

Investigating research power: networks, assemblages and the production of 'big' social science

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Introduction

How does change occur in dynamic and apparently voluntaristic systems? In particular how are some changes effected and others not? What establishes a seemingly irresistible 'direction of travel' in an intellectual field and with what implications and consequences? Much has been written over recent years about the pressures of neo-liberalism and managerialism on the academy, and the move by government to recruit educational and social research to the production of a better prepared workforce for the so-called 'knowledge economy'. But how are such pressures manifested, understood and realised in action? Significant literature in the field of governance and policy analysis argues that pressures should not be perceived as some sort of external force, but rather need to be understood more dynamically and investigated by reference to the mundane and routine practices of particular fields of endeavour (Ball 2012, Dicken et. al. 2001, Lemke 2012, Rizvi and Lingard 2010). This paper takes such advice as a prompt for some initial explorations of how and why new models of social science seem to be being produced at the present time. The paper is particularly located in, and grows out of, the field of educational research, but uses this more as a starting point, rather than a detailed context, to reflect more generally on policy developments in the organisation and funding of social research. The paper does not claim to be exhaustive, but rather represents an attempt to indicate the sorts of processes and activities which should feature in an analysis of how an apparent consensus is produced at a particular point in time.

Educational and social research in general, qualitative approaches to educational research in particular, have been under very specific attack for fifteen year or more (Hargreaves 1996, Tooley and Darby 1998, Blunkett 2000, NRC 2002, Goldacre 2013). Criticism is manifested in different ways, and with different levels of severity, in different countries and different disciplines. In the USA the situation became so acute that a recent review talked in terms of a

“major earthquake” hitting educational research (Walters, Lareau and Ranis 2009, p. 1). The pressure derives from concerns about the quality and the utility of social and educational research more generally, not just concerns about qualitative approaches (c.f. Hillage et. al. 1998, Blunkett 2000, Oakley 2000, 2003, Frederiksen and Beck 2010, Yates 2004). It also derives from an increased government focus on value-for-money in research, and how social research might better serve social policy (Torrance 2011).

This paper takes these pressures being exerted on educational and social research, particularly qualitative and critical approaches to educational and social research, as a starting point. It then focuses on a key trend – the development of large scale concentrations of research power – ‘big social science’ – to address the supposedly ‘big’ social issues of our time – sustainable economic development, health, well-being and aging populations, globalisation and security, and so forth. The paper seeks to situate these pressures and this trend in a wider context of social and political activity, in order to explore how intellectual change is accomplished in the field, and to begin to identify what spaces there may be for alternative visions of how critical qualitative research can be located and conducted. The paper is a first attempt to illustrate what an approach to investigating and understanding the production of ‘research power’ might look like. It identifies the need to investigate the politics of research but seeks to understand this as a set of dynamic, inter-related practices – each element interacting with, and delineating the possibilities for, other elements. The paper sets out a framework for thinking about how research ideas and activities become operationalised as practices; practices which are located in institutional processes and procedures and legitimated by various forms of reification including policy documents, guidelines, textbooks, even, in some cases, legislation, such as the writing into law of specific research methods (e.g. NCLB 2001). The paper treats these constellations of activity and reification as ‘assemblages’ whereby people, ideas and artefacts interact to privilege particular assumptions about forms of research, over others.

There are various different theoretical approaches to understanding assemblages or the dynamic emergence of systems of thought and activity. Systems theory itself asserts that causality is not linear, rather each part affects the whole and the system evolves in interaction with itself and its environment (cf. Zittoun et. al. 2007). This certainly reflects the fluidity of complexity but perhaps pays too little attention to issues of power and material interests in particular outcomes. Actor Network Theory investigates relationships, associations and

