

What is a research platform? Mapping methods, mobilities and subjectivities

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Abstract

This article provides an account of the question of method as it relates to collective modes of research organised, conceived and produced through the interplay between digital technologies of communication and offline strategies of investigation. It does so by exploring the orchestration of research platforms, which are mediating devices that constitute the production of knowledge across a range of geocultural settings. In the context of a project entitled Transit Labour: Circuits, Regions, Borders, the article maintains that research methods must contend with the ideological, technological and economic instruments that condition knowledge production at the current conjuncture. The platform, we argue, operates as a medium through which research, labour, subjectivity and knowledge are shaped in ways specific to hardware settings, software dynamics and the materialities of labour and life.

Keywords

digital methods, infrastructure, labour, logistics, platform research, software

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This article explores a notion of platform as method that has its roots in the worlds of art and activism (see Hands, 2013). Platforms organise. They bring bodies and brains into relation. While they require highly distributed formats of digital communication and translation, platforms also involve necessary connection with offline worlds. Platforms bring a strategic logic to network cultures that otherwise tend toward tactical short-termism. They encourage practices of collaboration that hold the potential to invent new institutional forms. When multiplied across time and space, platforms connect seemingly disparate events along circuits of experience and experimentation. The work of platforms at once tests and produces concepts. Platforms address contingency and movements as constitutive methods of analysis and organisation.

The article asks how the organisation of a platform can serve as a research tool that at once registers and mediates the movement of people and things along global supply chains. It takes as its focus the project *Transit Labour: Circuits, Regions, Borders*,¹ which investigated the changing material and conceptual connections between labour, mobility and subjectivity in the context of Asian capitalism. More specifically, the project asked how the velocity of cultural and economic development in the Asian region plays out in the lives and movements of people working within fields of media, knowledge, logistical and creative production. Furthermore, it examined how the mutations of Asian capitalism have affected the less visible information and service industries enabling the production of high-end creative output. Central to *Transit Labour* are concerns regarding the precariousness and mobility of creative work: the material displacements and inclusions of bodies and social formations along the lines of cultural and economic demand, the narratives of growth attending experiences of fragmented un/under-waged work, the composition of subjects within these ambivalent and shifting geographies of labour, and the aspirations and desires that underpin an era of 'supply chain capitalism' (Tsing, 2009).

Transit Labour: Circuits, Regions, Borders

The circulation of bodies and brains comprises one of the privileged spaces of politics today. This was the premise the *Transit Labour* project set out to investigate. In doing so, the question of how movement, technology, industry and subjectivity are mediated quickly became apparent as a problematic of both method and analysis. How to grasp the massive scale and operation of global capitalism as it registered in particular instances within the sites of research? In terms of method, this required a collective approach to research that more typically assumes the monastic scholar sequestered in their office or sole anthropologist at large in the field as the primary subjects of knowledge production. These two latter approaches to research have all but surrendered their viability as conduits to knowledge as a result of an intensification in processes of globalisation coupled with the penetrative force of neoliberal policy regimes. In the contemporary university, for instance, it is an increasing challenge to find time free from teaching, management and external fund raising activities to devote to sole-authored scholarship or concerted field work (Edu-factory Collective, 2009; Moten and Harney, 2004). Perhaps in a few elite schools, there is still the possibility to pursue what George Marcus (2008: 3) calls 'anthropology's professional culture of method' by passing a year in the field. But for most workaday academics such opportunities have become elusive, even as chances for

travel have generally increased, and a methodological emphasis on empirical investigation has emerged in the wake of theory's decline. How to conduct rigorous and ethical research when one's time in a site is limited to a couple of weeks, or perhaps two or three lightning visits? In our experience collaboration with local researchers is vital. But this raises questions of communication, translation, organisation and the distribution of resources. The platform method is an attempt to juggle these competing, and sometimes conflicting, factors.

Traversing three cities – Shanghai (2010), Kolkata (2011) and Sydney (2012) – Transit Labour sought to analyse labour mobilities and logistical operations set within and, at times, against the broad conditions of changing Asian capitalism. Each city became the site of a research platform that combined online and offline practices to gather researchers from across the world and bring them into collaborative relation with local participants (academics, artists and activists, as well as union officials, port authorities, factory owners, policy makers and technologists). This involved the organisation of workshops, site visits, symposia, exhibitions, mailing lists, blogs and publishing initiatives. There was a critical emphasis on both the knowledge practices of local participants and processes of inter-referencing between the three cities. Moving across the three sites, the project arranged for some of those who acted as local participants in their home cities to become part of the research process in the other sites. In this way, the platform method developed for Transit Labour highlighted the possibilities and limits for practices of mediating circuits of labour and commodities conducted in a collaborative frame that is sensitive to problems and questions of translation (Buden, 2006; Sakai, 1997, 2006; Solomon, forthcoming) as well as their implications for labour processes and relations (Mezzadra and Neilson, 2013; Rossiter and Zehle, 2013).

