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Making sense of knowledge-brokering organisations: boundary organisations or policy entrepreneurs?

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Abstract
Knowledge-brokering organisations (KBOs) have multiplied in the evidence–policy landscape worldwide, changing how decision-makers are accessing evidence. Yet, we still know little about their emergence and roles. This research helps to understand KBOs and their place in evidence-based policymaking by highlighting the varied work that they do, the relationships they cultivate with policymakers, the complex knowledge-brokering processes they negotiate, and how they establish their credibility in different ways. We build on boundary organisation theory and the concept of policy entrepreneur (PE) (drawn from the multiple streams analysis) to develop a better understanding of KBOs who play multiple roles. By using the PE concept, we bring a greater focus on the politics of brokering. This duality involves them in seeking to provide 'objective' evidence while simultaneously determining what counts as evidence for policy and making recommendations for political decisions.

Key words: boundary organisations; knowledge brokering; policy entrepreneurs; evidence; policymaking; what works centres.

1. Introduction

The 21st century has witnessed the growth of a new type of organisation worldwide that broker, translate, and mobilise knowledge to inform policymaking and practice. These knowledge-brokering organisations (KBOs), or evidence intermediaries (Gough et al. 2018), include thirteen UK What Works Centres (WWCs), productivity commissions in Australia and New Zealand (Banks 2011), the Mexican National Council for the Evaluation of Social Development Policy, the Africa Centre for Evidence, and the US What Works Clearinghouses (Gersten and Hitchcock 2009). Similar organisations have emerged in countries with different political systems, benefitting from significant government funding to provide evidence of 'what works' for policy and public service decision-making[1] (e.g. £20 billion worth of public services in the UK are linked to the What Works Network (WWN) (Cabinet Office 2018)). There are differences between them too. KBOs vary from country to country, and between policy areas, with some having established strong 'brands' and influence, especially in health-related areas. Their budgets vary widely too, with some having large endowments, whilst others have a grant-based or contract-based model (MacKillop 2023). The 'what works' notion should not be seen as unproblematic. Amongst the organisations mentioned earlier, there are varied and sometimes contradictory understandings of what 'what works' entails, which we discuss in our findings. Some policy fields have a longer tradition of researching and evaluating interventions—e.g. health—whereas others such as well-being are only just emerging. Sanderson (2002) questioned whether a focus on 'what works' infringes on decision-makers' authority, their capacity for 'appropriate' practice, and space for tacit knowledge. However, another risk is the exclusion of stakeholders with alternative concerns. In each policy area, different conceptualisations and conversations emerge on what 'what works' might mean.

There have always been individuals and organisations sitting at the boundary between knowledge, policy, and practice, trying to link the so-called 'two communities' (Newman et al. 2016) and 'speak truth to power' (Wildavsky 1979). Numerous studies have documented the roles and work of public intellectuals, think-tanks, parliamentary committees, inside–outside scientists, internal research services, individual knowledge brokers, and boundary organisations (BOs) in various (usually health related) policy fields (Stone 1996; Pielke, Jr, 2007; Turnhout et al. 2013; Perkmann and Schildt 2015; Powell et al. 2018; Geddes 2020; Williams 2021). The relationship between knowledge and policy at the boundary has been analysed from many different perspectives—e.g. by applying knowledge brokering (van Kammen et al. 2006; Shaxson and Gwyn 2010; Ward et al. 2012), boundary spanning (Williams 2013; Haas 2015), or research utilisation (Newman et al. 2016) lens or by taking a science and technology study–inspired approach to the production of policy knowledge (Jasanoff 1994; Bandola-Gill 2019). Based on research spanning health, social care, and education in the UK and worldwide, Davies et al. (2015) deduce eight archetypes of organisations: product push, brokering their own and wider research, advocating evidence, research into and in practice, fostering networks, and advancing knowledge mobilisation. These studies, from their different perspectives, have researched issues relevant to this new class of KBOs. We add to these by examining the emergence and roles of these

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organisations in detail to provide a robust conceptualisation of what they do and how.

Given the continued belief that policy options must be framed in terms of evidence to be acceptable, the financial investment by governments in these organisations, and the perception of their growing influence on policymaking and practice (Cairney 2016; MacKillop 2020), it is important to critically analyse these relatively new bodies and try to make sense of them. In seeking to understand our own organisation, we concluded that a single literature could not provide all the answers. This paper sets out to improve understanding of KBOs by combining conceptualisations of BOs (Guston 1999; Cash et al. 2003; Michaels 2009) and—to account for the political contexts in which KBOs operate—policy entrepreneurs (PEs) and problem brokers (PBs), derived from multiple streams analysis (MSA) in policy studies (Kingdon 1984; Zahariadis 2014; Baumgartner et al. 2018). We argue that KBOs can act as BOs, as PEs and PBs, and sometimes as all of them simultaneously in different aspects of their activities. Our findings contribute to a better understanding of knowledge brokering and the purpose and practice of KBOs. These bodies often frame themselves—or are framed by others (e.g. governments or funders)—as 'honest brokers' (Pielke 2007) even though that framing is often unrealistic, being expected to be objective and rigorous, yet also making recommendations and sometimes advocating for particular outcomes and interventions. However, as we demonstrate in this study, KBOs' work and identities are complex, and it is not always clear where the brokering ends and other roles begin. This further illustrates the need for more than one theory in explaining KBOs that do not conform neatly to a single category. Fundamentally, this study focuses on trying to make sense of these KBOs.

