Mustering as method: Ethnographic impulses and actor-network theory in education

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Muster

/ˈmʌstə/

verb
gerund or present participle: mustering
1.
assemble (troops), especially for inspection or in preparation for battle.

Similar:
assemble | bring together | call together | marshal | mobilize | rally | round up | raise | summon | gather | gather together | mass | collect | convene | call up | call to arms | recruit | conscript | raft | convoke | levy

Opposite:
Disperse

2.
collect or assemble (a number or amount).

(Google: define muster)

Introduction

In this paper, I engage with the word 'mustering' as a potentially generative verb to use in articulating the process of contemporary educational research. My focus is particularly on research that draws on new materialist approaches in general, and actor-network theory in particular. Originally developed in the social studies of science, over recent decades actor-network theory (ANT) has been used to question, and render complex, social explanations for educational phenomena. Given the complexity of education as a social practice (Greany and Kamp, forthcoming), one might anticipate a burgeoning of ANT-ish. Yet, Tummons (2020) suggests that it remains an under-used approach, despite its injunction to 'follow the actors' having clear congruence with ethnography as a productive research tradition.

In actor-network theory, 'the social' is taken to be an enactment of heterogenous assemblages of human and non-human entities. Rather than being a theory, actor-network theory is an approach to research that displaces humanism and foregrounds processes of assemblage and re/assemblage. The role of the researcher is to trace these processes; there is no set method for performing research with an orientation to actor-network theory. Rather, for Mol (Mol, 2010: 265), the performance rests in adaptability, 'a set of sensibilities […] a rich array of explorative and experimental ways of attuning to the world'. Whatever the way of attuning to the world, the ANTian researcher is involved in a minute tracing of local interactions and acknowledges that method 'performs the social and, in the process makes it in particular ways' (Michael, 2017: 4). Methodologically, it is widely accepted that ANT's injunction to 'follow the actors' of necessity demands an ethnographic framework of some kind (Michael, 2017; Latour, 1987; Tummons, 2010). However, the post humanism impulse of ANT demands particular data generation techniques that are mindful of principles of symmetry, irreduction, translation and alliance.

Why my interest in the word 'mustering', a word that speaks to assemblage yet evokes notions of battle and a 'call to arms'? My rationale lies in the landscape of education I am using as my case. My thinking occurs in the context of Aotearoa New Zealand (New Zealand), a bi-cultural nation state. The nation's founding document is Te Tiriti o Waitangi | the Treaty of Waitangi, progressively signed during 1840 by some 500 Māori chiefs and representatives of the British crown. In 2022, New Zealand remains a member of the Commonwealth. With a small population of just over five million people, the country is a unitary parliamentary representative democracy. The defining characteristics of New Zealand as ranked by its people are 'freedom, rights and peace' and 'environment' (mean rating 9.1), followed by 'the people in New Zealand' (mean rating 8.5) (StatsNZ, 2016). New Zealanders experience economic and political stability: in 2020, the global anti-corruption organisation Transparency International maintained New Zealand's first equal status with Denmark (https://www.transparency.org). New Zealand is a World Bank 'high income' country: an open economy based on free market principles yet persistently recording poor wellbeing statistics. On comparative child wellbeing measures published by OECD in 2009, New Zealand ranked twenty-first on material wellbeing, fourteenth on housing and environment, thirteenth on educational wellbeing, twenty-ninth on health and safety and twenty-fourth on risk behaviors. A quarter of children and young people live in homes with low incomes, and experience persistence inequalities of educational opportunity (Tomorrow's Schools Independent Taskforce, 2018). In this context, a language that evokes a call to arms, rather than a gathering, seems appropriate in informing the design of educational research endeavors that are intent on making a difference. This paper proceeds by exploring Law's (2004) notion of 'method assemblage', before moving to consider what a shift to a more political language of 'mustering' might imply for our ethnographic endeavors.