The conception and method of a research platform occasioned the invention of a social and technical device through which mediated mobilities were encountered, analysed and, in the case of research practice itself, produced. An important finding of the Transit Labour project, which explored transformations of labour in creative and informational workplaces, concerned the role of logistics in governing labour processes. Empirical research in China revealed how proprietary software systems manage complex supply chains and measure the productivity of workers through real-time KPIs (key performance indicators) (Neilson and Rossiter, 2011a; Rossiter, 2009). In India, a focus on the formation of IT 'new towns' in Rajarhat and Sector V on the peripheries of Kolkata showed how modes of 'primitive accumulation' in the form of peasant labour dispossessed of agricultural economies accommodates the development of infrastructure designed to support IT economies (Dey et al., 2013). Platform research in Sydney on the relation between port operations and the supporting infrastructure of container yards, road and rail transport networks and state planning around intermodal terminals in the city's southern and western suburbs suggested the rise of a new urban formation, namely the 'logistical city' (Neilson and Rossiter, 2011b).

The platform method breaks the methodological divide separating digital humanities (which employs digital methods to study traditional research objects – e.g. computer-aided analysis of literary texts) from digital media studies (which employs traditional social science methods online – e.g. ethnographic studies of social networking). By investigating labour mobilities and the infrastructural implementations necessary for

logistical operations, the research charted new methods for studies of the partial, fragmented and material operations of globalisation. Moreover, the research foregrounded how method is mediated and indeed constituted through the interplay between technological interfaces and social practices of translation.

Platform as activist, artistic and business device

For a brief moment in 2007 it seemed that everything was a platform. A decidedly ubiquitous moniker in the world of tech-marketing, the term ‘platform’ became a substitute for the word ‘product’. The idea was to add an air of strategy and Web 2.0 savvy to the inexhaustible rollout of software solutions and business objects that marked this particular moment in internet history. Indeed, in a pioneering text on business models for Web 2.0, Tim O’Reilly and John Battelle (2005) declared that one of the preliminary principles defining Web 2.0 was ‘The web as a platform’. This declaration did little to clarify the pervasiveness of the concept; the platform, it appeared, functioned as a catch-all notion to designate an intersection of organisation, architecture and communication. To frame a platform technically, it might be understood as something to be built upon. But it has also been used to describe a declaration of principles (for instance, by a political candidate) or a piece of infrastructure dedicated to public discussion. In the computing world its most common definition is as a piece of equipment or computer engineering that runs a particular operating system. But as a term of business jargon, its sense has been deployed well beyond this to describe what one technological consulting company, Platform Associates, calls the creation of ‘an environment of promiscuous integration as a way to accelerate operations, get closer to customers and partners, unlock innovation, and discover efficiencies’ (2006–10).

It is necessary to stress the differences between our appropriation of the platform method and the boosterish employment of the term by advocates of Web 2.0 (Leadbeater, 2008), crowd sourcing (Shirky, 2008) and the like (Arvidsson and Peitersen, 2013). A brief consideration of different varieties of platforms can help to map out the platform as a research method. Aside from its entrepreneurial and commercial proponents, the platform discourse appears in socio-political and culturally oriented sectors, most prolifically within NGO and art-activist worlds, as well as state cultural and research institutions. Our understanding of the term resonates with that developed in activist networks, which consider platforms as social and technical apparatuses through which to experiment with institutional forms in both on- and offline worlds. Long before the term ‘platform’ was associated with Web 2.0, it was deployed in political contexts. The early political tract *The Organisational Platform of the Libertarian Communists*, which argued for a new set of ‘organisational principles and practices’ (Makhno et al., 1926), offers an apt example. More recently, platforms have become a feature of political organisation for social movements, activist collectives and other non-governmental actors. Often crossing into art worlds, initiatives including Global Project, Sarai, Edu-factory, Fadaiat, Transit Migration and the European Institute for Progressive Cultural Policies illustrate the diverse geographies and networks such infrastructures assemble.²

Within technological disciplines and fields the term ‘platform’ was originally synonymous with operating systems, however the acceleration of social networking services

such as Facebook, Twitter, tumblr, Weibo and Renren reconfigured the notion of the platform as a catalysing method for internet user participation, content sharing and clustered organisation. The interactivity promised by the platform through this reconfiguration as social media has been desirable for both commercial and non-commercial actors – that is to say, as is also the case for mailing lists and chat boards, once the architecture is in place less maintenance is required from its providers than conventional websites and forms. At the same time as indicating an increase of user self-investment and self-organisation, reflecting the memes of collaboration and innovation espoused by enthusiasts of Web 2.0 (Benkler, 2006; Lessig, 2008; Shirky, 2010), the platform model decreases remunerated labour. It encourages, and arguably requires for its ongoing existence and relevance, postings and contributions from a range of users who are often attracted by an intense interest in the issues or politics at hand but rarely paid for the labour of their participation. Such principles of self-service and accessibility not only attract rationales of capitalist efficiency but also appeal to the imaginings of open and horizontal structures typical of radical political projects and, in recent history, NGOs and softer statist initiatives. Projects like Transit Labour are not free of this tension and must negotiate it constantly. In the case of Transit Labour, such negotiation occurred not only across the borders that separate those who orchestrated the platform from those who merely participated in it, but also across global geographical and cultural divides.