mediations between human actors, ideas, artefacts and materials (Latour 2005). Again this reflects the complexity of practice, including the limits to practice, but perhaps not how those limits come to be understood – why some mediations seem more influential than others. Deleuze and Guattari emphasise the idea of immanence and emergence in the unfolding of events, and also draw our attention to the affective and even the visceral in the way in which different actors might respond to particular issues or events (Deleuze and Guattari 2004, Deleuze 2004). Foucault traces the ways in which power circulates in social systems, it is not simply exerted, and as such indicates the ways in which we are all implicated in the operation of research assemblages and research practices (Foucault 1977). What each of these approaches to the analysis of human action emphasises is the dynamic nature of the ways in which particular intellectual and material settlements are reached. They highlight the inter-relation of human agency; artefacts and materials including symbolic resources such as the reifications of policy documents, procedures, practical guidelines, etc; and the recursive interpretations and mediations of actors' understandings of these procedures and practices *in situ*. Thus the constellation or assemblage of particular forms of knowledge and practice is both produced by our actions but also significantly produces them as we seek to pursue our research interests in the context of this restless but also constantly coalescing set of circumstances. What is distinctive about these latter theoretical positions (i.e. apart, perhaps, from systems theory) is that they assume a flat, rather than a hierarchical, ontology or logic, where structures and events emerge out of movement, fluidity and relationships, though these in turn feed back into the development of the system. Such theorising carries implications for methodology and for policy analysis, since it is not that one form of reification, policy documents for example, somehow stands apart from, or over, other activity in some determining fashion, but rather such reifications are interpreted and realised in action while also, in so doing, becoming a more or less important point of reference for such action.

With respect to the production of the current pressure on qualitative educational and social research, key elements over the last ten to fifteen years include:

- i) an increasing emphasis on the relationship of research to policy and utility;
- ii) the move towards research selectivity and concentration – with research funders, particularly governments, seeking value for money and encouraging interdisciplinarity, networking, collaboration, and the increasingly ubiquitous idea of 'partnership';

iii) a related emphasis on developing research quality by privileging particular methodologies and the role of capacity building in the production of a trained (compliant?) research workforce;

iv) partly as a result of the above, partly as a driver of it, the treatment of science in general, social science in particular, as an investment by government in the service of a productive economy and healthy and efficient workforce, rather than, for example, the independent international pursuit of knowledge for its own sake, or as a generally available intellectual community resource for democratic debate and development.

These trends have been manifested through:

a) the critique of the quality and utility of educational research, and social research more generally;

b) the privileging of Randomised Controlled Trials (sometimes also known as randomised field trials) and mixed methods research (MMR), including in the USA via legislation (see Goldacre 2013 for a recent policy intervention in the UK; Walters, Lareau and Ranis 2009 for accounts of the Education Sciences Reform Act 2002, No Child Left Behind 2001, and Reading Excellence Act 1999);

c) attempts to tie funding to particular definitions of the national interest e.g. Cantor & Smith (2013) attempting to restrict NSF funding (see also Wilson 2014); I will explore similar issues in the UK, below;

d) selectivity and concentration of resources;

e) the development of capacity building and research networking to provide a ‘trained’ workforce to pursue the above agenda.

How do each of these activities get produced and accepted as ‘the right thing to do’? There is not space here to explore all of the issues listed above. To do so would probably require a book-length treatment of the field, and indeed, some such attempts to cover some of these issues have already been produced (Baez and Boyles 2009, Lather 2010, Walters, Lareau and Ranis 2009). For the purposes of this paper, I take one example – the concentration of research resources and the development of a rhetoric of collaboration - to begin to work through the idea of an assemblage. How is it that scholars’ activities, institutional processes, funding agency procedures and government policies interact to produce collaboration and concentration? And with what effects and consequences?

As noted above, a particular feature of much current debate is the idea that networking and collaboration across research teams and disciplines is vital for addressing the large scale 'big issues' of our time - sustainable economic and environmental development, globalisation, migration and international security, health and well-being, aging populations, and so forth. The argument, certainly from government, but also from many within the social science community itself, is that these issues demand cross-disciplinary and multi-institutional collaborative research and development in order that such challenges can be properly understood and solutions produced. No single discipline, no single research team is any longer capable of addressing the multi-faceted nature of the challenges that we face.

