European Educational Research Journal
Volume 10 Number 4 2011
www.wwwords.eu/EERJ

EERJ European Educational Research Journal

Policy as Assemblage

RADHIKA GORUR
Graduate School of Education,
University of Melbourne, Australia

ABSTRACT In this article, the author tells the story of her search for appropriate tools to conceptualise policy work. She had set out to explore the relationship between the Programme for International Student Assessment (PISA) of the Organisation for Economic Co-operation and Development (OECD) and Australia's education policy, but early interview data forced her to reconsider her research question. The plethora of available models of policy did not satisfactorily accommodate her growing understanding of the messiness and complexity of policy work. On the basis of interviews with 18 policy actors, including former OECD officials, PISA analysts and bureaucrats, as well as documentary analysis of government reports and ministerial media releases, she suggests that the concept of 'assemblage' provides the tools to better understand the messy processes of policy work. The relationship between PISA and national policy is of interest to many scholars in Europe, making this study widely relevant. An article that argues for the unsettling of tidy accounts of knowledge making in policy can hardly afford to obscure the untidiness of its own assemblage. Accordingly, this article is somewhat unconventional in its presentation, and attempts to take the reader into the messiness of the research world as well as the policy world. Implicit in this presentation is the suggestion that both policy work and research work are ongoing attempts to find order and coherence through the cobbling together of a variety of resources.

My PhD study was originally designed to research the role and influence of the Programme for International Student Assessment (PISA) of the Organisation for Economic Cooperation and Development (OECD) on Australia's education policies. Having just arrived in the country, I was intrigued by the number of seminars on education policy featuring PISA slides and references. It appeared Australia relied greatly on the information gathered from PISA surveys. Australia's aim was, it seemed, to 'become' Finland, consistently the top performer in PISA. PISA was regularly cited by ministers and bureaucrats.

Influential people such as Professor Barry McGaw, the former Director of Education at the OECD and currently the Chair of the Australian Curriculum, Assessment and Reporting Authority (ACARA), believed Australia should aim to top the PISA league tables:

> This is a country that is not satisfied with silver or bronze in sporting events because it routinely aspires to gold. We should similarly aspire to be number 1 in education. We should not look to the OECD average and be content with being well above it. We should look for comparison and challenge to Finland, Japan and Korea and, outside the OECD, to Hong Kong-China, and Singapore ... (McGaw, 2009)

But why should Australia aspire to rank first in PISA? What were seen as the benefits of being first? Was improving one's standing in PISA seen as a way of improving the system itself?

To learn more, I started talking to a few policy makers, bureaucrats and PISA officials. It soon became obvious that to think of 'the role and influence of PISA on national education policy' was problematic. It was difficult to draw a picture of how PISA interacted with other elements within the policy terrain. As one interviewee explained:

 http://dx.doi.org/10.2304/eerj.2011.10.4.611

> In terms of policy development, there's never any neat link between PISA research and policy development, so it's a little hard to say ... [C]ertainly there are people, Barry McGaw among others, who made the point that there's not necessarily a trade-off between 'equity' in terms of outcomes and 'quality'; he's made that point. And the structure of school systems really matters – international data enables you to make that sort of judgment. Whether anybody listens to that sort of argument, what can I say ... (Interview transcript, policy bureaucrat and entrepreneur)

My 18 interviewees, all 'policy doers' at national and international levels (and purposively chosen for their senior roles and deep knowledge of the OECD, PISA or the Australian government), had lively descriptions of policy work. They talked dramatically of living in a world of constant uncertainties; of intervening strategically at the right moment; of the influence of particular individuals or ideas; and of the importance of creating a climate for ideas to get accepted as 'fact':

> You see the theorists draw their little models and so on, [but policy making] doesn't work like that. It's totally chaotic. And *often major reforms are driven by particular ideas that particular people have and particular circumstances*. But what does count is the environment ... I think the idea of climate is really important and that's where research plays a role, but it is a very slow, drip-feed type of role. *You start changing the ways that people think about the world, and then there'll be some catalyst at some stage and things happen*. (Interview transcript, policy bureaucrat and entrepreneur, my emphasis)

This suggested that there was more to influencing policy than simply producing credible research findings, and raised questions about the processes by which 'facts' come to be accepted as such, and how one went about 'changing the ways that people think about the world' in policy circles.