Although users of the platform discourse and format diverge in their intentions and needs, there are a number of shared objectives that platforms attend to. The back-end production of the platform often features a centralised decision-making, administrative and managerial structure and the commissioning of specialised technicians, designers and writers. However, its evolution changes the terrain of authorship and responsibility. The common tenet of the platform is its reliance on participation and interaction as the primary mode of self-generation: it is constituted by its users, whether in the business sense by its customers, suppliers and partners, or in a more radical sense by its collaborators and experimenters. The environment of reciprocity, knowledge sharing and interrelationality this is designed to stimulate helps to galvanise the energies of participants and thus further substantiates the construction of platforms.

Writing on platforms from within the arts, Olga Goriunova comments that ‘a platform differentiates itself from other networks and sites by a number of the relations it establishes and by those that emerge from within it’ (2012: 2). There is also an affective dimension in the way platforms work, whereby communities and networks of participants develop based on the shared labour of populating and continuing the initiative. Within the creative and activist networks that interest us most, these are some of the elements of the platform method with the most potential. The platform offers an ecology that makes possible the invention of cultural and aesthetic phenomena by opening spaces in which creative praxis and co-conceptualisations can be stimulated and supported. Through the platform, processes can be contributed to, documented and mapped by an elected diversity of users, and the resulting artefacts can be exhibited on the database, responded to and discussed. The capacity of the platform to move across on- and offline contexts also means that these activities have effects beyond the technological interface, which, as Goriunova notes, can ‘transfer the practice onto a different cultural level’ (2007). This was evident in the Transit Labour project as the platform site began to travel

and be accessed by people involved in the offline contexts where the research was being conducted. Various parties, from factory managers in China to peasant activists in India, began to raise questions about the political leanings of the project and these queries, in turn, had to be negotiated with these same actors. That the project site was blocked by the Chinese firewall at key times during the Shanghai platform is indicative of the sensitivity of these relations.

Platform as medium

For sociologist Noortje Marres (2012), online platforms involve a redistribution of methods among actors involved in a collective undertaking of social and cultural research. This seeming democratising effect of digital technology, in which there is also a redistribution of authority and expertise, has some resonance with the net-cultural debates stemming from California and Europe in the 1990s. Informed by social studies of science of technology (STS) and the social anthropology of things via the work of Bruno Latour and actor-network theory (ANT), it is perhaps no surprise that the problematic of power tends to be displaced in such accounts. Although Marres does note ‘how digitisation may be unsettling established divisions of labour in social research’, this intimation of the politics of digital transformation vis-a-vis the distribution of expertise does not extend to an analysis of how power conditions subjectivity and knowledge (2012: 141). Marres claims ‘the *re-mediation* of social methods in digital environments’ is coextensive with the redistribution of methods (2012: 139). Pre-existing social science methods are, then, resituated within the parameters of online digital media in the case of the ‘virtual methods’ approach, which essentially transposes qualitative approaches into online settings (surveys, questionnaires, documentation, ethnographies of users, etc.). Marres instead champions ‘digital methods’, particularly those associated with the work of Richard Rogers and his development of the Issue Crawler network analysis tool and the Digital Methods Initiative (DMI) at the University of Amsterdam (Rogers, 2010, 2013). This approach develops ‘natively digital’ research tools that ‘take advantage of the analytic and empirical capacities that are “embedded in online media”’ (Marres, 2012: 151). One key limitation of such an approach is that its capacity to analyse social, economic and cultural practices is confined by the algorithmic architectures that produce the data sets which provide the basis for a network analysis of issues, discourses and institutions or actors. There is a self-referential tendency, in other words, for the Issue Crawler results to produce a web-based topographical description of institutional-discursive relations which say more (without saying so) about the algorithmic parameters that generated data for visualisation than the material conditions within which issues, discourses and actors are embedded.

As much as these methods that valorise the new empirics of ‘big data’ present an advance on previous digital methods and challenge orthodoxies within the humanities, they tend not to involve an invention of method specific to media formats and algorithmic capacities as they intersect with material conditions in offline worlds. In taking the latter approach, one begins to register how the mediating aspects of method are multiplied as research methods and knowledge production move across research sites and between online and offline settings. Calibration and adjustment begin to define how

collective research is undertaken when the relational capacity of digital technologies (which includes the organising and expressive use of mailing lists, websites, blogs, digital mapping and visualisation tools, Excel budget sheets and even postal mailing lists to distribute digitally generated materials moved into analogue formats) rubs against and possibly even shapes contingency arising from the sociality of encounter in geocultural settings.

In the development of software code, critical theorist David Berry notes how platform studies focuses its analysis of the running of code in relation to hardware, software, networks and their everyday use. There is particular attention to how 'the conditions of possibility suggested by the capabilities of the hardware allow researchers to draw out the commonalities' that drive 'a particular computing platform' (2011: 97). The combination of hardware running code and software that embodies code comprises, for Berry, 'the temporality and spatiality offered by the platform' (2011: 97). We can see here a variation of medium theory, as pioneered by Canadian political economist and communications scholar, Harold A. Innis, and his more celebrated protégé, Marshall McLuhan. Where they studied the material and affective properties of communications media understood as hardware in order to discern societal tendencies and the mediated experiences of individuals, those working in the areas of platform studies and software studies make similar observations with respect to the operation of algorithms, code and software (Berry, 2011; Fuller, 2008; Montfort and Bogost, 2009).