Assemblage as method

Law (2004: 144) discussed 'method assemblage' as the process of crafting the boundaries between 'presence, manifest absence, and absence as Otherness', in the process producing conventional 'representations'. Method assemblage, in playing with the relations between presence (what is in here and present, for instance a representation or an object), manifest absence (what is absent yet can be seen and is manifestly relevant to what is present), and absence as Otherness (what is absent but while necessary to presence, it is hidden, repressed or uninteresting), changes our research sensitivity. Law moves beyond concerns with 'representation' to take up what he suggests is the more 'permissive' term 'gathering' as a

way to talk about relations between things without locating those relations within normative logics (2004: 160). The intent of this shift in language is to extend the list of what is appropriate for method. Here I offer a limited overview of Law's non-exhaustive list: texts (textbooks, scientific papers, spreadsheets); visual depictions (X-rays, art); maps (including but not limited to those generated by Euro-American cartographic methods); human apprehensions (the visual skills of scientists, the sense of horror of those witnessing an accident); bodies; machines; ceremonies; musical performances; conversations; model-making; architecture; physical exercise; gardens and landscapes. For Law, these are all 'crafted forms of presence' that can be used as methods of depiction and that, in their character, illustrate how our normative approaches to method are, on the one hand, limited materially – often to only textual or pictorial forms – in closing down what might be used to 'craft a particular reality' and, on the other hand, in terms of how they tend to strongly foreground 'absences [the economy, gender, and so on] that are taken to be independent, prior, singular, definite and passive' (2004: 146-7).

I have used John Law's work previously, to explore the methodological tensions of adult social sciences undertaking research on young people – particularly those young people who do not confirm to normalised pathways through, and beyond education (Kamp and Kelly, 2014; Kelly and Kamp, 2014). In *After Method*, Law (2004, 2–4) stresses that conventional ways of doing social science produce knowledge, outcomes and consequences that can support certain truth claims and make significant contributions to human knowledge and understandings of important issues. We witness this in, for example, much of the school effectiveness and improvement literature. However, as Law suggests, much of the natural, the social and the cultural is 'vague, diffuse or unspecific, slippery, emotional, ephemeral, elusive or indistinct'. This, at least in part, contributes to the situation where, even when we know what the research might tell us of how we can improve educational outcomes, even when our policy making – from wherever in the political realm – is apt, our efforts for equity fail and inequalities not only persist but, in the context of globalisation, are inflamed.

In his initial engagement with these questions, Law discusses some possibilities for expanding our knowledge practices: 'knowing as embodiment' where we come to know 'through the hungers, tastes, discomfort, or pains of our bodies'. Knowing as 'emotionality or apprehension' would bring into view the 'worlds of sensibilities, passions, intuitions, fears and betrayals'. In this paper, I work with my discomfort with the gentleness of terms such as 'bundling' or 'gathering' and their implication that data waits unproblematically for researchers to gather it, rather than being generated in ways that are continuing to serve particular interests, in particular places. Mustering – defined as an assemblage in preparation for battle – gives a more apt vision for those who wish to engage in ethnographic research determined to trace an array of actors in how they assemble allies in support of, or against, very particular interests.

Reassembling for social justice

As Harding (1987) notes, one of the key contributions to our thinking around knowledge practices is made by writers such as Deleuze and Guattari and their contemporary, Foucault, was a disruption of `methodolatory'; taking up Deleuzian concepts demands 'a rejection of all forms of slavishness in favour of (liberating) creativity. [...] Its insistent question is 'how does it work? (Buchanan, 2000: 8). I have previously argued that such an endeavour involves us in putting down our methodology textbooks and taking up an ANTian travel guide that will assist us in drawing a special kind of map (Kamp, 2013). Such a map oriented towards

experimentation: the map 'is […] open and connectable in all of its dimensions' (Deleuze and Guattari, 1987: 12). Such a map is not a tracing of anything prior with directions on how to get there; the emphasis is on finding one's own way (Rajchman, 2000: 118):

> For Deleuze and Guattari, a tracing is like an X-ray – it begins by selecting, by some artificial and restrictive procedure – what it intends to show. In the process, what else might be shown, landmarks, 'zones of indistinction' within which becomings may be in the making (Rajchman 2000: 12), alternative stories, theories and explanations, are all curtailed. What is shown reproduces its own prior story: whereas a map has multiple entries, a tracing defines the point of entry and always comes back to the same.