A former minister's account further attested to the complexity and unpredictability of policy work:

> [T]he political activist and the decision maker has to understand how the institutions allocate influence and how the various interests accumulate political resources and how they are going to deploy those in the process and what your role as the authoritative decision maker can be in influencing that outcome ... It all fits, I suppose, in a kind of linear model eventually, although ... very often it is not a rational process which leads to an outcome**.** That again depends on where you see rationality lie, because there is a political rationality as well. (Interview transcript, former minister)

How could I situate 'the role and influence of PISA' in such a scenario? My interviewees suggested that policy making was no orderly process on which I could map PISA's influence. Policy influences appeared to come from everywhere. Events in faraway places such as New York begot reforms in Australia. The global financial crisis resulted in new gyms and libraries in Australian schools. Policy entrepreneurs also influenced ministers and bureaucrats:

> [T]he joy of influencing policy making ... is that it is always susceptible to different forces and if you can read that strategic environment well enough, and if you are well-enough placed ... you can actually intervene and make differences which are quite remarkably fast and successful, even though, at times, you are talking of very, very complex and difficult environments. (Interview transcript, policy bureaucrat and policy entrepreneur)

And if the policy story was complex and full of intrigue, the PISA story was no less so. PISA insiders spoke of the difficulties of aligning the interests and aspirations of diverse nations:

> Early on the challenges were bringing everyone together, to do something that was acceptable to all of them and in part captured their vision but wasn't trivial. What I mean by that is it is about developing what it is that you will test. What it is you will *value* in the assessment. (Interview transcript, senior PISA official; original emphasis)

The PISA scientists talked of fairness and bias. They described the struggles to establish commensurability and the many mathematical strategies to minimise the uncertainty of measurement. They struggled to balance the tension between pragmatic considerations and ideological aspirations. They sought to cut through the tangle of complex factors influencing education performance to find order, certainty and predictability. The scientists within PISA appeared to grapple with problems that were very similar to that of the policy makers within

government – involving forging relations between disparate and sometimes uncooperative entities, to overcome uncertainty and to establish order.

At the same time, PISA itself, my interviewees suggested, was part of the global interest in measurement and comparison linked to human capital and national economic gain; to transparency and accountability; and to centralisation and devolution in education. One interviewee linked the rise of statistical accounts to the loss of authority of bureaucrats, so that scientific evidence replaced the wisdom and authority of individuals. Another talked about the increasing investment in education leading to increased attention on return on investment, and of the shift from a focus on inputs to a greater focus on 'outputs' and 'outcomes'. PISA was not born out of nowhere, my interviewees informed me. If I wanted to understand PISA's influence, I had to think historically and contextually. The focus on measurement and quantification of outcomes and performance was being experienced internationally:

> OECD had always been collecting statistics on education, really, but in the late '80s the Americans started to say you've got to do this more seriously, you've got to have more directly comparable indicators, you've got to work harder on this and OECD started. So the indicator work was ramped up and 'Education at a Glance' came up for the first time in the '90s ... but by the mid-90s they said we've *got* to start getting some outcome data… (Interview transcript, former senior OECD official; original emphasis)

PISA, it appeared, was linked to the increasing privileging of certain types of evidence in policy doing.

As I listened to these stories, it became more and more difficult to trace the boundaries and origins of policy influences and practices. Policy, my informants appeared to suggest, was not made by a few officials in well-appointed buildings during committee meetings, guided by PISA graphs and league tables, but involved a great deal of activity occurring at multiple levels at various venues. Not only were policy actors diverse and widespread, they were often difficult to identify – was a PISA scientist not doing 'policy work' as assiduously as any minister of education? Were they not both engaged actively in similar practices, translating interests and enrolling actors and building agreement and creating or closing off spaces for disagreement? Moreover, stories from my interviewees exponentially increased the range and type of policy actors. Every story I heard pointed me towards new people, new locations, new processes and new events.

My informants, it appeared, could only explain PISA and Australia's national education reforms within a much wider and more distributed context of quantification, international comparison and accountability. If I wanted to learn how PISA participated in Australian education policy decisions, I would first need to understand the untidy and apparently chaotic and complex processes involved in the 'doing' of policy in an increasingly globalising world, where transnational bodies such as the OECD, globally mobile policy advisors, and an international focus on 'evidence based research' were increasingly influential.

