocated decisions being based solely on the technical report (RDP, 1986a). There was general consensus that the local community needed to make their decisions in light of 'the full facts' as set out in the BOPCC (1985) Report.
- 43 Those arguing for the return of the river operated largely in the *domestic* order of worth, within which 'the claim of a general value is warranted by personal tie or local attachment, so that personal character or proximity are considered the source or building blocks of universal goods' (Lamont & Thévenot, 2000, p. 249). As we have seen, the CFE Report accorded weight to the values and knowledge of those with an historical connection to place and it set out 'to identify and evaluate the public concerns, wishes, demands and aspirations for the Maketu Estuary' (Bay Sun, 1984). It follows from this that 'local observations and perceptions [are] more valid than a report based on assumptions put together by people who had spent little time doing field work' (Loomis, cited in RDP, 1986c). It also follows, as we saw in the section above, that the decision-making process should seek to 'identify and evaluate ... public concerns, wishes, demands and aspirations' (CFE (1984); see also Bay Sun, 1984). Critiquing the approach of the BOPCC, MAG spokesperson Barrie Wilkinson stated that 'unfortunately officialdom refuses to seek the advice of local experience and makes unfounded predictions without ever having set foot on the tidal reaches of the estuary', adding that 'local residents have more knowledge of problems in the estuary, than any present study can accurately assess' (Bay of Plenty Times, 1984b). There was a clear expression of anger that the interests of 'one community' – i.e. farmers – had been privileged with no regard 'to the drastic impact on the environment of another community' (CFE, 1984, p. 34).
- 44 One way of understanding the dispute is as a disagreement over the relative weight that should be given to the forms of scientific evidence contained in the BOPCC Reports (operating within the *industrial-market* order) and the forms of knowledge and evidence presented by the CFE Report that operated within the *domestic-civic* order of worth. The Maketū community had hoped that BOPCC's technical report would serve a supportive role in working out the 'technical details' of how to achieve the community's desire for the river and the estuary to 'be restored to the way nature had it before it was interfered with by man' (Maketū elder Sir Charles Bennett, cited in BOP Times, 1984e). On the other side of the dispute, many voices distrusted the knowledge and expertise of the local community (suggesting for example that 'the recollection of many people of the former estuary appeared to differ from recorded history' (Jones, cited in RDP, 1986a) and recommending that situated and historical knowledge be accorded less weight than supposedly objective and technical expertise.

Findings: summary

- 45 These findings show that calls from the local community and the CFE Report for the return of the river to the estuary drew heavily on the *domestic* order of worth, privileging the situated knowledge and expertise of those with a demonstrated connection to place. From this perspective, the collective good could be best served by restoring the mana and the health of the local community and the local ecosystem. These calls drew their authority from the situated knowledge and wisdom of those with a demonstrated connection to the ‘customary past’ (see Table 1, above). These calls drew also on a specific understanding of the *civic* order. They insisted that the interests and opinions of the local Māori community should be given due weight in political decision-making and criticised the historical tendency of political institutions to prioritise and protect the legal rights of current property owners.
- 46 On the other side of the debate, the arguments made by local farmers and by the experts of the BOPCC Report operated within a specific combination of the *industrial* and *market* orders of worth. As such, they stressed the authoritative status of future-focussed technical planning towards a specific end: protecting and enhancing the economic competitiveness of market actors (farmers), deemed important to the economic competitiveness of the country overall and thus to the collective good of all New Zealanders. Insofar as these arguments drew on the *civic* order of worth and its emphasis on the fundamental rights of equal citizens (see Table 1) they focussed on the rights and financial interests of these actors. In the case analysed here, these arguments prevailed. Calls to return the river were resisted. A few years later, a decision was made to re-direct 4% of the river’s flow through the estuary. This decision was not based on a calculation of what was needed to restore the health of the estuary, but on considerations of cost and scientific-technical objections to re-diversion identified in the 1980s. Predictably, it singularly failed to address the degradation of the estuary or any of the concerns raised by the local community.