ANT, with its focus on capturing what-is-not-already-pre-determined, is illustrative to our endeavours. The idea, as Latour (2007: 1) notes is simple: if we are to really understand what happens in any phenomenon, such as the implementation of government policies for equity in education then we have to find ways to explore the nature of their 'sociality' rather than assuming its prior existence. As researchers, we need to defer drawing on default explanations of various dimensions of 'the social' as a 'specific type of causality' until such time as we have explored, in detail, how the social appears in a given form at a given time and place through a process of assemblage and reassemblage, at times in ways that sufficient allies are involved for something new and more just to become 'real'.

A defining position for ANT is that there is no difference in the treatment of human and non-human actors. This is the notion of 'symmetry' referred to earlier as a necessary data generation technique. Symmetry does not suggest that all actors are equal, or that non-human actors are by default granted the same status as human actors: a researcher can't assess the status of any actor until traced them in the context of ethnographic research. However, the ethnographer cannot disregard the contribution of any actor solely on the basis of categorical prejudice (Waltz, 2006). If our agenda is to see our work moving beyond gathering towards a more political 'mustering', then our tracing must be politically oriented.

As Law insists, Othering is inescapable in research given its necessity to the portrayal of presence (2004: 147). Yet by not passively collapsing within the constraints of 'standard methods' we broaden the conditions of possibility and the hope for a more meaningful engagement with that which we hope to better understand and better support in the context of our everyday practice. An example of benefit of such a concern with tracing might be illustrative (Kamp, 2013: 53):

> As I write it is a Thursday afternoon and I am in my office, occupied with the ins and outs of student enrolments and, in the same moment, thinking about the examples to include in this chapter. And in my attention to all things actant, two examples fall into my lap. In each case, the details are similar: on the one hand, a student who, through a particular assemblage of doctor's appointments, medical assessments and diagnoses, has been 'enacted' as dyslexic. On the other hand, a student – schooled in Ireland and fluent in English (and two other languages) – but, lacking an Irish birth certificate, who needs to be 'enacted' as literate through providing a signed assessment before she can enrol. In each case, the circumstances of enactment fades away but the inscription goes on to act: the dyslexia of one student, the literacy of the other become real. But the 'reality' of their situation is retained for only as long as the inscription device – in this case the formal, signed assessment – remains within date.

> The day after the signed document of assessment expires, for the purposes of enrolment, the former student is no longer dyslexic, the latter student is no longer literate. While this may seem to be little more than a quaint quirk of enrolment processes, for the student's this enactment assembles with other actors in ways that are far from meaningless for equity purposes. In our research endeavors, the failure to consider non-humans beyond their status as things/tools/equipment used by the human actors compromises our ability to effect the social change many of us seek.

ANT also enables researchers to move beyond the sense that action is uni-directional. While non-human actors are accorded agency, they are not accorded supreme agency. Thus, human actors can be mediators: they can distort the meanings carried by policies, texts, other teachers, students, architecture, grade books, Learning Management Systems; they can use any number of forms of reference and the assemblage that results will come together in unpredictable ways that might be more in keeping with the ethics of their endeavours. A commitment to ANT demands a shift from concerns with 'principles of power' to 'practices of power' given actor networks are inherently contingent (Grint, 1991: 150).

Implications

> By translation we understand all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another actor or force "Our interests are the same, *do what I want, you cannot succeed without going through me*". (Callon and Latour, 1981: 279)

> The word 'meaning' is taken in its original nontextual and nonlinguistic interpretation: *how a privileged trajectory is … built*, out of an indefinite number of possibilities. (Akrich and Latour, 1992: 259)

These two quotes – to which I have added the emphasis – hint at the rationale for the case I am making in this paper. In education in New Zealand, imperatives to do what 'I' want, and meaning in the form of privileged trajectories drawn from an indefinite number of possibilities, have been evident in the thirty years since the introduction of *Tomorrow's Schools*. The intent of *Tomorrow's Schools* was for improved schooling outcomes and, over the intervening period, results in New Zealand's three-level senior school qualification, the National Certificate in Educational Achievement (NCEA) has lifted: by 2018 85 per cent of 18 year olds had achieved NCEA Level 2 or equivalent. However, there is an argument that this lift was achieved through the simultaneous shift to a standards-based examination system (Gordon, 2015) and shifts in inequality in achievement was not evident (Clark, 2017; Gordon, 2015). Indeed for Lubienski (2014: 432)