Accordingly, my research question broadened into a larger one: 'What work "does" policy?' Instead of focusing just on PISA, I decided to explore the larger phenomenon of evidence-based policy (EBP) in education. I began to think of a much more intertwined and emergent relationship between 'evidence' such as PISA and policy and reform in education. I began to think of both PISA and Australia's reforms (the 'Education Revolution') as *instantiations* or *performances* of EBP. In this way, my early empirical explorations in the form of interviews with policy actors changed my research focus and my initial research questions quite significantly, and, indeed, my understanding of policy work itself was altered.

'Doing' Policy

Traditional understandings of policy work make distinctions between policy making, policy implementation, policy discourse, policy analysis, policy innovation, policy impact, policy evaluation, policy transfer, policy contexts, policy advice and so on (see Colebatch, 2006), but my interviewees presented policy as a dynamic, emergent and uncertain process where such distinctions were blurred. Abandoning the idea of 'policy making', I began to think in terms of 'policy doing'. Concepts such as 'policy making', and even more so 'policy maker', are burdened with prior conceptualisations about the processes and the participants, which I felt would limit my

exploration. I preferred the dynamism and fluidity implied in the concept of 'doing' policy. I wanted to avoid making any assumptions about the nature of the action and the relations between the various policy 'doings' or to posit 'policy making' through prior definitional work.

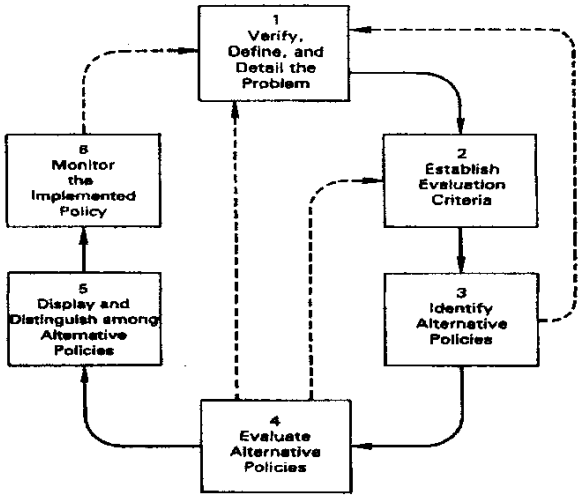
'What work "does" policy?' is awkward syntactically, but phrasing the question in terms of 'doing policy' makes room to explore the many sites, processes, practices and actors that might be involved in policy being 'done'. It leaves open the question of how agency is mobilised. Colebatch used the verb 'makes' instead of 'does' with similar effect, but 'make' summons a 'maker' – with the entailments of human agency and intention. I did not want to presuppose my 'doers' of policy to be exclusively human. I had, after all, begun with the idea that PISA was a significant 'actor'.

As I was developing these understandings, I also began to explore how others in the field conceptualised policy.

Models of Policy Doing: a selective overview

Policy as Rational Decision Making

The dominant understanding, promoted in policy textbooks, sees the policy-making process as informed problem-solving: a problem is identified, data are collected, the problem is analysed and the advice is used to make a policy decision. The work of policy is framed within the concepts of choice and decision theory.



A typical model of rational decision-making from Patton & Sawicki (1993) is presented above. Such models locate all agency with policy officials, and assume each stage to be bounded, separate and sequential. However, it is now widely held that policy work is seldom performed in this idealised way. Moreover, such models do not explain how certain issues come to be articulated as problems, and certain solutions come to be regarded as appropriate. Here policy processes are depicted as rational and natural rather than contested and political.

Figure 1. Rational decision making – a tidy process with discrete steps.

In these 'rational decision-making' models, policy doers are seen as comprising two separate communities – those who produce research and those who use it. But, as Davies asserts, this conceptualisation is 'too simple, linear, uni-directional, individualised, unproblematised, asocial, and acontextual (otherwise OK)' (Davies, 2010) (see Figure 2).

Nutley's (2009) model (see Figure 2) highlights the range of actors involved and the ways in which they might interact. When the range and number of actors increases, there is considerable diversity in their understandings of what counts as 'evidence'. Here we begin to see the challenges of forging collective, common understandings of what counts as authoritative knowledge.