1.1 Defining KBOs

KBOs are distinguished—or distinguish themselves—from other organisations by a *combination* of three key characteristics. These characteristics may exist in other similar bodies, but the combination of them is central to KBOs. First and most importantly, KBOs articulate concepts of evidence and evidence-informed policymaking as central to their work. This occupies a prominent position in their mission statements, theory of change, and practices. Even though they might conduct similar work to think-tanks and academia, the emphasis they place on the mobilisation of evidence—or knowledge brokering (Ward et al. 2009)—in everything they do distinguishes them from other bodies. The second characteristic relates to the structures, practices, and relationships set up by KBOs in an intermediate position or one where different sectors/worlds overlap. This is often demonstrated by the tools and processes they use that are inspired by knowledge-brokering research (e.g. demand-led evidence communicated via evidence syntheses, data analysis, and policy briefings); the relationships they cultivate with policy, research, and practice; and the composition of their staff (who tend to have a mixture of academic, civil servant, and third- and private-sector backgrounds). Third, despite being separate from governments, many are directly government funded by short- or long-term grants (e.g. some WWCs). Furthermore, their performance and perceived impact are likely to influence their future funding. Of course, these differences from other organisations in the evidence–policy landscape may be real or constructed by KBOs themselves and reinforced in how they describe themselves. Furthermore, within the category of KBOs, and the WWCs that we examine here, each body varies widely from the next, in their budgets, legal status, funding models, and activities (e.g. Appendix 1 for a table of key facts about WWCs).

1.2 Our focus on WWCs as KBOs

Since the late 2010s, the UK government has invested significant resources into developing a network of organisations outside the government that could synthesise (and sometimes generate) evidence of what works in a particular policy area. Other countries have undertaken similar endeavours, some utilising a similar framework of arm's length bodies to be the bridge between evidence and policy. These organisations have been likened to think-tanks or academic research centres and yet, even though they resemble both, they differ from those organisations in several ways (see earlier). These WWCs arrive into a crowded space where, among others, think-tanks, academic research centres, lobby groups and charities, and internal research services vie for providing evidence and ideas of what works or might work.

UK WWCs are often analysed as a group, but it is important to recognise that there are significant differences between the thirteen bodies, as shown in Appendix 1. Most centres focus on practice rather than policy, and some have developed implementation strategies going beyond evidence brokering to help their stakeholders integrate knowledge into their practice (e.g. Education Endowment Fund). Some have a geographical target—e.g. the Wales Centre for Public Policy—whereas others focus on a particular profession—e.g. children's social workers or policing—or have been created around a specific policy problem or wicked issue—e.g. homelessness or early intervention. These differences illustrate how WWCs and other KBOs should be seen as on a spectrum of knowledge brokering. Despite their differences in form and context, these organisations are all products of several, similar phenomena—such as the call for evidence-informed policy and the politics of knowledge production and mobilisation—and can be studied as KBOs. However, within-group variety emphasises the analytical benefits of bringing together BO and MSA concepts of PE and PB to understand their emergence and roles. Some KBOs might be more often acting as PEs and PBs, whilst others might more often act as BO, although this will evolve according to the given context and opportunities presented by that context for KBOs to act differently. Our ability to account for variety makes our research relevant to other organisations and evidence–policy systems worldwide. By assessing the practices of KBOs using these concepts—notably BO's focus on organising knowledge and creating and maintaining the boundary between knowledge and policy/practice, and MSA's focus on the constraints within which decision-makers operate—we can improve our understanding of KBOs' emergence and their role in the evidence–policy landscape and grasp the diversity of their activities in the evidence–policy world.

The paper is structured as follows. The next two sections outline some key concepts regarding the two main theories we discuss, as well as our methodology. This provides the foundation for the next section that outlines how the different kinds of literature can help, when mobilised alongside each other, to explain the emergence and roles of KBOs. Our findings

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are grouped into four main sets of tensions: the emergence and roles of KBOs; how KBOs negotiate the tension between evidence and ideas; the different and contradictory practices of KBOs; and the tensions involved in how KBOs navigate politics. This is followed by a discussion of our findings and outlining topics for future research.

2. Key concepts from BOs and MSA

In this section, we outline key points from the BO and MSA literature, which help us to make sense of KBOs and set the scene for our empirical analysis.

First formulated by Guston (1999) to analyse US policy on technology transfer, BOs play a unique role in building relationships between different spheres such as science and non-science or science and policy. According to Guston (1999, 2001), BOs have three essential criteria: (1) they involve the participation of players linked to different worlds such as research and policy, with professionals as mediators; (2) they produce boundary objects (e.g. evidence reviews)—in different ways by different communities at the boundary (Star and Griesemer 1989); and (3) they have principal–agent relationships with each side of the boundary; for instance, a BO can be an agent of the government when contracted but a principal of research when commissioning research.

BOs simultaneously stabilise and blur the boundary between research and policy, for instance by communicating and compiling different types of information, reducing differences between conflicting ideas, and helping to preserve the independence of participants on each side. BOs gain their credibility in both research and policy by responding to the needs and criteria of both communities (Bednarek et al. 2016). Their primary function is to communicate and translate knowledge to subsequently build joint knowledge that can be perceived as credible, legitimate, and salient (Grek 2019). Halffman (2002) formulated two types of boundary work that BOs may use as tools of legitimation: demarcation and coordination. The creation of BOs epitomises their demarcation work, helping to resolve boundary problems such as intractable policy issues by emphasising 'differences in knowledge [and] authority' (van Bochove et al. 2018: 392). These differences between the two worlds of policy and knowledge are not set in stone but are 'constantly (re)crafted' by BOs (van Bochove et al. 2018: 395). BOs embody new opportunities for interaction and limit disagreements, for instance with their advisory boards including individuals from across the boundaries. Coordination work for BOs involves communicating across the two spheres and producing outputs understandable by different audiences.