Discussion: arguments, evidence and cultural context

- 47 Lamont and Thévenot (2000) remind us that arguments are always made in ‘specific contexts where various orders of worth are differentially available and resonant’ (Skilling & Tregidga, 2019, p. 2037). The Maketū Estuary/Ōngātoro case took place in the specific context of New Zealand, a uniquely young and remote nation-state marked by its history as a capitalist settler-state (Denoon, 1983) that has always been haunted by a sense of its peripherality and vulnerability within the global economy (Turner, 1999; Skilling, 2011). For Turner (1999), this sense of precarity combines with the characteristic urge of the settler-state to forget the pre-settlement past to create a cultural preference for a future-focussed pragmatism ‘based on an accommodation to global demands and norms’ (Skilling, 2011, p. 70). This cultural-geo-economic context generates a preference for arguments that stress expert planning towards the goal of future-focussed economic competitiveness. That is to say, it creates a preference for the sorts of argumentation and the forms of evidence and expertise associated with the BOPCC Report. In the mid-1980s, this preference was strengthened by an economic crisis that rendered actions that could be construed as ‘costly tinkering of dubious value’ (RDP, 1984b) less appealing than usual.

- 48 In this case then, the dominant prevailing repertoires of evaluation celebrated the directing of *industrial* expertise towards the goal of national-level economic competitiveness. Despite its pretensions to objectivity, the *industrial* order can never achieve a neutral realm of value-free technical planning. Rather, the actors deemed authoritative (scientific experts) and worthy of consideration (farmer-landowners) were ‘more powerful than others’ and spoke in voices that were ‘louder than others’ (Patriotta et al., 2011, p. 1811). This was certainly the experience of the local community and those calling for the return of the river. The BOPCC Report’s subordination of historical knowledge and local interests to *market* signals and *industrial* expertise led to a total erosion of trust between the Maketū community and official decision-makers. The MAG saw the BOPCC Report not as objective science but, rather, as simply another excuse to tell them that their desires were unrealistic or unimportant (see BOP Times, 1986e).
- 49 It was not that the local community rejected the validity of scientific expertise. They were not some precursor of a post-truth or an anti-science sentiment. Rather, they simply lost faith in the purposes that this expertise was being put to. The MAG saw the BOPCC Report not as an objective, technical report but as a political document ‘aimed at squashing [the community’s] objective’ of having ‘the full flow of the Kaituna River returned to the landing site of the Arawa canoe’ (Wilkinson, cited in BOP Times, 1986d). In rejecting the BOPCC Report, the local community was not rejecting science but, rather, insisting that there are other forms of valid knowledge that the Report had ignored: forms of knowledge built on the historical and place-based knowledge that emerges from the complex relationships people develop with the places they live in, and that have globally been disrupted by colonisation and industrialised agriculture (Munshi et al., 2020).
- 50 As King et al. (2008, p. 387) point out, based on their close links to land and its resources, ‘Māori have developed a wealth of environmental knowledge ... or *Mātauranga Taiao* [that] incorporates both traditional and non-traditional knowledge, and represents the totality of experiences of generations of Māori in Aotearoa...’. This view echoes the argument of Aboriginal Australian Marlikka Perdrisat (2019, emphasis added) that:

traditional ecological knowledge is science. First Nations people have been conducting experiments and testing hypotheses in their regions for tens of thousands of years. ... We have the science, but the message is lost in translation – or because we do not have your accreditation.

- 51 The CFE (1984) Report, based on an inclusive participatory process, was able to incorporate this form of situated, historical, relational knowledge. In doing so, however, it deviated from the dominant ‘grammars of justification’ (Jagd, 2004, p. 2) of 1980s New Zealand. Further, its findings were not supported by the requisite institutional, financial or decision-making power and its recommendations were ultimately not adopted.

Discussion: arguments, evidence and institutional settings

- 52 The importance of the institutional settings within which disputes take place was demonstrated twenty years later, when the Bay of Plenty Regional Council (BOPRC)

initiated an inclusive process of community participation in 2005 to resolve the ongoing dispute over the state of the Maketū Estuary/Ōngātoro (see Barrett et al., 2019). The outcome of this process – a decision to re-divert approximately 20% of the river’s flow through the estuary – fell some way short of some earlier calls for the return of the full flow of the river. Nevertheless, it received widespread community support, largely on the basis that the community felt heard and respected through the process. Lamont and Thévenot’s (2000, p. 1) work in comparative cultural sociology stresses the different ‘repertoires of evaluation’ that obtain in different countries. The different outcomes of the two moments of dispute at Maketū Estuary/Ōngātoro (mid 1980s and mid-2000s) demonstrate that different orders of worth are also differentially available and effective at different times *within the same country*.