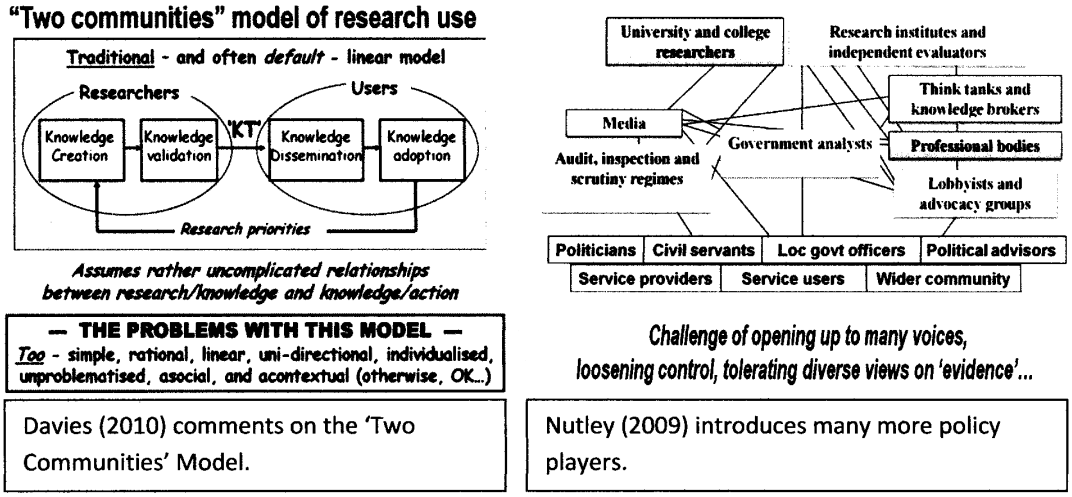


Figure 2. Davies's model (2010) and Nutley's model (2009).

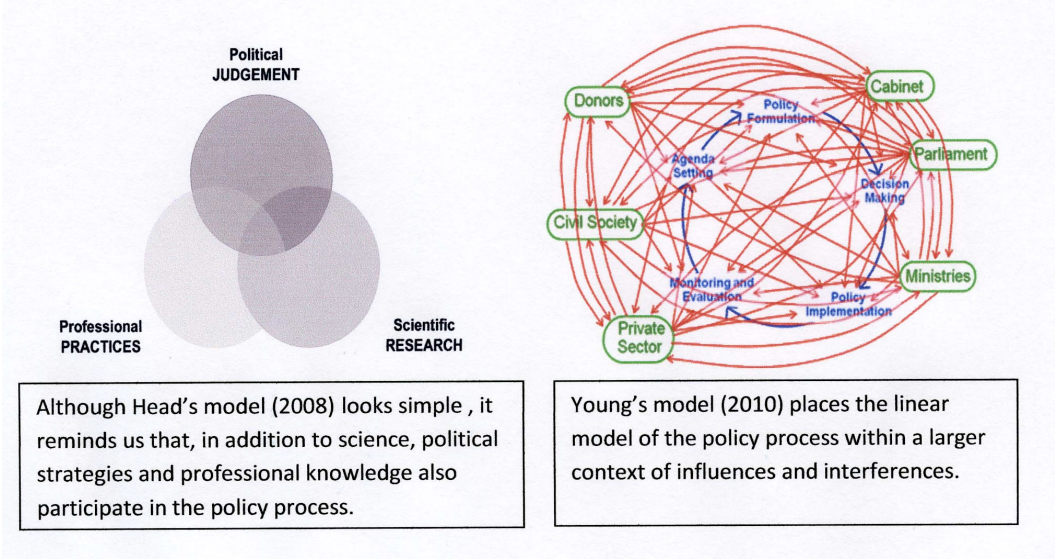


Figure 3. Head's model (2008) and Young's model (2010).

Head (2008) talks about the three kinds of knowledge – 'political know-how; scientific and technical analysis; and practical and professional field experience', and says that each of these brings its own views of 'evidence' as the three come to bear on policy decisions. But, continues Head, sometimes governments make commitments which cannot be shifted no matter what evidence is presented. Young (2010) places his cyclical model within the context of various pressures and lobby groups, illustrating the complexity of the 'policy doing'. However, it is not clear *how* or *why* these groups interact and what the effects of these interactions could be.