> there is little doubt that the Tomorrow's Schools reforms have positioned articulate, active parents in the more affluent classes to assert their influence in repositioning public schools to act as private goods serving their own interests … In the absence of an intermediary authority responsible for equity concerns and accountable to the wider community, state schools are reconfigured to serve the interests of such parents, as well as the interests of the schools in a competitive environment, in excluding students who might drag down the schools' reputation.

As Michael (2017) notes, ethnography is not transparent, even in its use of 'thick description' (Geertz, 1973). ANT offers potential here in its before-the-event expectation of the proliferation of actors and recognition that researchers make decisions about where to draw the boundaries around their ethnographic studies. Callon and Law (1995) go so far as to suggest that such decisions are a matter of taste and practicality. Given the invested interests in education, one might also suggest such decisions are also a matter of one's agenda for education.

In his 2007 work *Reassembling the Social*: *An Introduction to Actor-Network Theory*, Latour outlines a sequence of 'uncertainties' that can be drawn on to provoke our considerations of how to avoid collapsing into conventional representations with all their likelihood of 'more of the same'. Certainly ANT has some parallel with ethnomethodologies of various kinds but efforts to articulate 'the' ANT approach will, ironically, result in it becoming boxed in the kind of rigid, methodological framework that it critiques. Fenwick and Edwards (2010) offer some 'signposts' that are of value. Here, I am, as I have been previously, guided by the five 'sources of uncertainty' through which Latour builds the case for ANT, through which I consider the potential of a commitment to mustering as methodology.

No group, only group formation

Latour's first source of uncertainty – no group, only group formation – challenges us to think about where to begin any research journey. Commonly, the researcher commences their investigation by defining both the group that is of interest and the level of analysis that will be undertaken. An ANTian researcher will begin by following the actors through 'the traces left behind by their activity of forming and dismantling groups' (Latour, 2007: 29). In other words, researchers must focus on tracking the assemblage as it appears – and disappears – in processes of assemblage and reassemblage. In this, the 'duty' of forming a group falls not to some wise-before-the-event researcher but to the actors themselves. Tracing the process of gathering of humans and non-humans is powerful because more 'traces' are left while things are moving than are left by established 'things' that have gained some form of 'realness'; that have moved from the molecular to the molar and become 'mute' (Latour 2007: 31). Thus, the imperative here is to focus on assemblages when they are 'relatively weak', that is, either in their early stages when enrolment is in process, or – and this is the more likely option given the challenges of identifying the point of enrolment – when there is 'some sort of crisis in the network as seemingly faithful elements do not do what they are "supposed to" (Michael, 2017: 49). This process of tracing group formation is powerful because, for Latour (2007: 31-3), a number of items are always present and they can be followed in forming research accounts. Firstly, groups are made to talk – there is always a spokesperson who 'speaks for' the group's existence. Such actors define for their group 'who they are, what they should be'; therefore they also define what should not be. Also present is the process of Othering. Thus for every group to be defined, a list of anti-groups is formed. Once the boundary is defined, some actors are 'in' and other actors are not 'in'; thus the group is 'fixed' and rendered manageable and accountable, in particular ways that may, or may not, be serve our interests. Finally, always present are professionals (including, of course, academic researchers) who are mobilized and who are 'part and parcel of what makes the group exist, last, decay, or disappear'.

Action is overtaken

> An ‘actor’ in the hyphenated expression actor-network is not the source of an action but the moving target of a vast array of entities swarming toward it [...]. To use the word ‘actor’ means that it’s never clear who and what is acting when we act since an actor on stage is never alone in acting. (Latour 2007: 46)

This uncertainty ensure we remain focused on who is acting, and from where, when action occurs. For Deleuze and Guattari (1987) a given multiplicity is often included within some kind of ‘totality’ whereas for ANT the reverse is the case: the multiplicity includes forces of totalisation and these forces influence matters in particular ways. The imperative here is to make explicit traces of the ‘hesitations actors themselves feel about the “drives” that make them act’ and keeping these traces as ‘our most cherished treasure’ (Latour 2007: 47-8). Such a task involves allowing ourselves to hear not only those causes well-known in the ‘few words of the social vocabulary’ but also the idiosyncratic terms and practical theories offered by the actors themselves in regards to the full range and nature of mediators involved in social action. This more complete portrayal of how things come to be assembled in particular, privileged, ways in turn brings into our ethnographic accounts the realization that actors can be reassembled in new ways, can allow for new possibilities of action.