- 53 In the process after 2005, the relationship between *domestic-civic-green* aspirations on the one hand, and the *industrial-market* privileging of technical expertise towards economic ends on the other hand, was effectively reversed. It was not that scientific knowledge and expertise was denigrated or ignored, but rather that the tools of industrial order planning and scientific expertise were directed towards the end of advancing community aspirations. The process in 2005 drew the boundaries differently between scientific evidence and economic considerations (which had dominated the mid-1980s debate) and the other forms of evidence and knowledge that exist within a polity. While “western” science and local-indigenous knowledge had been set against each other in the 1980s, they were presented in the mid-2000s as a synthesis (Te Puke Times, 2018). The authorised decision-making official body [the BOPRC] adopted a much broader conception of productivity. Instead of a 1980s-style equation of “productive” land with economically viable farmland, the BOPCC accepted that ‘mudflats, salt marsh, freshwater wetlands and terrestrial habitats are valuable to different species and the community for different reasons’ (Sunday Star Times, 2015). The very different outcomes in the 2000s support Plumwood’s (2005, p. 614) contention that ‘ecologically rational’ outcomes require ‘political structures and culture’ that can facilitate effective, justice-focussed communication.

Discussion: the cultural specificity of arguments

- 54 Pragmatic sociology’s original six orders of worth were derived from an analysis of classic works of political philosophy and an exploration of contemporary business manuals (Boltanski & Thévenot, 2006). Little justification is offered for this approach. The reliance on western and Euro-centric source material leads to questions about whether the framework can adequately comprehend arguments made in non-western contexts. In this case, it raises questions as to whether the arguments made by the local (largely indigenous) community at Maketū are best understood as a specific combination of already established orders of worth (perhaps a specific combination of the *domestic*, *civic* and *green* orders) or whether they warrant consideration of a separate order of worth. There are several ways in which the pro-environmental arguments made by the local community do not fit easily into the existing typology of orders of worth.
- 55 Arguments for the return of the river, while largely a call for an environmental outcome, were overwhelmingly made in the *domestic* order of worth. The restoration of the estuary was understood neither as an intrinsic good valued for its own sake, nor as

an objective separate from people and the community, as it might have been under the *green* order of worth. Rather, the restoration of the estuary was most often articulated with the restoration of the dignity, prestige and customary rights of the community itself. Non-western or indigenous approaches do not separate humans from nature, but rather see humans as part of and entirely dependent upon nature. As noted above, the natural world is seen in intimate terms: as parent, ancestor and kin.³ There is a large distance between the ways in which the people of Maketū argued for the restoration of their treasured estuary, and the central tenets of the *green* order of worth, with its qualified object of a 'pristine environment' and its qualified people of 'environmentalists and ecologists' (see Table 1).

- 56 Arguments for the return of the river also seemingly drew on the *civic* order of worth and its insistence on the fundamental and equal rights of citizens. The community at Maketū insisted that their interests and values were important, and they expressed anger that they had been thoroughly subordinated to the interests and values of other members of the community (CFE, 1984, p. 34). At the same time, their arguments were based on the collective interests of their community, a formulation that sits uneasily with the doctrine of equal *individual* rights for all citizens assumed by the *civic* order. Indeed, it might well be argued that the local community's prior occupation of the land and the settler-era history of land confiscations and environmental damage meant that their interests and aspirations should be accorded special status in contemporary decisions. While the *civic* order's insistence on equal rights for all may have been emancipatory in a certain historical setting, it cannot easily contain the claims of indigenous peoples living with the effects of land confiscations and colonialism.