Phil Davies (2005) introduces some new and interesting elements: resources, habits and traditions, pragmatics and contingencies. He contends that elements such as experience, habits and traditions get in the way of accessing and using evidence. Further, he elaborates the concept of 'evidence' to describe several types of evidence that might be used in policy work.

Policy Making as (Gradual) Social Learning: 'muddling through'

Helco understood policy as 'a form of collective puzzlement on society's behalf' (Helco, 1974, cited in Hall, 1993, p. 276). Charles Lindblom proposed that policy is a process of gradual learning – what he called 'incrementalism' (Lindblom, 1959, 1979). He found that most policies just introduced small changes, which over time may lead to significant shifts.

Lindblom also proposes that policy is often something that *happens* rather than something that is *made*, particularly where decision making is decentralised. Here policies could be influenced by a wide range of interests. The rationales for policy decisions also become obscured during the process since different participants could see different reasons for any given policy. Lindblom calls this type of pluralism 'partisan mutual adjustment'. Here policy is visualised not as an event but as a chain of processes with participation from actors at various levels.

Post-positivist Understandings

Parsons (2002) elaborates the entailments of the differences between the world views held by rational-realists and those held by post-positivist policy scientists like Lasswell and Schön. While rational-realists imagine the policy terrain to be firm, mappable and navigable, post-positivists see it as messy, complex and difficult. Where the former see social science as producing codified, transferable knowledge, the latter see it as a process of ongoing social learning in an ever-changing world. These views lead to different aspirations; the former seek to focus on decision-making protocols that facilitate 'command and control', the latter on ideas to promote continuous learning and self-organisation. If the former seek to answer 'What works?' the latter expand the question to 'What works, for whom, when, and how? What kind of evidence works for what kind of problem/policy in what context, and for whom?' Where rational decision making views science as neutral and scientific knowledge as absolute truth, post-positivist accounts see realities as constructed and are alert to the inequities created through such constructions. Post-positivist views highlight issues of power and normativity.

Taking a post-structuralist approach, Fischer & Forester (1993) posit policy making as an *argument*, highlighting both the discursive construction of policy and the normative role of such discourse. Hajer (1993) is also interested in how language and rhetoric are used in policy. He explains how new meanings are given to 'facts' such as dead trees in environmental discourses. He points out that democratic discussion can be shut out by resorting to science and technocratising the discourse. In a similar vein, Rein & Schön use *policy discourse* to refer to 'the interactions of individuals, interest groups, social movements, and institutions through which problematic situations are converted to policy problems, agendas are set, decisions made, and actions taken' (Rein & Schön, 1993, pp. 145, 146). They propose the idea of 'frames' – an idea similar to Law's 'modes of ordering' (Law, 1994), whereby frames act as tropes or logics that help to order and make sense of the world.

In the sociology of education policy, understandings of the policy processes have mainly fallen along two lines – state-control and state-centred theories that place most of the agency and power in the hands of the state; and post-modernist and post-structuralist theories that give less centrality to the state and assume that the agency is more widely distributed among a variety of actors. Marxist-influenced theorists place the power to determine policy in the hands of dominant groups whose intention is to control others through various technologies or regimes of regulation and discipline. For state-centred theorists such as Roger Dale, the state's domination is tempered by other influences. To maintain its hegemony and control, the state has to negotiate and compromise with these influences, leading to conflicts and contradictions. Researchers in this tradition focus on the politics and ideology of state policy makers. The focus for researchers like Gewirtz & Ozga (1994) remains on the structures of power, which constrain possibilities for new actors and ideas. Ozga's work reflects a strong activism with a view to countering state hegemony and control (see e.g. Ozga, 2000).

Ball's cyclical model of policy, developed along with Bowe and Gold (Bowe et al, 1992), opposes linear models which separate policy formulation from policy implementation, and assigns the roles of policy making and implementation to different groups of people. This model suggests that policy does not just get made within the government but is remade again and again as it is

reinterpreted in the process of implementation. Sites such as schools also act as 'discursive contexts within which policies emerge' (Bowe et al, 1992, p. 23).

Foucault's enormously influential governmentality approach is widely used in policy critique. Governmentality pays particular attention to normative subjectifications and objectifications that are discursively inscribed through policy articulations. It alerts us to the technologies of power and surveillance that create discursive regimes and impose their particular sets of affordances and constraints. The imposition of order through technologies of regulation and control becomes a continual quest in this way of understanding government. Foucault's post-structuralism is anti-foundationalist and draws attention to the relational production of epochal epistemes (Law, 2007). My interest, however, lay in more local and particular processes of policy doing.