The qualities specific to digital media platforms are further elaborated in recent work by Lev Manovich, who maintains that '*a medium as simulated in software is a combination of a data structure and set of algorithms*' (2013: 207, italics in original). And while 'the same data structure can be shared across multiple medium simulations, at least some of the algorithms will be unique to each medium'. Software, in other words, redefines for Manovich how the concept and capacity of media forms are understood. Less emphasis is placed on hardware, and more on how software models or simulates universes of expression and economies of practice in distinct ways. We would be more inclined to retain some attention to hardware, as this also encompasses the materiality of infrastructure. In logistical operations involving communications and transport, infrastructure holds force within a diagram of relations that include the mobility of labour and the production of subjectivity. Both hardware and software have a bearing on how platforms may be understood and indeed function within the ensemble of research methods. There are specific attributes less at the level of hardware and software, and more in terms of the relation between online and offline activities, that distinguish the Transit Labour platform as method from other methodological conventions found in the humanities and social sciences.

In the case of Transit Labour, there are a number of complexities, problems and ambivalences that characterise the platform method. The first concerns the ambition to operate across different cities and geographical spaces. What kind of methods can be employed for such a transcultural and transdisciplinary project beyond the traditional methods of cultural studies and the social sciences: the stale mixture of discourse analysis and ethnographic interviews, or the zero sum game of dividing all research between the qualitative and the quantitative (as if these are the only options) and then feigning innovation as the attempt to combine them? As John Law writes: 'while standard

methods are often extremely good at what they do, they are badly adapted to the study of the ephemeral, the indefinite and the irregular' (2004: 6). This is particularly the case for a project such as Transit Labour that examines the production of subjectivity and circuits of capital and culture associated with labour regimes that are articulated with global logistics industries. There are problems not only of making the platform worthwhile for the involvement of local participants in each of the three cities (problems that centre on factors such as language, economic exchange, global hierarchies of knowledge production, and local government surveillance of internet sites and research activities) but also of bringing these actors into meaningful interaction through online exchanges.

During the Sydney leg of the Transit Labour project, the research focused on crane rates and truck turnaround times at Port Botany, the city's only container shipping terminal. This occasioned analysis not only of labour practices associated with these particular performance measures but also their implications for traffic management, intermodal infrastructure development, software control of workspaces and the social life of the city (Neilson, 2013). Central to the methodological apparatus developed for this research was a digital visualisation of how these measures had changed over time. Here Transit Labour researchers collaborated with computer scientists and designers to produce an accessible and interactive graphic representation of these changes.³ Part of the difficulty of this kind of research is access to data. Commercial enterprises fiercely guard logistics data due to its value-generating capacities. Data occupies the logistical centre of competition. Indeed, the whole question of data sharing is contentious within supply chain management. In this case, we managed to source publicly available data from the Australian government's Department of Infrastructure and Regional Development. Crucial in the visual presentation of this data was the design of an interactive timeline that allowed users to correlate changes in port operations with global and national events in labour history, legislative settings, software implementations and infrastructural developments. Two points need to be made in terms of method. First, the production of the visualisation itself was a learning process that involved offline interactions with different parties: logistics professionals, trade unionists, port authority officers, computer scientists, software engineers and other technologists. Such relations may well not have been part of the research process without the mediating device of the visualisation. Second, the finished visualisation continued to play a role in this relational mesh, providing a means by which to relate technocratic and software-generated decisions to material conditions of labour and issues of intense social interest such as traffic congestion. Here we see the potential of digital methods when released from the self-reflexive box of analytics and deployed within a platform ensemble that reckons with matter and life in offline worlds.

A key challenge is to communicate the logic of the platform method among participants from diverse disciplinary, social and cultural backgrounds. In our experience, it helps to combine long-term research participants with more recently met participants. In this way, a productive environment of mutual testing of limits or tension is created, where the risk of entrenched practices and dispositions is set against the at times sceptical interventions and queries of more recent project researchers. These difficulties are compounded by the fact that the choice of research sites is often arbitrary, based more on the existence of previous research ties than particularities of culture, labour and

geography. This is a problem familiar to anthropologists of distributed phenomena. As Christopher Kelty writes:

The study of distributed phenomena does not necessarily imply the detailed, local study of each instance of a phenomenon, nor does it necessitate visiting every relevant geographical site – indeed, such a project is not only extremely difficult, but confuses map and territory... The decisions about where to go, whom to study, and how to think ... are arbitrary in the precise sense that because the phenomena are so widely distributed, it is possible to make any given node into a source of rich and detailed knowledge about the distributed phenomena itself, not only about the local site. (2008: 20)

The hope is that the visits of researchers from across and beyond the chosen sites can animate participation in each of the cities. But there is a delicate dynamic in which the costs of transporting researchers across the sites can potentially work against the remuneration of those who might contribute to the project in any one locality. This raises the question of free labour within networked settings that has been explored by Tiziana Terranova among others. For Terranova, there is always a danger in ‘open systems’ that ‘qualitative, intensive differences’ turn into ‘quantitative relations of exchange and equivalence’ that ‘reimpose hierarchical relations at the service of social reproduction and the production of surplus value’ (2006: 33). This danger is further amplified in a project like Transit Labour that operates across the economic, cultural and racial divides that separate and connect Australia, India and China.