Conclusion

- 57 This article has analysed the ways in which competing parties to a public dispute drew on specific grammars of justification in their attempts to show that their claims were aligned with the collective good. While it is a single case study drawn from a specific cultural context (and its findings, therefore, cannot be easily extended to other contexts), the very specificity of the case is of value. The article's systematic analysis of a historical controversy provides insights into how competing arguments drew on different forms of authoritative knowledge and evidence, including that from indigenous sources, and accorded weight to the interests, expertise and values of different groups. The subordination of the aspirations of the local, largely Māori, community to the needs of the agricultural sector (and the related subordination of situated-historical knowledge to market-oriented technical expertise) reflected the repertoires of evaluation most available and resonant in 1980s New Zealand and the patterns of cultural and economic power that those repertoires embodied. The very different resolution of this dispute twenty years later demonstrates how the relative resonance of the various orders of worth (and constellations of institutional power) can change over time. The article concluded by noting some important ways in which the framework offered by pragmatic sociology struggles to adequately apprehend the ways in which the local Māori constructed their arguments for the restoration of the estuary that had historical, cultural and spiritual (as well as material) significance for them.

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APPENDIXES

Appendix A: Representative quotes from the data

Actors advocating the return of the river to the estuary	
Order of worth	Representative Quote(s)
Green	Restoration of the estuary would lead to improved outcomes for estuarine shellfish, vegetation and fish (CFE, 1984, Figure 3)
Civic	Existing situation has led to 'emotional stress for leaders dealing with bureaucrats'; 'widespread feelings of impotence [and] cynicism'; a 'sense of declining quality of life, viable community future'

Market	Existing situation bad for tourism and commercial fishing (CFE, 1984, p. 7) and creating 'less business for shops' (CFE, 1984, Figure 1) Restoration of the estuary would lead to improved outcomes for commercial fishing, tourism, agricultural production and employment (CFE, 1984, Figure 3).
Domestic	Existing situation bad for the mana of the local Maori ('loss of Maori mana', 'marae/mana denigration' (CFE, 1984, Figure 1). Restoration of the estuary would respect the traditional ways of life and the habits of the community by allowing things to be "like they used to be" (CFE, 1984, Figure 3)

Actors opposing the return of the river to the estuary	
Order of worth	Representative Quote(s)
Market	Returning the river to the estuary could put a lot of properties in a marginal position... Some properties could become uneconomic' (RDP, 1984a); see also Te Puke Times, 1984). Plans for a partial return of the river to the estuary were described by a BOPCC member as 'costly tinkering of dubious value' as 'raising stopbanks, increasing pumping etc, could cost millions' (RDP, 1984b).
Industrial	'Land improvements associated with the Lower Kaituna River flood protection scheme would prove a good investment for the country' (RDP, 1984d). The scheme is increasing the productivity of the land ... by using a lot of the taxpayers' money, but it will prove a very good return to the nation so it is a good investment.' [Parkes, in <i>ibid.</i>] 'The allocation of water resources, which were finite, was a national matter and required experience and wisdom, Mr Parkes said' and 'The Ministry of Works and Development has acquired the necessary expertise ... so people can rest assured they are reaping the benefits' (<i>ibid.</i>).

Actors advocating the return of the river to the estuary	
Forms of evidence	Representative Quote(s)
Preference for situated knowledge	'Local residents have more knowledge of problems in the estuary, than any present study can accurately assess" (Wilkinson, in 'Group rebuts shellfish claim', May 11 1984).