Some Dissatisfactions with Current Theories

Although public policy studies and education policy sociology are well-established fields and have engaged in advancing understandings of policy, researchers in both fields have expressed dissatisfaction with current theories and emphasised the need for new theories.

One aspect of this dissatisfaction is representational and concerns the extent to which a model provides a 'true' and reliable picture of policy processes. Some of the models examined were simplistic and impractical. Policy practitioners are sometimes unable to locate themselves within these existing models and maps of policy work (Colebatch, 2006). Although some models provide complex understandings by involving more actors and more relationships, they do not explain how multiple actors are drawn in, how the relations between them are formed, and how they interact with each other. Fischer & Forester are 'astonished by the richness of [the work that planners do in everyday practice] and the poverty of analytic models that claim to represent what planning and policy analysts do' (Fischer & Forester, 1993, p. 5). Zimmermann (2009, p. 56) believes that 'the status of knowledge in politics and planning is changing' and whilst we discount 'the modernist ideal of planning and its positivist implications for the use of knowledge ... we still do not know much about the way different forms of knowledge are negotiated, in planning in particular and in local politics in general'.

In his analysis of research on education policy, Ball (1997, p. 256), following Elmore (1996), points out several shortcomings, such as focusing on one policy as if it were insulated from all other policies that came before or are operating simultaneously; looking at 'practice' and focusing on classrooms as if they were unconnected with policy making; and tending to see policies 'as clear, abstract and fixed as opposed to ... awkward, incomplete, incoherent and unstable'.

The second set of dissatisfactions concerns the reach or influence afforded by these theories and models to perform useful and powerful critique. Commenting on discursive critiques of policy making, Gale contends that such analyses, including his own work, are part of the 'current orthodoxy in education' and do not go far enough.

> In this text/discourse account, academics and educators often seem to remain recipients or implementers of education policy not strictly producers of it, no matter how much we might acknowledge their ability to reinterpret. While 'policy as text' and 'policy as discourse' provide better answers to critical questions of 'what is really going on?' and 'how come?', they do less well in answering 'what can be done about it?' (Gale, 2006, p. 5)

A third set of dissatisfactions concerns the nature of research itself. Theories are double-edged swords: inasmuch as they might provide clear explanations for phenomena, they can also 'explain away' that which does not fit. Returning to the earlier theme of order and mess, any effort to produce order out of untidy realities inevitably performs such violence. In particular, employing 'strong theories' could lead to unwittingly eclipsing the theories of those who are the objects (or subjects?) of the study. This is quite significant, because policy actors' understandings of the policy process significantly affect how they approach their work (Colebatch, 2006).

Strong theories seek to impose explanations on social phenomena, thus obscuring the theories and associations used by the actors themselves. The purpose of theories is to explain – and an inadequate, tentative or uncertain explanation could be seen as either a weakness of the theory or the weakness of the research (or researcher). However, some commentators are now calling for more modest theories that produce modest accounts. Ball, for instance, appeals for 'a kind of

theorising that rests upon complexity, uncertainty and doubt and upon a reflexivity about its own production and its claims to knowledge about the social' (Ball, 1995, p. 269).

Examining the issue using the generative question 'What work does policy?', without an a priori list of actors and sites, and leaving the question of practices and processes open, required an analytic that could be both developed and rehearsed empirically, rather than a ready-made formula or model that could be determined ahead and then 'applied' to the empirical data. My choice of the material-semiotic approach of actor-network theory (ANT) permitted – indeed, it endorsed and encouraged – such an approach.

Policy Assemblage

ANT is part of the interdisciplinary field of science and technology studies (STS). STS and ANT have concerned themselves with the processes of authoritative knowledge production. They see the processes and products of science as being also always political (Jasanoff, 2005). Law suggests that ANT can be thought of as 'an empirical version of post-structuralism', interested in exploring 'the strategic, relational and productive character of particular, heterogeneous actor-networks' rather than the 'relational character of epochal epistemes' (Law, 2007, p. 6).