A second key feature of current debate, or, perhaps more accurately, of government responses to the debate, is the push for selectivity and concentration of research resources, certainly in the UK, but also internationally. Governments around the world are seeking better value for money from their investment in research and this has involved restricting and focusing resource allocation. For there to be enough 'big resources' available to support 'big social science', those resources have to be concentrated on fewer, bigger, programs and collaborative projects. As with the move towards more networking and collaboration, the concentration of research resources also carries implications for critical qualitative inquiry

Research concentration and collaboration in the UK

Selectivity and concentration of research resources are particularly being pursued in the UK. The Conservative dominated coalition government is cutting public spending in the wake of the 2008 banking crisis and global recession; so there are fewer resources available for research than might otherwise have been the case, and selectivity and concentration have become even more severe in the UK over the last two or three years. Concentration of research is effected both through focused core allocations from the higher education funding agencies and through highly competitive bidding to research councils and charitable foundations. Success leads to further success and to relatively few universities securing the overwhelming majority of available funding. This in turn produces the issue of universities seeking research funding first and foremost for their own corporate survival, rather than for the public benefits that may accrue. It also leads to social research becoming part of a nationalized approach to managing national social problems, rather than, for example, being part of an international (scientific) community pursuing better understanding of the nature of social issues and what produces them.

Funding agencies and individual universities are now concentrating resources on fewer research units and programs, and are taking decisions to develop a 'big science' model of social science. This is being pursued by funders supporting fewer, larger projects, with explicit policy encouragement for researchers to develop cross-institutional, mixed method approaches. Thus issues such as health and well-being, or sustainable economic development, are being presented as part of a common-sense, taken-for-granted trade-off of government funding in exchange for social scientists serving policy. Critique, diversity of perspective, and the insight into complexity which detailed qualitative studies can provide are potentially being marginalized. Social science is being reconceptualised as a technical service to government rather than developed as a democratic intellectual resource for the community.

Funding universities

Over the last 10-15 years or so there has been increasing policy interest, certainly in the UK, in concentrating research funding in a select, few, centres of excellence. The argument is that global competition is intensifying for research excellence and the economic benefits which may flow from this. Moreover research is expensive and the best research is very expensive, especially in the natural sciences, engineering and technology with high laboratory and equipment costs, thus concentration will afford economies of scale. Additionally, arguments are advanced about the relationship of critical mass to research quality and thus the need for concentration of research activity into bigger multi-disciplinary teams; in turn, social science follows the lead of natural science. It is now almost axiomatic that single, individual scholars, or even small groups, cannot produce high quality research. A key Parliamentary White Paper (i.e. a policy statement framing legislation) which underpinned the development of research selectivity in the UK argued:

Research...is central to improved growth, productivity and quality of life. This applies not only to scientific and technical knowledge. Research in the social sciences . . . can also benefit the economy. . . . But competition is fierce . . . we need to think carefully about how research is organised and funded...The challenge...is to make...sure that research funding is allocated, organised and managed effectively . . . [] . . . by focussing resources . . . on the best research performers. . . . We therefore intend to reward research that is more concentrated and better managed. (DfES, 2003, pp. 23–29)

Since 2010 university policy and funding has been located in the UK government department of Business, Innovation and Skills (BIS) – evidence in itself of where current government priorities lie. A recent BIS White Paper continued to emphasise the theme of economic investment and research concentration: “we intend to maximize the impact of our research base on economic growth” (BIS 2011, p. iv). It went on:

To compete effectively the UK must harness its strengths in...research...and its expertise in areas such as design and behavioural science... (BIS 2011 p.6).

As Rizvi and Lingard (2010, p. 6) note: “Policies...proffer solutions to the problem constructed by the policy itself”. In essence the White Paper argues that investment in research should be oriented to those areas that promise most economic return, with “behavioural science” being deployed to understand and change people’s behaviour in relation to key threats to economic development such as poor health and global security. Moreover the White Paper goes on to assert that major social and economic challenges “can only be resolved through interdisciplinary collaboration” (p.20) and thus government will “actively support strong collaborations” (p.8) across disciplines and institutions. Research, including social research, will be marshalled and directed in the national economic interest.

Such policy discourse then sets the tone for the activities of intermediary agencies such as research funding councils and individual universities. While individual research councils can set their own agenda, their budgets derive from government (BIS) and funding calls are unlikely to stray too far from policy imperatives. Similarly universities, while independent, must compete for specific forms of funding under common national rules and thus common institutional structures of research prioritization, monitoring and compliance emerge across institutions.

The general research allocation which UK universities receive from the Higher Education Funding Council (HEFC) is based on subject-by-subject quality ratings derived from an accountability exercise originally called the Research Assessment Exercise (RAE), and now known in its current iteration as the Research Excellence Framework (REF). As a result of these exercises funding has become highly concentrated in historically elite institutions, with, for example, only four universities receiving 32% of all HEFC research funding in 2009-10, and 25 universities receiving 75% of funding (out of 120 universities in the UK, Aston & Shutt 2009; see also Torrance 2006 for a longer account of how the RAE/REF operates).