Critique of “objective” scientific expertise	<p>‘Unfortunately officialdom refuses to seek the advice of local experience and makes unfounded predictions without ever having set foot on the tidal reaches of the estuary’ (Wilkinson, in BOP Times, 1984b).</p> <p>The BOPCC ignored ‘a lot of important social information’ and the ‘frames of reference for the [BOPCC] study were so limited it was natural the study would rule out a full return of the river to the estuary [since] the study looked at things only in an economic and technical way’ (Loomis, in RDP, 1986c).</p> <p>‘The Maketu people had never been consulted. Nor had the potential effects of full diversion on the community been addressed’ (Wilkinson, in RDP, 1986c).</p> <p>The BOPCC Report ‘was theoretical and a waste of money’ (MAG, in RDP, 1986d).</p> <p>Loomis said: ‘parts of the [BOPCC Report] were offensive to the Maori people’ since the Report ‘questioned their ability to remember the estuary as it was and ... took a cavalier attitude to Maori legends and cultural heritage. The implication was that such input was unreliable for planning purposes’ (Loomis, in RDP, 1986d).</p> <p>‘The Maori people have been insulted by the misquoting of our history’ (Wilkinson, in BOP Times, 1986c).</p> <p>‘Further technical studies will only serve to cloud contentious issues, waste time, money and energy’ since these ‘technical studies’ are costly and ‘only supply theoretical unsubstantiated findings’ (MAG, in Te Puke Times, 1986b).</p>
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Actors opposing the return of the river to the estuary	
Forms of evidence	Representative Quote(s)
Preference for scientific and technical expertise	<p>‘The findings of the [BOPCC] report were impartial, objective, technical and scientific’ (Jones, in RDP, 1986b).</p> <p>‘This is an objective pakeha study based on research and data’ (Jones, in Te Puke Times, 1986a).</p> <p>‘This study is very much a technical study to enable politicians to make a decision.’ (Jeff Jones, in New Zealand Herald, 1986).</p> <p>The Report aimed at arriving ‘at a point where specific courses of action can be identified and guidelines for further work laid down’ (BOPCC, 1985p. 4).</p>

<p>Critique of “unqualified” situated knowledge</p>	<p>While some BOPCC members felt that the people of Maketu ‘were entitled to their opinion’, others worried whether ‘people would understand the technical reasons why total reinversion was not best’ and advocated decisions being based solely on the technical report (RDP, 1986a)</p> <p>‘The recollection of many people of the former estuary appeared to differ from recorded history turned up in the study’ (Jones, in RDP, 1986a)</p> <p>The CFE ‘led people up the river’ by encouraging them to believe the return of the river to the estuary was feasible and economic. ‘The environmental aspects have moved ahead of the technical aspects and that should not have happened’ (MP Ian McLean, in ‘Maketu talks upset by “cued” walkout’ Rotorua Daily Post 7 July 1986).</p> <p>The CFE is ‘guilty of a severe disservice in <i>whipping up emotion</i> instead of trying to work towards the best solution’ (MP Ian McLean, in RDP, 1986b).</p> <p>Jeff Jones felt ‘insulted’ by the walkout and has ‘sent [the local community] a copy of the report ... so the issue can be discussed <i>in a sane and rational manner</i>’.’ (Te Puke Times, 1986a).</p> <p>‘Unqualified opinions might derail the industrial-order recommendations of accredited agencies such as the Ministry of Works and Development and the BOPCC. (BOP Times, 1986b)</p>
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NOTES

1. The Te Arawa waka (canoe) was one of the founding canoes of Aotearoa (New Zealand). Members of the Te Arawa iwi (tribe) trace their ancestry to this waka.
2. Literally, “people of the land” and often used to refer to Māori communities in a way that acknowledges their prior connection to land. The word whenua, meaning both land and placenta, emphasises the sense of deep connection to land.
3. A document from another North Island iwi (Ngai Tuhoe, n.d.) draws a distinction, for example, between western-style sustainability (described as ‘managing the land for the benefit of people’) and their customary practices of managing ‘people for the benefit of the land’.

ABSTRACTS

This article examines interactions between different forms of authoritative knowledge and evidence in a public dispute over an environmental problem. It draws on a case set in a small coastal town in New Zealand where the local community had expressed concern over the degradation of a river-mouth estuary caused by catchment management works built in the 1950s to support the farming sector. The estuary historically had been an important economic and cultural treasure for indigenous Māori, and by the mid-20th century had become a valued recreational and fishing resource for the broader community. This article analyses a moment of dispute in the 1980s between those who called for the restoration of the estuary and those who

wished to maintain the status quo. Drawing on an analysis of official reports, media coverage and other public documents, the article shows how the competing parties and their constructions of the collective good accorded authority and weight to specific histories, forms of evidence and kinds of people. The article understands the case not as a dispute between “the people” and “the experts” but rather as a moment where competing blocs drew on specific grammars of justification in their attempts to align their claims with the collective good.

INDEX

Keywords: expertise, policy argumentation, pragmatic sociology, environmental policy

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