That the project, which attracted funding from organisations such as the Australian Research Council and the Asia-Europe Foundation, had the financial resources to modestly reimburse participants did not necessarily provide a way out of this dilemma. This is because these bodies impose restrictions on how funds can be committed, the former in a nationalist frame. There is a need to negotiate these restrictions as part of the platform method. This negotiation, in itself, is part of the ongoing tension between ‘networked organisations’ and ‘organised networks’ (Lovink and Rossiter, 2005). The staging of a research platform cannot and should not be imagined as a means of escaping or avoiding this discord, which is one of the defining conflicts of our times.

Platforms and free labour

Like much of the labour critical to the reproduction of digital economies, the work that sustains platforms is often voluntary and unwaged. The free labour that frequently underpins the population, visibility and maintenance of platforms, both on- and offline, operates within an economy of desire, exploitation and social and cultural capital – one that derives its momentum from the pleasure, valorisation, collective and social knowledge and associated networks composed by participants and users. The complexity of these conditions indicates the necessity to approach an analysis of the labour that goes into platforms from a perspective that is not solely oriented toward issues of financial remuneration but is nonetheless sensitive to the ease with which self-exploitation occurs on the basis of a perceived future gain.

The modes of labour that ensure the production and continuation of platforms cross differential levels predicated on both multi-directional and vertical circuits of command

and organisation – from the labour involved in the conceptualisation and financing, to the specialist labour of the web designers and programmers, to the labour of moderation, management and facilitation. Equally important is the labour of the participants who provide content by uploading, viewing, dispersing and contributing information and opinions, and who engage in mailing lists, chats, dialogue and so on. Certain aspects of this process are essentially hierarchical – the commissioning of the platform, for instance, its aesthetic, layout and design as well as the discourses, thematics and vocabularies of its content are determined by those conceptualising the platform and often funding its construction. Similarly, the programs and software used, and how they are manipulated and customised, tend to follow the particular bias and abilities of the programmers and web designers. These forms of technical and specialist labour are most recognisable within a conventional framework of organisational culture and tend to be those that are remunerated. At the same time, however, given the myriad forms of labour, the contracts or lack thereof for many freelance creative workers and unpaid overtime and social security, it becomes difficult to evaluate any sort of equivalence between value and capital. This is a tendency commonly associated with precarious forms of production which rely on the ‘intelligence, sensibility, creativity and language’ of workers (Berardi, 2009: 192), as well as flexibility and mobility to navigate shifts from secure and long-term employment to more casualised, intermittent, project and cognitively based forms of work.

What also remain invisible are the processes of negotiation and communication underpinning the more visible ‘work time’, which ostensibly culminates in the platform itself (the maintenance of which, again, largely disappears from sight). The culminating ‘commodity’ is the ‘material’ result of the technical labour; the affective labour that intertwines with the technical components is articulated through interpersonal communications of collaboration, conflicts and antagonisms and expectation. These exchanges that take place over technological and corporeal media make up the amorphous majority of labour that goes into the platform, when we consider contemporary labour as heavily contingent on skills that ameliorate cultural and social relations (Lazzarato, 1996: 133). Similarly, psycho-somatic elements of our biological and political existences – stress, the overlapping of work with personal time, workaholism, private crises, mental illness, insomnia and so forth – remain unspoken and are hardly definable under normative understandings of what falls into the category of labour.

It is clear, then, that even for the employed and salaried work that goes into platforms there are aspects that cannot be contained by such identification. This is apparent even before considering the explicitly voluntary and free labour that not only supports but importantly continues the operation of the platform, its dissemination and population. As mentioned earlier, it would be simplistic to claim that the invisible, affective and reproductive labour that perpetuates digital economies does not operate within a field of exchange. As Terranova (2000) has pointed out, these economies work partly on the circulation of other forms of capital including social and cultural valorisation. More utopian Internet discourses such as those of Richard Barbrook (1998) have hailed the relational feedback loops and open source collaborations of the Web 2.0 era as signifying new methods of gift exchange emanating from, and forming, networks of collective intelligence. Such positions contend that the capitalisation of these networks is in some way exterior to the networks themselves. However, as Terranova argues, free labour and

its expression within the digital realm develop through what might be regarded as a peculiar symbiosis with late capitalist labour mechanisms.