'Assemblage' is an important concept within ANT. Assemblage (or rather its French version, *agencement*) as used by Deleuze & Guattari (1988) (and in ANT) provides an alternative to the conceptualisation of social phenomena as organic totalities. Assemblage theory focuses on the historical processes through which apparent universalisations appear to be achieved (DeLanda, 2006). In this anti-essentialist and anti-totalitarian way of thinking, relations between entities are not 'logically necessary' as in totalities but are only 'contingently obligatory'. The implication for research, then, is that assemblages cannot be investigated by thought alone, but require empirical investigation. We cannot predict or theorise *beforehand* how entities might interact, but must study assemblages case by case (DeLanda, 2006). To understand policy as assemblage would mean focusing on how EBP is being stabilized and maintained through processes such as articulation, coding, mapping and categorisation.

EBP is being actively developed and promoted by a variety of organisations, including national governments and transnational organisations, as an *innovation*, a new way of doing policy. At the same time, it is also contested in many quarters and its practices have not stabilised. To this extent, it could be seen as a *controversy*. In controversies and innovations, the processes of assemblage and the multitude of human and non-human actors that make up the assemblage are evident everywhere (Latour, 2005). In a building site, the conduits, the wires, the pipes, the insulation, the switches, the frame – all the 'insides' are still visible. Later, they will become invisible, hidden behind plaster, and hum efficiently in the background, only getting noticed when something breaks down. The excitement, urgency and drama, and most of all the array of *things* on a movie set are completely invisible in the movie itself. The mix of facts, objects, people, rhetoric, institutions and protocols that make up phenomena such as EBP are all visible when they are still innovations or controversies. In retrospect, when stabilisation (however partial and precarious) has been achieved, they disappear from view. Dichotomies get established, boundaries around groups are defined, the various actors settle into their roles and everything appears natural. But *before* these translations occur, innovations and controversies are exciting and busy places. To visit such locations, we might need the hard hat and gumboots of ANT concepts, but in return we are treated to exciting and lively hives of activity.

Key to the notion of assemblage is the understanding that entities gain their characteristics *relationally* and are always an empirical and contingent matter. Moreover, instruments such as surveys are also seen as constitutive of the knowledge they produce (Law, 2009).

My main research question 'What work does policy?' was open-ended and generative. But as I began to think in terms of 'assemblage', some additional and more specific questions began to emerge, and I added the following supplementary questions:

- How is EBP in education being assembled? How is agency mobilised and where is the action occurring in contemporary education 'policy doing'?
- How is EBP being promoted and stabilised?

- Thinking in terms of 'assemblage' meant taking into account the historic and contingent ways in which the cognitive, the material, the social and the normative (Jasanoff, 2004) were intertwined in EBP. So I added another question:
- What are the specific relations between politics, evidence and education policy in EBP?

It takes a lot of 'doing' to produce evidence. Large-scale comparisons such as PISA involve commensuration of the variables measured across different cultures and value systems. This raised the issue of how such commensuration became possible and how these measurements were developed. Accordingly, I added some questions about the nature of such metrologies and calculative practices:

- How are things being made calculable?

The processes of rendering contextual, culture-specific, complex phenomena into universal and measurable forms perforce involve simplifications and reductions. On the other hand, the information thus produced is transportable, storable and, by being widely accessible, more socially inclusive (Ezrahi, 2004). I became interested in the tensions between impoverished accounts and democratic access, and added another question:

- What are the types and limits of knowledge produced by this calculus?

In this way, the literature review, the initial interviews and my own observations all resulted in changing the focus of my research and the questions which I decided to address. My initial proposal of policy as influenced by research – PISA as influencing Australia's education policy – appeared inadequate and naive, and the idea of 'policy doing' became refined into 'policy assemblage'.

The question of the role of PISA in national education policies and its influence on them has been of intense interest in Europe, and several researchers have been exploring this issue. Ozga, Grek and others at the Centre for Educational Sociology at the University of Edinburgh have undertaken several studies that explored PISA's influence in various contexts, particularly through the 'FabQ' project [1], producing a number of conference presentations, working papers and journal publications. The multi-university 'Knowledge and Policy' study [2] included many European nations and engaged more broadly with the role of knowledge in policy, engaging with the new forms of evidence now informing policy, and PISA was the particular focus of some of the studies undertaken in this large project (see e.g. Carvalho et al, 2009; Carvalho & Costa, 2009). This current article, situated in Australia, adds to this body of knowledge about the relationship between national and transnational policy spaces and influences.