Among the critiques of BO theory is the overemphasis on the aims of the organisation—e.g. bridging and brokering—and not enough on *how* they perform their tasks, relate to other actors, and organise the science–policy interface (Gustafsson and Lidskog 2018). On this point, Forsyth (2003) adds that BO conceptualisation does not discuss how boundary objects are 'made'. Returning to a more analytical use of the BO concept could resolve this issue. A final point of critique is that BOs are often described using a bridge metaphor to illustrate their role in facilitating knowledge transfer, but this 'ignores their more actor-like behaviour in demarcating and coordinating the relations between research and policy' (Scholten 2009: 562).

The second area of literature used to help understand KBOs comes from policy studies. The related concepts of *PE* and *PB* derive from MSA and refocus attention on KBOs as actors. Like other theories originating in the US pluralist tradition, MSA sees government, not as calmly pursuing rational preferences, but as trying to manage policymaking in the face of claims by competing interest groups and physical, material, and psychological constraints on its own capacity. This perspective, and particularly the concept of PE, and to a lesser extent that of PB, offers insights into how KBOs operate on the science/policy boundary to manage the flow of evidence and information into policymaking.

PEs are central actors in Kingdon's (1984) original MSA (Mintrom 2019). They are individual or corporate actors who invest resources (e.g. time, energy, reputation, or money) in promoting projects in the hope of future return (e.g. favoured policies, material, or reputational advantage or the simple satisfaction of exerting influence). They do this by looking to couple together the three streams of problems, policy, and politics (Cairney and Jones 2015)—by presenting their project as the answer to an existing or newly-identified 'problem' at a moment that is politically propitious—to create a window of opportunity for policy change. These entrepreneurs provide 'leadership of ideas' (Mintrom et al. 2014) and can tell a convincing story about the causes that they promote. They identify problem framing, the use of symbols, and the dissemination of information, as being key strategic practices (Aviram et al. 2019).

The concept of *PB* is concerned with framing a particular issue as a problem requiring attention by decision-makers (Knaggård 2014, 2015). Unlike PEs, PBs do not promote policy solutions—their focus is on the problem stream only. However, 'framing delimits the span of conceivable policies that can be attached to a problem' (Knaggård 2015: 455), and successful PBs may achieve 'ownership' of a problem if their framing comes to dominate understanding. So, what PEs and PBs share is that, while not themselves formally decision-makers, they can shape the terms in which decision-makers think (and act) about a particular policy question. They place particular framings of problems and policies on the agenda and thereby exclude others. This helps to simplify the work of policymakers, whose time and resources are limited. KBOs are not necessarily PEs or PBs, but these concepts can help us understand, by analogy, their function of making problem and policy definition manageable.

Our contribution is twofold. First, the combination of BO and MSA (specifically PE and PB) concepts alongside case studies of KBOs allows us to better understand these bodies, one theory being insufficient to capture the variety of their activities and roles at the evidence–policy interface. Second, the PE concept—and at times the BO concept—brings a greater focus on the politics of brokering that these organisations are part of, balancing multiple and contradictory practices, from providing 'objective' evidence to determining what counts as evidence for policy and making recommendations for political decisions. We begin by outlining our methodology before examining the findings related to the origins and roles of KBOs.

3. Methods

We mobilise data collected from a sample of UK WWCs and KBOs in other countries between 2018 and 2021

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(Appendix 2). We selected organisations to represent the broadest possible range of policy fields (not exclusively health-care or public health) and from three countries outside the UK. We wanted to survey practices across the WWCs, as well as understand how they resembled or differed from bodies elsewhere (in South Africa, Canada, and the USA). The organisations were selected based on several criteria. First, as our own organisation is part of the WWN, we wanted to understand how other WWCs made sense of their origins and their practices. Second, we included comparable organisations in countries outside of the UK, which most resembled our own and the wider WWN (especially because they did not focus exclusively on health or social care, which are the dominant policy area covered by KBOs). Third, we aimed to improve understanding of how KBOs emerge and work in different institutional settings, such as federal versus unitary constitutional systems. The organisations were also selected based on the extent to which they met the three characteristics of KBOs discussed earlier.

Eighteen members of KBOs were interviewed—these organisations are generally small, so we focused on chief executives or other senior posts. These perceptions are therefore from those who work in these organisations and not from decision-makers who may use (or not) the evidence supplied by these KBOs and could have a different perspective. Interviews were semi-structured, focusing on themes of emergence, activities, and relationships with decision-makers, which allowed us to examine how these organisations built their identities and bridge and broker relations at the boundary, as well as their credibility. A further five interviews were conducted with KBOs' stakeholders—e.g. policymakers and expert academics in the field of evidence-based policy—allowing us to contextualise what KBOs were saying about their identities and roles.

All interviews were recorded and professionally transcribed. We coded them using NVivo, first using general themes based on our interview questions, before developing more detailed codes around what is evidence or problem definition by KBOs. Our approach was iterative, moving back and forth between theory and empirics to make sense of the data alongside the project's aims (Bassett 2010). As members of one of these organisations, we were reflective of our positions as researchers and our dual position throughout the research project via continuous team conversations during the fieldwork and analysis. We do not have direct contact with decision-makers and felt able to reflect on our position and biases, ensuring that organisations and participants were sampled in a way that would reflect as many views as possible. We also designed open-ended interview questions that enabled participants to express their perceptions and provide space for critique. We focused on how members of KBOs spoke about their roles, actions, organisations, and the world around them—seeking to understand *how* they made sense of these aspects (Hajer and Wagenaar 2003).