Objects too have agency

ANT’s central concern with symmetry encourages ethnographic accounts which broader the realm of action: ‘there might exist many metaphysical shades between full causality and sheer inexistence’. Thus, Latour’s oft-cited injunction that the list of verbs to describe what actors do has to be expanded beyond the one extreme of ‘provide background’ and the other extreme of ‘determine’ to include ‘allow, afford, encourage, permit, suggest, influence, block, render possible, forbid and so on’ (2007: 72). Clearly, this expanded list of verbs immediately expands the potential narratives of how inequities are quietly perpetuated in educational settings. This in turn means that researchers need an extended range of tools; the research imperative here is to devise techniques to allow both humans and non-humans to tell their stories: ‘objects, no matter how important, efficient, central or necessary they may be, tend to recede into the background very fast [...] and the greater their importance, the faster they disappear’ (Latour 2007: 80). Where do we cast our eye? Towards sites of innovation as an opportunity to view translations in process: these often appear in policy texts, meetings, plans, trials, policy pilots and so on. Researchers can also turn towards moments when what ‘normal’ in practice begins to appear exotic by virtue of distance in learning, space or time; the equity insights gained from education in the context of COVID-19 are illustrative here. There are opportunities for non-humans voice where accidents and breakdowns render visible what objects do when they ‘break other actors down’. Archives can be used to bring the ‘receding objects’ of the past into our current explorations, a particularly pertinent technique in the context of New Zealand given the intergenerational trauma that has come together given consistent breaches of the Treaty of Waitangi which, only now, is becoming central to understandings of how education should function in a bi-cultural context. Finally, we can draw on fiction to bring voice to those things which are commonly considered mute in the ‘real’ world (Latour 2007: 80-82).

Matters of fact or matters of concern

The fourth source of uncertainty turns research towards a focus on ‘matters of concern’. In their seminal text, Latour and Woolgar (1986) draw on ethnographic research to present a thick description of the ways ‘facts’ were fabricated in a scientific laboratory: from desks as

hubs of productive units, by way of inscription devices where objects of interest are progressively transformed into texts which are then taken up and used by others, thereby increasingly becoming 'real'. In the process, the precarious process by which the fact was fabricated, fades and is muted. This is not to say that facts don't exist; the fact of disparities in educational achievement in New Zealand, and beyond, very evidently do exist. Instead, the foregrounding of 'matters of concern' is an invitation to eschew premature notions of indisputability about how things are:

> For too long, objects have been wrongly portrayed as matters-of-fact. [...] They are much more interesting, variegated, uncertain, complicated, far reaching, heterogeneous, risky, historical, local, material and networking than the pathetic version offered for too long [...]. 'Facts are facts are facts'? Yes, but they are also a lot of other things in addition. (Latour 2005: 19)

Rather than accepting facts are only and always indisputibly facts, descriptions of the necessary work that goes into sustaining a given fact facilitates awareness of a broader array of possibilities, and a wider arena for interventionary action. For Latour 'the critic is not the one who debunks but the one who assembles [...] the one who offers the participants arenas in which to gather' (Latour 2004: 246). Thus matters-of-concern focus on a reframing of politics away from a critique of ideology to a transgressive, ontological politics.