The concept of 'policy assemblage' provides tools that can be widely deployed in policy research. Researchers from a variety of philosophical, epistemological and methodological persuasions have been exploring the possibilities offered by the concept of assemblage in a range of substantive areas: climate change and other environmental issues (Li, 2007; Blok, 2011); medical practice (Mol & Law, 1994; Mol et al, 2010); economics (Callon & Muniesa, 2005); and, increasingly, education policy (Gorur, 2008, 2010a; Koyama, 2009a,b; Fenwick, 2010; Fenwick & Edwards, 2010; Mulcahy, 2010). Some use assemblage as a metaphor, a way to describe policy-making or knowledge-making processes as a somewhat chaotic hodgepodge, to trouble the crisp and clear certainties that characterise the current quests in policy. Others use assemblage as an analytic, to explore processes by which entities become relationally entangled in emergent phenomena. Still others use this concept to destabilise held notions, redistribute agency and action, and perform 'ontological politics' (Law & Hassard, 1999; Gorur, 2010b). By treating 'scale' as a relational effect and refusing to invest 'context' with explanatory power, *a priori*, assemblage becomes an appropriate conceptual resource especially when 'national' and 'transnational' inter-relations and co-productions are to be explored.

The concept of assemblage drew my attention to questions I found novel and interesting. It also drew me away from tired debates in education policy about the relative merits of qualitative and quantitative research and from explanations that used globalisation or neoliberalism as the contextual drivers of reform. It afforded a way to avoid the sometimes cynical view of politics and politicians and the feeling of hopelessness that discourse determinism can engender. The anti-foundational stance of assemblage gave me hope that if realities are contingent and emergent matters, and if things *could have been* different, they could *yet be made* differently.

Research as Assemblage

As I worked on developing an understanding of policy work, I was struck by the parallels between policy work and thesis writing. Both are knowledge practices; both, I suggest, are assemblages. If my intention is to discard 'smooth' narratives of policy and to engage with the messiness of its practices, how could I present my own assemblage, my own knowledge practice (my PhD thesis or this article) as a 'smooth narrative'? In considering the various accounts of policy and proposing the idea of 'policy assemblage', I wish to acknowledge the instability, the partiality and the constructedness of my own assembling and make it apparent to the reader. This makes for a somewhat unconventional and awkward presentation, but then Latour (2005) reminds us that texts themselves should be seen as laboratories, sites for enacting assemblages. My hope is that the awkwardness of this account makes transparent the messiness and labour involved in assemblage work – thesis work as well as policy work.

A danger in research is that our theories blind us to the ways in which our accounts constitute the meanings they make. But an 'a-theoretical' approach is impossible – we build and carry our theories without even being aware of them. So what is to be done? One solution is to be reflexive (to the extent that we are aware of our theories) – to understand how our theoretical allegiances may affect the realities we assemble. Another, suggests Ball (following Foucault and Bourdieu), is that we resist the pressure to close things off and refuse to pronounce definitive answers and strong accounts. This means

> giving up on spontaneous empiricism, casual epistemologies, theory by numbers, and constantly struggling against the governmentalities of scientism to find a proper rigour, a thoughtful reflexive and practical rigour – a rigour that goes beyond the niceties and safety of technique to find a form of epistemological practice that is not simply self-regarding. (Ball, 2006, pp. 5, 6)

Law (2007) makes a similar point. He notes that realities are multiple and messy and will always exceed our capacity to speak about them in any one particular way. He advocates modesty in the undertaking – not to have the expectation or the aspiration to make a grand explanation, but to have the awareness that our own sense-making processes make us no different to the objects of our research.

Frameworks imposed by conventions of research reporting can serve to ensure rigour and transparency. But they can also obfuscate the tentativeness, the serendipity and the uneven trajectory of research work. This part conversation, part reflection and part recount is a modest attempt to recover the messiness, richness and excitement of knowledge practices.

Notes

[1] http://www.ces.ed.ac.uk/research/FabQ/index.htm

[2] http://www.knowandpol.eu/

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RADHIKA GORUR is a research fellow at the University of Melbourne. Her research interests include education policy, evidence-based policy, PISA, international comparisons and material semiotics. *Correspondence*: radhikagorur@yahoo.com