4. Making sense of KBOs

4.1 Understanding the emergence and tensions regarding the different roles of KBOs: advocacy versus objectivity

Our interviews with KBOs reveal the narratives that these bodies mobilise to explain their emergence and role in the policy–evidence interface, which ebbed between traditional boundary work and more strategic/political motives. One interviewee saw KBOs such as WWCs as emerging to 'help[ing] them [i.e. "potential users of evidence"] create new solutions to very old problems' (KBO 7.1), suggesting demarcation as well as coordination work (Halffman 2002). Indeed, by establishing a new organisation, particular framings of the given problem or issue might be excluded, whilst simultaneously bringing stakeholders into networks with each other and bridging the boundary. A Canadian KBO explained how their 'organisation [was created] to take on projects that could answer policy questions as objectively as possible' (Canada 1), illustrating how these BOs justify their existence as creating and maintaining the boundary around 'good evidence'.

However, our findings also underline the importance of context for explaining why a KBO was created, such as the presence of charismatic/well-networked individuals, e.g. key academic or consultant in the field making the case for such an organisation (KBO 2.1) or the decreasing 'capacity internally' within government (KBO 2.3). These examples suggest power plays and politics beyond the principal–agent relations suggested by Guston (2001). Several interviewees with members of the WWN talked about the role of the UK Cabinet Office in helping 'incubate' WWCs, which shows the role of governments in setting up and steering some KBOs (KBO 6.1). For one policy stakeholder, WWCs were created to demonstrate policymakers' interest in a policy area, as well as to address a lack of evidence:

> If you think about the current situation with homelessness and the lack of evidence and the lack of data, there is a real impetus for it. The evidence landscape for that particular area […] is quite scarce, there is a greater need for it. (Policy stakeholder 2)

This political signalling was echoed by another KBO interviewee who talked of 'politicians want[ing] to be able to say they've done something and done something fairly quickly' (KBO 6.1).

The work of KBOs is often complex, reflecting the interests and agendas of KBOs themselves, with other policy actors trying to influence its approach (Åm 2013). Both BO and PE concepts talk of the multiple relationships at play between research and policy, but BO theory tends to overly focus on the bridging function of BOs rather than examine the agency they have to demarcate and coordinate relations between research and policy (Scholten 2009: 562). Some of the KBOs we interviewed primarily saw their role as providing objectivity to policy deliberation via evidence—evidence being key to their existence. They are concerned with how knowledge is attained—'the bit that's really missing is the "how we know" bit' (KBO 8.1)—and invest resources in developing and publishing methodology on what counts as good evidence (KBO 8.1; 9.1). For others, their role shifts from providing objective evidence to problem framing, advocacy, and shaping and influencing policy. We believe that this is one of the key tensions for these KBOs: their rhetoric of evidence and objectivity but, simultaneously, their actions that are more focused on finding common ground, making recommendations, influencing decision-makers, and steering them towards specific actions and interventions. This is a further

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demonstration of the need for both BO and PE theories to understand KBOs.

The PB concept helps to explain the key role KBOs play in defining how a problem is presented and understood by decision-makers. For example, an interviewee revealed the agency of WWCs in funnelling evidence into the policy and practice process:

> It is impossible to not bring some prior views and opinions on what [policy/practice area] is … you are making judgements about how you interpret the evidence that you pull out, and you are bringing your own opinion into that. (KBO 4.1)

In another example, a WWC commissioned a study, drawing on specific research disciplines (e.g. economics and psychology), to define the key concepts in the policy field in particular ways. This work to define, or frame, issues was echoed by another interviewee who explicitly recognised their role as a PB to focus policy attention in specific ways. They explained how their organisation did more than evidence generation and problem brokering:

> [T]he thing that's slightly different to some What Works Centres, I guess, is that we also have a bit of an advocacy role […]. So, we also do a bit of not quite campaigning, but what we've previously called advocacy work … to try to get investment in [topic], particularly from national government. (KBO 11.1)

However, not all KBOs actively promote solutions, and even if they do, their motives may differ from those of the classic PE. For instance, they may wish to see a solution adopted because the evidence indicates that it 'works' rather than in the hope of a future return for themselves. An interviewee from a US KBO emphasised that they only advocate for recommendations to be adopted by decision-makers when they considered the evidence to be 'conclusive'. Indeed, the view from a Canadian KBO was that 'it would hurt [the KBO] if we tried to be advocates and promote our agenda. We wouldn't be seen as neutral and credible' (KBO 2.2).

In this section, we have illustrated how different KBOs exploit their context and agency in different ways and how the legitimacy of these organisations oscillates between different registers from neutral and academic to political and advisory (Williams 2021). We have shown that BO theory helps us understand how KBOs work the boundary between policy/practice and knowledge, notably via their demarcation work and defining what counts as 'good evidence'. In addition, both the PB and PE concepts aid understanding of how KBOs work to make it easier for decision-makers to bring a particular policy issue into focus. They present problem frames or solutions to decision-makers whose time, resources, and attention are limited. Similarly, even when KBOs are not acting directly as PBs and PEs, their role in accessing and presenting evidence—an inevitably selective process—aims to reduce ambiguity, by delimiting the ways in which a problem and/or its solutions can be framed (Zahariadis 2014). They allow decision-makers to exclude, wholly or partially, other framings. It is in this combination of literature that helps to provide a rounded picture of how KBOs work. We now look at how KBOs provide evidence for policy and how the two theories speak to that question.