Funding Social Science

Social science research is funded in the UK by the Economic and Social Research Council (ESRC). In principle the ESRC is an ‘arms length’ body, independent of government, allocating awards for excellent social science research in response to competitive bids refereed by peer review. However all research council funding derives from government (via BIS) and as such is clearly influenced by government priorities. ESRC policy and priorities thus reflect government priorities but in turn probably shape the content of the social science research agenda much more directly than general government policy statements. Far from being an arms-length ‘buffer’ between government and social research, the ESRC has become more of a conduit from the former to the latter. ESRC policy documents and program calls form a key part of the ‘assemblage’ that scholars work with, respond to, and attempt to appropriate and operationalise in pursuit of their own research interests. Of course, there are many intermediary processes and activities, with ESRC officials seeking to maximize funding available in difficult times, in return for responding to government priorities. Likewise peers review proposals on merit (in-so-far-as peers, who are also competitors, *can* review proposals on merit) but these proposals have already been produced in response to priority areas and specific funding calls, and of course the reviewers read them in light of their knowledge of these calls and priorities. Intimations of what is ‘likely to be funded’ circulate and feed off each other to produce a particular context for proposal-writing and proposal evaluation.

The ESRC works within the context of an overarching cross-research council strategy. There are seven research councils in the UK, distributing funds across the natural and social sciences, humanities, and medicine. Each council has become progressively more managerial over recent years, not simply responding to bids from the scholarly community for funding, but actively shaping the agenda around which bids can be made – establishing priorities and issuing specific calls for proposals, as noted above. A central core of permanent administrative staff, along with key senior academics, develop and disseminate research policy in their respective fields. Their overarching body – Research Councils UK (RCUK) – in its “Strategic Vision” for 2011-2015 argues that:

Public investment in research is an investment in the nation. It ensures...a productive economy, healthy society and ...a sustainable world...[]...Our research will contribute...to enhancing economic growth...[]...we will...steer collaboration

amongst research organizations...leading to greater research concentration...[
]...Focusing research to produce impact for a productive economy, healthy society
and a sustainable world..." (RCUK 2011, pp. 2, 3, 4 & 6)

It is interesting to note that the document refers to the work that it funds as "*our* research", and to what "*we* will" do – indicating very powerfully the way in which RCUK perceives the relationship between research councils and individual researchers and research groups. The agency does not so much see itself as an intermediary between government and independent research(ers), supporting the work of the broader scientific community, but rather as a sponsor with implicit ownership over the knowledge produced. Again, as Rizvi and Lingard (2010 p.60) observe, citing Sennett (2004):

‘we’ is a dangerous pronoun, excluding at the same time as it includes. ‘Our’ is another first person collective pronoun which can do interesting discursive work in a policy text

In turn, the ESRC’s “Strategic Plan 2009-2014” is titled “Delivering Impact Through Social Science”. Its associated “Delivery Plan 2011-2015” states:

The ESRC is...identifying and addressing key societal challenges and co-ordinating the national social science research infrastructure...we will:

Align and shape our strategic research investment in three priority areas:

Economic Performance and Sustainable Growth;

Influencing Behaviour and Informing Interventions; and

A Fair and Vibrant Society...

[We will] Focus our resources on longer, larger grants...

Invest in future leaders...

Concentrate PhD training in the best centres... (ESRC 2011 p.2)

Total funding available is restricted, so longer, larger grants also means fewer grants being awarded, bringing yet further concentration, to go with the concentration of HEFC research funding, and selective recognition of PhD training for ESRC support.