Rather than dismiss the potential seen by Barbrook on the grounds that the internet, like any other social field, is saturated by capital, it is far more interesting to explore the ambivalent tangle of aspirations, complicities and valorisation that drives a great many users to work for free. One way to do so is to follow claims such as those of Franco Berardi, who sees the new kind of worker as valuing 'labor as the most interesting part of his or her life', ready to prolong the working day through 'personal choice and will' (2009: 79). Berardi explains this as coming from a loss of pleasure and reassurance in the space of human relations – a 'loss of eros in everyday life', the result of which is the 'investment of desire in one's work' (2009: 80). If we understand labour or work as not only waged labour then such affective registers of work become typical. A large proportion of the free labour that goes into platforms comes from users or participants, more so even for platforms that attempt to traverse on- and offline spaces. What users contribute to the platform is significant: they populate content through uploading and writing blog entries, images, sound, engaging in dialogue on mailing lists, they generate traffic and interest via other networking sites and word of mouth; they build up an online community and node of collective intelligence that is open to further participation and use, and, hence, reproduction.

Users willingly provide the cultural and social labour that goes into the continuation of the platform beyond its technical construction. The potential longevity and popularity of the platform is contingent on the extraction of value from this ongoing labour of self-reproduction. At the same time, this activity sets up new relations between users, forging networks of alliance and collaboration through shared participation. Especially in open source and 2.0 ICTs, users constitute and shape the platforms and technologies they use; the capacity for collective constitution is higher than in traditional communication and information apparatuses. This means that the relationship between self-determined activity and exploited activity overlaps; for example, the way in which open source has been embraced by corporate and venture capitalism and at the same time provides a framework to collectivise resources and knowledge and circumvent the logic of payment for music, film, software, etc., through peer-to-peer practices of sharing and distribution.

What users gain from such exchange and participation is not to be underestimated. In art and activist realms platforms have been a key tool in opening up global networks of communication and organisation. Platforms provide a means to share knowledge, skills and research, to connect to possible collaborators and to propel a sense of immediate solidarity and commons over geographical space and time. Similarly, they provide a model for social networking and self-valorisation, which feeds into an accumulation of cultural capital both within global and local, online and offline worlds.

How platforms change research

The Transit Labour project displayed a reflexive awareness about these dynamics of free labour and the digital and social contexts in which they unfold. Indeed, as earlier explained, the project initially conceived of itself as investigating the variegated conditions of creative and digital labour in the context of changing Asian capitalism.

This implied attention to patterns of mobility and mediation, both on- and offline, as well as to conditions of labour precarity in the creative and cultural sectors of the three cities concerned: Shanghai, Kolkata and Sydney. A hope was to empirically extend some of our earlier discussions of digital and precarious labour (Neilson and Rossiter, 2005, 2008; Shukaitis and Kanngieser, 2010) by testing whether the theorisations of precarity emerging from Europe held weight in other continental contexts. As the research progressed and the platform process took its path, there was a pronounced shift in the focus of the project. Examining the dynamics of this change is important not only for understanding the difference that platform methods make to the conduct and conceptualisation of research but also for situating current political concerns about the exploitation of digital labour (including that which contributes to building platforms) within a wider material and political economic sphere of contention.

We can take as an example the Transit Labour research conducted in Kolkata, although already in Shanghai it was clear that an empirical focus on creative and digital labour could not be maintained in the narrow sense. What emerged through the Shanghai platform process was an overriding concern on the part of local participants with the conditions of urban change accompanying and enabling the emergence of the newer kinds of technologically inflected work. Time and again in postings and discussions attention turned to the remaking of Shanghai's creative districts, the consequent increase in real estate values and the internal rural–urban migrant labour involved in this development. This involved something more than considerations of gentrification (Smith, 1996) or the 'art of rent' (Harvey, 2009). It implied reflection on the part of platform participants on their own practices of digital labour and their connection with and enablement by other kinds of labour, most prominently that of the migrant workers rebuilding the city. The project's focus shifted to the links between creative work and these other kinds of labour.

As the research proceeded, it became clear that these links could not be fully apprehended within the confines of a single city or locality. Not only did the mobility of the project and the platform method oblige a consideration of patterns of inter-referencing between Shanghai, Kolkata and Sydney but we also had to account for how the labour regimes we were studying fitted within larger global patterns. This led us to a consideration of the workings of supply, production and assembly chains, and the social-technical systems of logistics that link them together. From here it was a short step to studying labour in the logistics industries themselves (not only the masculinised labour associated with transport but also the feminised labour associated with tasks such as data entry and freight forwarding). We also began to ask what might be gained by approaching digital labour as a kind of *logistical labour* – that is, as a labour practice that facilitates global connections through the manipulation of technical and informatic codes but also touches down in particular sites to materialise abstractions such as the 'economy' or the 'state' in ways that reveal the messiness and unevenness of contemporary social worlds.

This was the approach to digital labour that we already had in mind when the research shifted to Kolkata. The intention was to investigate the labour of young tech-savvy professionals who work in India's IT/ITES (Information Technology Enabled Services) and BPO (Business Processing Outsourcing) industries. We were aware of the debates on 'virtual migration' (Aneesh, 2006) as well as efforts to study incipient patterns of unionisation in these sectors (Stevens and Mosco, 2010). What occurred in the context of the

platform process shifted the research once again. In conversation with local participants in Kolkata a decision was made to focus the investigation on the development of Rajarhat, a 'new town' on the city's northeast fringes, as well as Sector V, an IT/ITES hub developed in the 1990s.