4.2 Understanding the tension between KBOs' views of knowledge: evidence versus ideas

In this section, we examine two aspects of KBOs' views on evidence: first looking at their positioning in contrast to other intermediaries such as think-tanks and second how they manage, coordinate, and label different forms of evidence. Whether ideas are different from evidence might be seen by some as a rhetorical matter. For others closer to the evidence-informed policymaking (EIPM) school of thought, however, evidence is seen as distinguishable from ideas and separates KBOs (who provide evidence) from other bodies (e.g. think-tanks and government research services) who provide ideas and seek to influence policy and practice. An interviewee explained that:

> A WWC's sole endeavour is to bridge the activity between research and practice. It is set up exclusively to do that. [WWC's name] has a lot of resources to do that. That significant amount of funding enabled them not just to mobilise the evidence but to respond to that by filling those gaps, gathering new evidence, evaluations, commissioning new reviews. A think tank doesn't have the resources to do that. WWCs are more active in that role around linking research evidence with policy and practice. (KBO 4.1)

Unlike internal research services in government that are seen by KBOs as part of 'a political environment' and guided in their research by 'ministerial interest', KBOs such as WWCs described themselves and were seen by external stakeholders as more independent 'even though [they are] funded by government' (KBO 9.1). Research on credibility and legitimacy building at the boundary (Williams 2018) helps explain how KBOs, like BO, establish independence as a result of their accountability to both research and policy/practice communities (Guston 2001) and distinctive reliability because of the evidence they produce. As one expert interviewee remarked on WWCs:

> You wouldn't tend to describe these bodies as think tanks. The quality is seen as different. (Expert 2)

A point echoed by a UK WWC talking about the quality of the evidence they produce:

> [W]e operate to some clear standards of evidence in terms of what we share on our toolkit. We're very transparent and open about that. (KBO 9.1)

The demarcation work of KBOs in determining what is evidence and excluding what is not is clear here (van Bochove et al. 2018). In general, pluralist policy models such as MSA see policymaking as characterised by competition between interested actors seeking to capture a neutral decision-maker whose own capacity for action is limited. KBOs, when funded by governments, may be seen as resources that allow governments to bring in other sources of knowledge. The principal–agent delegation model in BO theory also helps to understand how KBOs mediate between these sources so that inclusion/exclusion of evidence is constructed as evidence based rather than political.

The evidence provided by KBOs is not 'official' (in the sense of being produced by a government's own research service)

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but neither is it from a campaigning organisation or interest group. Government can thus accord it a higher status because of its ostensible independence, the latter a result of the constant work of KBOs in maintaining the boundary between research and policy/practice. Equally for KBOs, they position themselves as neither official nor interest based and therefore trustworthy. Indeed, KBOs play a role in determining what counts as evidence and the necessary role of judgement and bias in those processes.

KBOs are following Guston's three-pronged definition of BOs outlined earlier, their aim being to transfer knowledge that is useful for policy and practice decision-making (Cash et al. 2003). By synthesising the evidence produced and sometimes generating evidence that is missing—for instance by highlighting 'the different types of evidence that there is' and enabling 'other voices being heard' (KBO 5.2)—as well as negotiating policy questions and determining what is amenable to evidence (i.e. is this an evidence or a political question), they reconcile the two worlds and manage the boundary.

Some of our KBOs had been created to help address 'wicked issues'—e.g. UK WWCs on homelessness, well-being, early intervention, and children's social care. In those cases, the KBO plays a demarcation role (Halffman 2002), building links with both the research and policy worlds and providing credibility to the information used for policy by brokering different sources of knowledge and evidence into a relevant and trusted boundary object (e.g. report). How these different types of evidence are mobilised together in informing policy and practice is significant. Yet, and suggesting more subjectivity and judgement than their declared difference from think-tanks, KBOs do not always subscribe to rigid hierarchies of evidence:

> [W]e have a really broad understanding of evidence... We've got evidence synthesis, both quant and qual [sic], and we've got synthesis methodology for case studies and lots of different methodologies. And because we're working often in areas with a very low evidence base and with people who want to contribute to that evidence base but can only do it in a way by doing a good case study, that's the best that they can do. (KBO 8.1)

Linking to the demarcation role of KBOs including and excluding knowledge as 'evidence', in their PE role, KBOs select what counts as evidence in a given area, leading to policy problems and solutions becoming understood in a particular way. Policy theory puts too much emphasis on interests, ideas, and power and insufficient emphasis on process and boundary spanning, which this section has sought to reconcile. We now examine how our combination of literature helps us understand KBOs' practices.

4.3 Understanding the tension among the practices of KBOs: credible evidence versus selective evidence

While the concepts of PE and PB focus on the practices KBOs employ to help decision-makers manage policy change, BO theory explains how KBOs build their credibility, legitimacy, and accountability (Jensen-Ryan and German 2019) by working the boundary between research and policy. Our interviews with KBOs and external stakeholders reflect both types of activity. Indeed, KBOs draw on the personal credibility of their staff (who often have an academic background) and the relationships they have with the academic community to provide credibility to the evidence they broker. One interviewee explained how a report by their organisation, led by a staff member with academic credentials, allowed them to build connections with decision-makers:

> I think that [i.e. the report] has led to strong relationships in government more broadly, because it's so credible, because our lead academic on it is very credible. [...] I think that's probably what spawns the relationship with that team in [government department] and what has led to quite tangible influence on policy. (KBO 11.1)

Alongside credibility, the importance of providing relevant and useful evidence for policy/practice was seen as key to the function of KBOs—further echoing BO theory. Interviewees talked about the importance of being 'that bridge between evidence and practice' (KBO 11.1) and working closely with officials to ensure that their outputs are going to be useful for policy (KBO 5.1) (Schlierf and Meyer 2013). For another interviewee, the bridging function meant quickly responding to a request for evidence:

> With policymaking, you're, obviously, coming quickly to a topic, and you need to know, 'What's known and who knows about it?' quickly ... That, for me, is at the heart of open policymaking... That's what a bridge should do. (KBO 8.1)