Collaboration and Capacity Building

Large-scale interdisciplinary and inter-institutional collaborations and networking in social science are thus being encouraged and actively developed. Scholars interpret, mediate, and in so doing bring into being such changing reifications of the field. In the UK an interesting

example of this is the ESRC's Teaching and Learning Research Program (TLRP) which ran from 2000 to 2012. The program was originally conceived and developed in the context of high profile criticisms of the quality and utility of UK educational research (Hargreaves 1996, Hillage et. al. 1998). In many respects TLRP can be seen as a response to such criticisms and thus a major intervention in the field. However, it is not that significant amounts of new funding were made available. Rather, funding was diverted from what were general research allocations to Education as a discipline (via HEFC and the RAE) described above. These funds were channelled through the ESRC's competitive peer review system into a linked program of projects intended to improve the overall quality and output of educational research. Large scale cross-institutional and mixed methods collaborations were encouraged, with 52 projects being funded over 12 years along with a range of other network seminars, training opportunities and cross-project thematic initiatives (Pollard 2007; see also www.tlrp.org). Thus individual scholarly research in Education which might have been funded via general HEFC RAE allocations was substantially supplanted by this large scale collaborative program. In many respects the program raised the visibility of educational research in the UK and presented a successful profile in the face of continuing criticisms of the field, but it did so by embracing the rhetoric and rationale of large-scale collaborative projects. As such it can be understood as another element of the seductive assemblage of scale and collaboration – how could researchers not support a program that seemed to be recovering some of the reputation of educational research, a program with which researchers felt they could not afford not to engage.

The program was accompanied by various capacity-building initiatives organised by the TLRP Research Capacity Building Network (RCBN, Rees et. al. 2007) and spawned others including the Applied Educational Research Scheme (AERS) in Scotland and the National Centre for Research Methods (NCRM), funded by ESRC to support research capacity building across the social sciences. There is not space here to rehearse all the reasons behind these initiatives and the implications and ramifications of them (see Carmichael 2011 for further exploration of the phenomenon). My point for the moment is to illustrate that concentration of research resources, coupled with large-scale collaborative programs of research projects, also provides the context for and link into networked programs of capacity building and professional development for researchers. This provides a context for the development of a cadre of professional social researchers, oriented to funded policy priorities, and outside of or certainly additional to what might be termed the traditional scholarly route

of disciplinary PhDs and individual monographs. Somewhat similar developments can be seen in the USA via guidelines and training workshops provided by professional associations such as AERA and moves to standardise research training (Walters, Lareau and Ranis 2009). The response to criticisms of quality and utility has been to produce policies and guidelines oriented to 'quality control' (e.g. AERA 2006, Ragin et. al. 2004), thereby validating the legitimacy of the criticisms and accepting responsibility for changing the nature of scholarship in the field. The production of new textbooks in long-standing, but newly prominent fields such as Mixed Methods Research might be said to be a manifestation of the same phenomenon (e.g. Tashakorri and Teddlie 2003, 2010). What was once an unremarkable approach to research design, has become a major intervention in the training of social researchers.

Collaborative research is also mandatory for projects that apply for funding from the European Union (EU). Collaborations normally involve research teams from at least three member states, and ideally more, and must include combinations across the established high GDP economies and those from the poorer, newer accession countries in the south and east of Europe (cf. Zittoun et al 2007). Recent work in *American Sociologist* confirms this trend in the USA. Hunter and Leahey (2008) analysed articles published in leading American Sociology journals between 1935 and 2005. They report that that "collaboration rates among sociologists have increased dramatically" (p. 303) with almost 50% of articles published between 2000 and 2005 being co-authored. They further report that "Not only has the rate of collaboration increased over time but the average number of authors per article has also risen" (p.297). They conclude that this represents a "major shift in work organisation" (p.290). They observe that this shift reflects many of the trends identified above including links between science, public policy and economic activity, and note that "collaboration...is now normative and ubiquitous in most scientific disciplines" (p. 290) with 95% of articles in major science journals being co-authored. They clearly see this as the way that research and publishing will continue to develop in social science as 'big social science' becomes the norm. Moreover, Hunter and Leahey also identify a marked association between collaborative publishing, empirical data gathering using quantitative methods and large scale secondary data analysis. They note that in 2005 "57% of quantitative articles were co-authored, compared to only 31% of qualitative articles" (p.299) and suggest that "papers employing quantitative methods, which are more amenable to the division of labour, are more likely to be collaborative" (p.292). They further note that collaboration is associated with co-

authors being affiliated with higher prestige institutions: “institutional prestige of co-authors [is] higher than that of sole authors” (p.301). Clearly these findings carry some profound implications for qualitative and particularly critical qualitative work, as the dynamic assemblage of policy, funding, prestige and individual decision-making about research topics and career development privilege certain topics and ways of working over others.