Writing risky accounts

The importance of writing is pivotal to ethnographic research. ANT reminds us that research texts themselves must allow the process of assembling the social to appear; in this approach objective accounts are achieved through actors being scrupulously followed 'all the way to the final report': our reports, in whatever form they are presented, must make apparent the 'string of actions where each participant [human and non-human, subject and author] is treated as a full-blown mediator' (Latour 2007: 128). The challenges of devising research accounts that convey the 'flickering' nature of performance (Law 2004) are now well-rehearsed; McLean and Hassard (2004) suggest the best that can be achieved is 'fractional ways of "knowing" and "telling", ways that allow multiple entrypoints to multiple worlds. These challenges are rendered more complex when non-humans are granted symmetry. If our agenda is also one of social justice, then the writing of risky accounts takes on another degree of complexity and commitment, one that openly and explicitly rallies the troops – human and non-human – and foregrounds how these actors allow, afford, encourage, permit, suggest, influence, block, render possible, forbid (and so on) the actions of others, for particular diverse ends. These risky accounts may demand new authorial skills, and new ways of knowing and telling. There is no 'right' way, no form of discourse or literary technique: the right way, form or technique is that which enables us to get as close as we can to adequately the limits and possibilities that we evoke through our ethnographic efforts. In earlier work I have suggested that 'this injunction holds even if, perhaps most urgently if, this means transgressing the "permissible" academic forms which entrench what is already argued to be "known" (Kamp, 2013: 63)

Conclusion

> The concepts 'molar' and 'molecular' are not categorical and must not be confused with large and small, or whole and part. There is no whole that appears at the end of a process of assemblage, there is no end to the process. The molar too is a multiplicity,

> albeit a 'disciplined' one (Massumi, 1992: 55). It may be 'grasped as a whole', but it is not a whole; the sense of unity exists only from the forms of expression to which the whole is subjected from exterior agencies, the signifiers of The World As We Know It. (Kamp, 2013: 102)

In this paper I have suggested that The World As We Know It is a world that is evidenced by social injustices, not least in the context of education. Certainly, this is the case in New Zealand where – despite valued cultural narrative of 'freedom, rights and peace', 'environment' and 'the people in New Zealand' – educational inequities continue to persist. This persistence is despite sustained, research-informed, attention by government. Over recent years I, along with others, have increasing appreciated the potential of new materialist approaches in general, and ANT in particular, to understand how educational inequity, and its twin, educational privilege, have been assembled as facts; as something to be concerned about but perhaps, for those who do not live with the intergenerational consequences of those facts, to come to accept that this is just how the world is. Over recent years, in formally declaring an agenda for change, Prime Minister Ardern's centre-left governments initiated the *Education Conversation* of 2018-2019. Comprising a comprehensive consultation process involving stakeholders across New Zealand, the Education Conversation was to form the platform for 'significant changes being proposed to almost our entire New Zealand education system', and to develop a vision for 'the future of education in Aotearoa for the next 30 years' (https://conversation.education.govt.nz/). This programme of work included a review of *Tomorrow's Schools*. The resulting report *Supporting All Schools to Succeed. Reform of the Tomorrow's Schools System* (Ministry of Education, 2019: 5-6) put the position that:

> Our system is currently designed so that schools largely operate as autonomous, self-managing entities. In practice, this means that they frequently operate largely on their own, under increasing pressure, and often with slow and uneven transfers of professional knowledge, skills, and best practice. The result is wide variability in learner/ākonga outcomes across and within schools/kura. The nature of the relationship between schools and central government is also highly variable, and trust needs to be rebuilt throughout the system. This document outlines the Government's approach for the reform of the governance, management, and administration of the schooling system. This involves a reset from a highly devolved, largely disconnected, and autonomous set of institutions, to a much more deliberately networked and supported system that is more responsive to the needs of learners/ākonga and their whānau.

The potential of this opportunity has, unsurprisingly, be overshadowed to some extent by the urgent imperatives for education brought about by COVID-19 as an actor. As yet, we do not know if, once and for all, these changes across the entire system of a small nation state might be able to mediate inequity in a manner that is in keeping with New Zealand's bi-cultural commitments, now and into the future. As educational researchers, I argue that an 'permissive' gathering of what is will not maximise the potential benefit of our role as actors in the system. I am suggesting the more provocative 'mustering' should become our ethnographic discourse – a call to arms for a battle that enables systemic change and an understanding of how to maintain that generative assemblage for the benefit of all students and families/whānau, all teachers, to the greater good of us all.

5543 words

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