There are multiple coexisting boundaries between research, policy, and practice that KBOs bridge: epistemic, professional, and organisational. They deploy a range of BO-type initiatives to work the boundary and negotiate differences. They create roles/positions that blend the two worlds; for example, interviewees stressed the academic background of their staff (KBO 3.2) and the mixed composition of their advisory board (KBO 2.1). They undertake evidence synthesis, evidence review, and capacity building (KBO 1.1 and 1.2)—that lead to non-traditional research publications intended to reach different audiences—but also stress peer review (KBO 3.1) and rigorous methodology to underscore their academic credibility, alongside their commitment to relevance and timeliness. As a result of their careful bridging role and boundary-blurring practice, they 'help [...] the research community to promote the role of evidence in the policy-making process' (Policy stakeholder 1), and 'have also developed to help policymakers trust the evidence' (Expert 3). As one WWC representative expressed it:

> I have this odd role where I sit between research, policy, and practice. I don't have deep expertise of any of these areas but spending time in those spaces in between. You can act as a translator and professional intermediary and see the needs, context, etcetera of all of them and bridge between the two. Dedicated intermediaries are there to bridge across the different contexts and needs. (KBO 4.1)

While BO theory explains the practices of KBOs to bridge between research and policy/practice worlds, it tells us less about what they do and with what effect. KBOs exist, ostensibly, to provide and improve access to evidence, a particular

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form of information. Having more information can help reduce *uncertainty* about the likely effects of policy interventions, but it may not reduce *ambiguity* about the terms in which a problem is understood (Zahariadis 2014). In fact, more information can exacerbate ambiguity by bringing in further factors or perspectives that could be considered. However, we believe that KBOs can confer a certain authority on the evidence that they present to the extent that they can maintain a boundary between their government funding (or other sources of funding depending on the KBO) and the evidence they select and endorse. This allows decision-makers to privilege evidence that they receive through KBOs over other sources. This in turn simplifies the task of conceptualising a problem and establishing a range of possible responses. The role of KBOs is as much about excluding evidence and information from the policymaking process as about bringing evidence and information into it.

The interviews we conducted show how KBOs frame what counts as useful, echoing the PB concept. They digest research and frame, select, and broker it to time-poor decision-makers, as well as perform other tasks such as matchmaking by bringing experts and decision-makers together. KBOs also act as an agent to researchers looking to get their research into policy:

> Policy-makers want to be able to pick up the phone and speak to someone directly. People who seek quick answers to their questions struggle to know who to speak to. So, it makes sense to set up an organisation to do that. From a supply side, a lot of researchers would be frustrated in not getting their research into policy. (Expert 1)

A WWC interviewee explained how their centre helped stakeholders home in on problems and develop solutions:

> [P]art of that is leaders in [policy area] coming and asking us to support them because they think a national solution is needed to a problem. We'll go through a process with them to get them to articulate what the problem is, and then work out how we might best support them in having a national solution to that. (KBO 9.1)

Another interviewee illustrated the importance of using a traffic-light system to indicate how reliable evidence is for a particular intervention in a specific context because 'there's an awful lot of nuance in why something is effective' (KBO 9.1) and 'practitioners and policymakers do not have the time to read all those sort of complexities' (KBO 6.1).

We believe that this selective and exclusionary role will be recognised, explicitly or implicitly, by many who work in KBOs and by the decision-makers with whom they work. But it is not currently recognised in the literature. This is not surprising as EIPM paradigms generally assume that more evidence (if it meets a quality standard) is a good thing. By applying concepts derived from both BO and policy theories, we enrich our perspective and gain fresh insights. We now turn to how the two frameworks help grasp the often-overlooked politics of KBOs.

4.4 Understanding the tensions associated with the politics of KBOs

Existing research on BO tends to overlook power dynamics (Parker and Crona 2012; Wehrens et al. 2013). However, some examine the political demand for knowledge brokers and how these latter's knowledge is mobilised in policymaking (Broome 2021). The focus is generally on boundary work rather than the 'why' question of knowledge brokering. This means that questions of interests, agendas, and alliances over how evidence is defined and mobilised in the policy process are often not examined.

The attitudes towards evidence from those who work in WWCs and other KBOs, and how it differs from other types of knowledge, make them different from other policy actors and can lead to policymakers mobilising evidence in different ways. When talking about why government funds their WWC and yet cuts spending in that policy area, one UK WWC interviewee explained why decision-makers might want a centre like theirs and the role they play in knitting together problem framing and solutions in politically acceptable ways:

> The funding for this stuff has really been cut and, yet, politicians will still say the 'basic prevention is better than cure', message. […] One of the really big challenges for us in influencing policymaking is the invest to save argument (KBO 11.1)

The contradiction between KBOs' perception that they advocate based on evidence and their proximity to government, and thus the need to navigate political preferences, emerges. Indeed, the same interviewee explained how, in some cases, they are asked to play a political role by doing what they referred to as 'policy-based evidence' rather than evidence-informed policymaking:

> We'd get [from the ministry] 'you have some comments on this thing we're planning to announce next week?' and it'd be 'we're going to roll out X intervention that we knew had no evidence behind it, it just hadn't been tested. (KBO 11.1)

This mobilisation of KBOs' evidence speaks to critical BO research that identifies intermediaries as, not simply moving knowledge but, producing 'a new kind of knowledge: brokered knowledge' (Meyer 2010). Others allude to the dynamics of reproduction and translation of evidence that occur in the practices of BOs. For example, Hennion explains that:

> Intermediaries are not passive […] They force, tear out, knit together; they have tools and techniques for isolating, measuring, testing. (Hennion 1989: 402, cited in Åm 2013)

In the current EIPM context in the UK and beyond, combining the focus on organisational practice, context, and politics helps to understand KBOs more fully. In some situations, KBOs' role is more akin to PEs in negotiating the various streams and building a compromise on the need for reform—e.g. the Early Intervention Foundation (a WWC) advocating for a focus on early intervention. In others, KBOs fit better in the institutional context of policy idea formulation (the problem stream) where ideas are moulded, and this is where the BO concept focuses on those everyday practices of idea formation and producing reliable evidence.