Implications and alternatives

In terms of our theoretical interest in assemblage therefore, the implication of these developments are very clear:

- i) The overall operational milieu of social research is now infused with ideas of national economic competitiveness and the need for large-scale collaborations to secure resources for continuing intellectual work;
- ii) This milieu is permeated and delineated by the reifications of government policy, funding council guidelines, professional body guidelines, specific program funding calls, institutional policies and priorities, new courses and textbooks responding to calls for the development of new forms of methodological expertise, and so forth;
- iii) Scholars pursue their research interests as best they can but in an institutional environment responding to overall government policy and the need to earn additional (research and consultancy) income.

Thus smaller scale critical qualitative inquiry is likely to be marginalised, both in relation to what is considered to be high quality/high status work in the academy and in relation to impact and utility more generally – it simply won't fit within the 'assemblage' of this re-constituted taken-for-granted social scientific practice. It is not that qualitative work will disappear; governments will always require detailed knowledge of social issues and how policy is understood and operationalised in action. Thus for example, Valerie Caracelli (2006), in an article written from the perspective of the US Government Accountability Office, argues for the inclusion of qualitative methods alongside the use of surveys and randomised controlled field trials “to assure contextual understanding” (p. 84). She states that: “there has been an acknowledgement about how ethnographic studies can inform agency actions and how it can be used to study culture in organisations” (p.87). The issue, rather, is to what purposes might qualitative research be put? Qualitative work, in order to continue, is likely to be conceived and proposed either in terms of much larger scale longitudinal ethnographic investigations (no bad thing, but not the same as a small scale critical inquiry),

or (and much more likely to attract funding) as part of a large scale, cross disciplinary and cross-institutional mixed methods research design. In turn, with respect to the social relations of research, opportunities for early and mid career social scientists to develop their own intellectual trajectories are likely to decrease as areas of strategic investment are defined by funding agencies. Large scale grants are likely only to be awarded to senior researchers who have a track record of managing and ‘delivering’ on previously funded work, while early career researchers must now attend to bidding for research grants, especially in areas of applied research, and look to secure collaborative funding with more senior colleagues. This will come to comprise the new career topography of social research – an ever-developing assemblage of apprenticeship and accommodation, rather than of curiosity, criticality and diversity.

What might alternatives look like? Can concentration of research resources and collaboration across research activities be thought and practised differently? What might intervention in the process of assembling assemblages look like? Part of the answer obviously resides in conferences such as ICQI and networks such as CCQI. But part of the problem is that intervention is not a single, intentional, agential act. The theoretical orientation of this paper proposes that intellectual positions and research practices are the product of a dense and complex set of inter-related activities including critique and resistance. Critique may even be thought of as the safety valve that allows the basic machinery to continue to function. Nevertheless ‘concentration’, ‘collaboration’ and ‘partnership’ are concepts and activities that can be interpreted and operationalised in different ways. While the idea of concentration may be irresistible in current circumstances, the practice can take different forms with different groups and collectives. Thus ‘concentration’ of research resources might be thought of as a concentration of intellectual, not just material, resources, orchestrated via internet sites, different forms of textbook production, blogs with comment threads, and face-to-face meetings such as ICQI which seeks to produce something more than the sum of its parts. In turn collaborative research can include multi-faceted, related and interlocking inquiries that are not necessarily dependent on large scale funding. Similarly collaborations and partnerships can be with a wide variety of professional and community groups outside the academy, separate from and additional to other scholars in other universities.

In some respects such ideas and activities simply reinvent the notion of the ‘invisible college’ and how different ‘schools of thought’ and indeed disciplines and political and professional

associations emerge and are sustained: networks and assemblages by another name, before such practices were identified, reified and valorised by policy. But equally something new and different might be at work, or at least brought into being, by collaborating with a wider range of groups across a wider range of intellectual and geographical territory. There is something puzzlingly old-fashioned about the idea of a physical ‘critical mass’ and the policy impulse to concentrate resources in specific people and institutions. Obviously it is in the material interests of such people and institutions to support such policy and seek to benefit from it but it inevitably closes off other ideas and sources of innovation and creativity. Exploring the notion of a ‘distributed critical mass’, a ‘distributed concentration’ of research resources, including new intellectual ideas and contexts of community action, might be one way of reorienting the development of our contemporary research assemblage.

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