If the Transit Labour Shanghai platform engaged pre-eminently with links between creative digital workers and other labour forces, such patterns of connection and distribution are by no means localised only in urban China. Yet it is another and quite different Chinese import that provided the focus for the Kolkata platform: the import of the very model of an economic zone. Resistance to development in Rajarhat, as in the well-known nearby cases of Singur and Nandigram, was presented as a struggle against a 'Chinese model' of development. Here, we faced the intractable problem of origins and modes or techniques of translation. How is the plan of urban development and infrastructural development mobilised from China to India? Does this also register the flight of capital from the wealthy eastern seaboard of China to the less capital-intensive territories of India? Is a new geopolitical configuration in the making here, or is this a material instantiation of more abstract and global work distinct from the legislative power of the sovereign state?

These sorts of questions framed our research in Kolkata and were tested against more specifically local conditions and politics, which include the history of state formation and the transformation in Rajarhat of peasant labour into a dispossessed labour force finding new forms of employment that subsists on the fringes of the logistical and IT industries. To be sure, this was not an investigation that provided a gloss on the leapfrogging from an agricultural to an informational economy, as if that exists beyond the delirium of the World Bank and IMF (International Monetary Fund). Rather, we sought to refine a method of research that brings the practice of collective investigation into a meeting with the politics adumbrated by global logistical operations as they manifest within Kolkata's new urban developments.

We have discussed in detail the research conducted in Rajarhat in other publications (Dey et al., 2013; Kanngieser, 2012; Mezzadra and Neilson, 2013; Neilson, 2013; Neilson and Rossiter, 2011b). What interests us here are the new openings, insights and possibilities occasioned by the platform method. We can sum these up as follows. Attention to the struggles and debates that surrounded the removal of Rajarhat's peasant population from the land provided an original and productive angle from which to recast empirical and theoretical discussions of digital labour, software and the global transformations of capitalism. By the same token, the investigation of logistical practices and IT infrastructure/development supplied an analytical lens through which to approach the politics of land expropriation in ways different to the leads offered by subaltern studies and its rival theoretical traditions. These new directions and realisations are the fruit of something more than collaboration between researchers of different provenance. They involved instances of mediated mobility, facilitated by the platform method's online organisation and orchestration of both offline research methods (interviews, observation, visual archiving, sound sampling, etc.) and processes of inter-referencing between the different sites and phases of the project. It is important to emphasise that the Shanghai platform experience was constitutive in achieving this angle on the Rajarhat research because it raised pressing questions about the relation between digital labour and adjunct

labour practices, giving impetus to the investigation of logistical worlds. The offline presence of researchers in both cities (five were present in both Shanghai and Kolkata although not necessarily simultaneously) was crucial in this regard. But so was the way in which the project's online elements established and kept the link between the cities and the wider patterns of participation established in them. Again the capacity for platform methods to mediate between online and offline materialities is vital.

Something needs to be said about these considerations of method in relation to our earlier discussion of how platforms extract free labour. A political interest in the newer forms of exploitation emerging in digital and creative labour scenarios was the initial impulse for the Transit Labour project and one that had to be constantly negotiated in terms of its methodological design, funding arrangements and employment relations. It is likely that the present article, due to its authorship (co-written by two full-time academics and one precarious researcher employed by the project and only recently hired as a full-time academic), reflects something of these tensions. None of us went unremunerated but we all put in extra time and energy beyond the limits of our putative working days. We also participated, at one level or another, in the affective and relational dynamics that made possible free digital labour on the part of others. Recognising this as an inevitable peril in the platform method is probably a good first step to addressing it. In the case of Transit Labour, the research itself cast light on free labour dynamics and also relativised the discussion of digital labour in the context of adjunct and contiguous labour regimes – whether those of dispossessed peasants in Rajarhat or those of logistical workers subject to software tracking and tracing (Kangieser, 2013).

It is not a matter of assessing the plight of one group of workers as harder than that of others. Rather, it is a question of understanding the social, technical and economic factors that connect these dispersed and often internally fragmented labour forces. One thing is clear. If precarious digital and creative labourers wish to act politically they cannot afford to fraternise only with their own kind, to retreat under the identity of the 'precarariat' (Standing, 2011), 'carrot workers' (Carrot Workers Collective, 2011) or the like. The forms of organisation enabled by such identifications are necessary but insufficient to address the ways in which contemporary capital works the differences between accumulation strategies. New solidarities and alliances must emerge if struggles concerning creative and digital labour are to attend to the increasing heterogeneity of capital and the complex linkages between exploitation and dispossession.

Conclusion

Earlier we mentioned that platforms provide an effective method for transnational research projects in which the possibility to conduct lengthy fieldwork or to visit multiple locations for extended periods is curtailed. It should be clear that we do not understand platforms as a substitute for these approaches or some newfangled way to diminish or make them obsolete. It is not the purpose of digital methods to put disciplines out of business. Nor is their aim to merely move established offline methods into digital environments. Equally, if such methods are restricted to the use of digital tools and analytic routines that remain enclosed in online worlds, their capacity to intervene and obtain social and political relevance can be limited. This article has outlined strategies for

deploying digital methods in ways that mediate movements between offline and online worlds. Drawing on our experience in the Transit Labour project, we have explored the perils and potentialities of what we call the platform method, which assembles and orchestrates research experiences across these domains.