As we have discussed throughout, politics matter in the creation and functioning of KBOs, from how their roles are

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shaped to the practices that they deploy. The murky boundary between politics and science is the one that is constantly renegotiated:

> As you become more successful, [WWC's name] has become closer to government. How close that relationship should be? You want to be relevant but also there needs to be some boundaries. [WWC's name] was involved in loads of big national initiatives: when do you start to be perceived as government? (KBO 4.1)

Another interviewee talked about the difficult balancing act of being critical of decision-makers, yet being listened to by them:

> We're kind of constantly recalibrating it a little bit. […] So, [CEO's name] has probably been more inclined to be more critical, more vocal on issues, perhaps, but we constantly have that, 'How critical can we be of government on this issue?' (KBO 11.1)

Power dynamics are perceived as central to determining how the knowledge-brokering relationship worked:

> There are all these really interesting power dynamics that are quite often not recognised, even when we're doing knowledge mobilisation work. So that would be a more kind of small P kind of politics.' (KBO 10.1)

The PE and PB concepts can bring politics back into the evidence–policy relationship and improve our understanding of KBOs. These concepts are about actors' ability to persuade decision-makers to accept their analysis of problems and proposals for action and are thus intrinsically concerned with politics and power dynamics. However, MSA struggles to account for the role of KBOs in the policy process. Although the theories were originally developed before the 1990's 'evidence turn' in decision-making, it ought to be straightforward to incorporate evidence use into them. We have suggested that KBOs can help reduce 'ambiguity' by allowing decision-makers to privilege evidence that they receive through them over other sources. Furthermore, this privileging of KBO evidence helps decision-makers manage the claims, information, and evidence advanced by various—often interested—actors seeking to 'capture' the policy process. KBOs, especially when commissioned or funded by governments, can thus represent a reassertion of a government agency in the face of competing claims.

Combining insights from MSA and BO helps us to think about the politics at play in these organisations, and how evidence/knowledge becomes mobilised in this process, for instance in how the boundary between knowledge and policy is constantly worked by KBOs acting as BOs.

5. Discussion

This research examines a new type of organisation providing evidence for decision-makers. The combination of theories has helped to make sense of the emergence and roles of these organisations working in the evidence–policy nexus and captured the evidence work, as well as the political roles played by these organisations. Our argument is that KBOs can act as BOs, or as PEs and PBs, and sometimes demonstrate aspects of all of these simultaneously in different aspects of their activities. Using interviews with UK WWCs and evidence centres in other countries, we develop some key findings, which are illustrated in Table 1.

Both BO and PE concepts talk of the multiple relationships at play between research and policy in different ways, BO by focusing on how such organisations maintain and bridge the boundary between policy/practice and knowledge, and PE by examining the politics involved in these relationships when KBOs are created and how they work. Regarding the distinction between ideas and evidence, both PE and

Table 1. Understanding KBOs examining different points of tension and using different theories.

	BO	PE/PB
Understanding the emergence and tensions regarding the different roles of KBOs	Focus on organisations that are 'neither/nor' and work with both sides of the evidence–policy boundary Demarcation work of KBOs—helping to resolve boundary problems such as wicked issues Maintain the boundary around what counts as 'good evidence'	Understand how KBOs carve out new roles according to context and can be a result of political signaling Focus on actor-like behaviour of KBOs: evidence funnelling, defining evidence, their agency in coordinating relationships, and sometimes but not always advocacy for specific ideas, framings, or initiatives
Understanding the tensions between evidence and ideas	Focus on evidence and knowledge and how notions of 'evidence' are constructed Constant BO work to maintain the boundary between knowledge and policy	Focus on providing (selected) evidence to allow problems and solutions to be understood in particular ways
Understanding the tensions among the practices of KBOs	Focus on how KBOs function as organisations: emergence, evolution, legitimacy and credibility building, and demarcation work (e.g. advisory boards and background of staff) Bridging between credible evidence and practice to reduce uncertainty	Focus on how KBOs help decision-makers frame, select, and broker evidence to reduce ambiguity
Understanding the tensions associated with the politics of KBOs	Focus on the boundary work between knowledge and policy as a product of KBOs' work Bring the 'evidence turn' to MSA theory, specifically concepts of PE and PB	Focus on the politics of KBOs as actors persuading decision-makers and/or as actors providing decision-makers with resources to include or exclude conceptualisations of policy/problems

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BO help us understand how KBOs mediate between different interests. The concept of PEs and PBs helps us think about how KBOs manage flows of information into the policy process, and BOs help us understand how evidence is defined and worked at the boundary between research and politics. BO theory brings a greater focus on the practices of KBOs as organisations, how they evolve and build legitimacy and credibility, and their demarcation work. They straddle the boundary between evidence and policy, mobilising different types of legitimacy—e.g. academic, think-tank, and political—in changing ways to either emphasise their proximity to government and their influence or their independence and academic credentials (Bandola-Gill 2020; Williams 2021). Both BO and PB's ideas help us see how KBOs work the boundary: not only brokering knowledge but also determining what counts as knowledge. Finally, the PE concept brings a greater focus on the politics of KBOs and how evidence/knowledge becomes mobilised in this process, while BO can bring an 'evidence turn' to our understanding of PEs. By borrowing from the two theories, we were able to illustrate the multiple roles and activities that KBOs may take on in their work at the frontier of the evidence–policy world.

What combining these theories does not explain however is how this tension is reconciled. We highlight the lack of theoretical explanation of current KBOs and propose a middle-ground explanation operating as a bit like a BO and a bit like a PE. On the objectivity vs advocacy point, our data suggest that they reconcile this tension by being concerned about 'how they know'. So they advocate on the basis of their epistemology or what—to them—counts as evidence, which they seem to argue is more 'objective'. However, this is compromised by their position in relation to policymakers and politics and having to respond to what is politically acceptable.

6. Conclusion

This research illustrates how KBOs emerge, build relationships and credibility, and broker knowledge in diverse ways, depending on the context and opportunities that they are presented with and can mobilise. This research contributes to evidence and policy studies in two main ways. Our approach in combining literature starts to develop a conversation between theories to try to explain how KBOs work. Indeed, we have highlighted how using one concept is insufficient to explain the diversity of practices, relationships, and identities at play around these organisations. We have shown how KBOs' agency fluctuates but will change according to context and opportunities. Our focus was on different aspects of these organisations, from their multiple identities to their practices of knowledge brokering, their narratives of evidence, and the politics of knowledge. Through our examples, we provide an analysis of a specific type of organisation in the knowledge–policy landscape, which undertakes several activities spanning from traditional evidence reviews to more in-depth functions of brokering, implementation, and advocacy. Most importantly, KBOs should not be seen as either objective providers of evidence or advocating for certain interventions. Instead, the explanatory benefit gained by combining PE and BO ideas allows us to illustrate the fine line and sometimes messy reality that KBOs have to deal with. A PE lens to examine KBOs would lead to overly focusing on the politics at play, whereas a focus on their BO-like practices would lead to painting them as overly objective.

These KBOs can act as BOs, and as PEs and PBs, and sometimes as all of them simultaneously in various aspects of their activities. Despite being grouped by the UK Cabinet Office under the umbrella of 'What Works Centres', Appendix 1 shows how these organisations are quite different. They work in diverse ways, with different budgets, numbers of staff, and tools. This further reiterates the importance of approaching this spectrum of organisations, as well as other KBOs, with an array of frameworks to be able to grasp the variety of their activities and roles, and how they mobilise the context within which they work to create different opportunities for knowledge brokering. We have shown how KBOs understand their various roles in the policy process, from managing the input of ideas as evidence, to sifting through the array of research, to overseeing the making of new evidence through roundtables between experts and policymakers to discuss specific policy problems, and to even helping with the formulation of policy questions. We have also combined empirics that highlight the necessary intertwinement of politics and organisation and the value of combining different disciplines and concepts to understand new phenomena.

By studying these organisations, we also wanted to highlight their diversity. KBOs are the result of, and are subject to, power plays and politics (MacKillop 2023), with a constant balancing, and calculation, of what projects to accept and the consequences of this decision for the future of that organisation, its relationship with policymakers, and its standing as an independent organisation. Our findings have shown how KBOs navigate the porous boundary between being an evidence intermediary and advocating for particular interventions. We have also illustrated that KBOs play a key role in excluding certain types and sources of knowledge. The same tensions and negotiations occur when determining what counts as evidence and who is called upon to provide that evidence. KBOs have to respond to political preferences for certain knowledge types at different times. In particular, the role of lived experience is a 'hot' topic across the KBOs that we analysed, with consequences over who is involved in the gathering and hierarchising of this type of evidence, as well as challenges to what is usually understood as evidence.

The paper shows how credibility is built in different ways by KBOs. For BOs, credibility is established by balancing the needs and values of both worlds by mobilising different outputs such as policy briefings and systematic reviews and having staff and advisory boards with different backgrounds. PEs, and to some extent PBs, assist decision-makers by helping them privilege particular ('credible') framings of policy problems and solutions. Overall, evidence, however it is defined, is the main basis for their credibility across the two worlds.

More empirical testing is needed to highlight the advantages and limitations of this approach. This could be operationalised by comparative in-depth case studies across countries, different policy areas, and over time. An emphasis on how KBOs and their stakeholders talk and make sense of their activities and roles—i.e. an emphasis on practice—would also be useful in examining the multiple narratives, tensions, and patterns influencing the emergence of these bodies and their

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work and analysing how these differ from existing BOs such as think-tanks and applied research centres. Further examination focusing on stakeholders' voices, especially policymakers, in these debates would be useful to continue exploring the politics of KBOs. As KBOs continue to emerge in different parts of the world, we will gather more examples of how they work and be able to improve our collective knowledge. There is also a need to continue better theorising these organisations in order to reconcile the various tensions and contradictions that we have highlighted.

This research also contributes to practice by showing how KBOs might come in many shapes or forms that are influenced by the processes through which they were created, their mission, the background of their staff, their funding models and budgets, and the policy areas that they work in. All these factors, and others such as credibility, influence the opportunities that KBOs might be presented with (or might make for themselves) to synthesise and generate evidence, network with evidence and policy/practice actors, influence decision-making at different levels, and advocate for change. Understanding the variety of KBOs' origins, roles, and relationships is important for KBOs themselves, decision-makers, and others in the policy community to learn from but also exercise accountability and transparency over these bodies' practices.

Supplementary material

Supplementary material is available at *Science and Public Policy* online.

Data availability

The data that support the findings of this study are available on request from the corresponding author (Eleanor MacKillop). The data are not publicly available due to their containing that could compromise the privacy of research participants.

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Note

1. We use the term 'decision-makers' in this paper to refer to policymakers (national and subnational) as well as other users of evidence such as public service providers and practitioners.

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