The perils we have identified are primarily associated with the propensity of platforms to thrive on the extraction of free labour. This is a political problem for projects such as Transit Labour that are interested in precisely the new patterns of exploitation emerging in digital economies. Not all platforms are equal in this regard and the methods they assemble can also have the capacity to widen the debate and extend it in new directions. Attention to how the labour of dispossessed peasants supports the logistical labour of IT professionals in India is one instance of this. More generally the investigation of software control and infrastructural implementation in contemporary workplaces shifts the focus to how the nexus of digitisation and labour extends far beyond those workforces typically considered to engage in digital labour – web designers, creative workers, social media users, etc. Indeed, it highlights how digital methods infiltrate mundane offline work sites and subject them to performance measures which seek ever more to operate in real-time. Like all methods, the organisation of platforms will probably have its day. For now it remains a compromised and inventive means of investigating the mediated mobilities of contemporary culture and society.

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Notes

1. See: <http://transitlabour.asia>.
2. See: <http://www.globalproject.info>, <http://www.sarai.net>, <http://www.edu-factory.org>, <http://fadaiat.net>, <http://www.transitmigration.org> and <http://eipc.net>.
3. The digital visualisations can be found at: <http://transitlabour.asia/documentation/>.

References

- Aneesh A (2006) *Virtual Migration: The Programming of Globalization*. Durham, NC: Duke University Press.
- Arvidsson A and Peitersen N (2013) *The Ethical Economy: Rebuilding Value After the Crisis*. New York: Columbia University Press.
- Barbrook R (1998) The high-tech gift economy. *First Monday* 3. Available at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/631/552> (accessed September 2013).
- Benkler Y (2006) *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT: Yale University Press.
- Berardi F (2009) *The Soul at Work: From Alienation to Autonomy*, trans. Cadel F and Mecchia G. Los Angeles: Semiotext(e).
- Berry DM (2011) *The Philosophy of Software: Code and Mediation in the Digital Age*. Basingstoke: Palgrave.
- Buden B (2006) Cultural translation: why it is important and where to start with it. *Transversal*. Available at: <http://eipc.net/transversal/0606/buden/en> (accessed September 2013).

- Carrot Workers Collective (2011) *Surviving Internships: A Counter Guide to Free Labour in the Arts*. Available at: http://carrotworkers.files.wordpress.com/2009/03/cw_web.pdf (accessed September 2013).
- Dey I, Samaddar R and Sen S (2013) *Beyond Kolkata: Rajarhat and the Dystopia of the Urban Imagination*. New Delhi: Routledge.
- Edu-factory Collective (2009) *Toward a Global Autonomous University: Cognitive Labor, the Production of Knowledge, and Exodus from the Education Factory*. Brooklyn: Autonomedia.
- Fuller M (ed.) (2008) *Software Studies: A Lexicon*. Cambridge, MA: MIT Press.
- Goriunova O (2007) Swarm, forms: on platforms and creativity. *Mute*. Available at: <http://www.metamute.org/editorial/articles/swarm-forms-platforms-and-creativity> (accessed September 2013).
- Goriunova O (2012) *Art Platforms and Cultural Production on the Internet*. Abingdon: Routledge.
- Hands J (2013) Introduction: politics, power and 'platformativity'. *Culture Machine* 14: 1–9.1
- Harvey D (2009) The art of rent: globalisation, monopoly and the commodification of culture. *Socialist Register* 38: 93–110.
- Kangieser A (2012) Listening as a method for 'knowing': sound mapping Sector V and Rajarhat. *Transit Labour* 4: 37–38.
- Kangieser A (2013) Tracking and tracing: geographies of logistical governance and labouring bodies. *Environment and Planning D* 31(4): 594–610.
- Kelty C (2008) *Two Bits: The Cultural Significance of Free Software*. Durham, NC: Duke University Press.
- Law J (2004) *After Method: Mess in Social Science Research*. London: Routledge.
- Lazzarato M (1996) Immaterial labor. In: Virno P and Hardt M (eds) *Radical Thought in Italy: A Potential Politics*. Minneapolis: University of Minnesota Press, pp. 132–146.
- Leadbeater C (2008) *We-Think: Mass Innovation, not Mass Production*. London: Profile Books.
- Lessig L (2008) *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. New York: Penguin.
- Lovink G and Rossiter N (2005) Dawn of the organised networks. *FibreCulture Journal* 5. Available at: <http://five.fibrejournal.org/fcj-029-dawn-of-the-organised-networks/> (accessed September 2013).
- Makhno N, Mett I, Archinov P, Valevsky and Linsky (1926) *The Organisational Platform of the Libertarian Communists*. Available at: http://www.nestormakhno.info/english/platform/org_plat.htm (accessed September 2013).
- Manovich L (2013) *Software Takes Command*. London: Bloomsbury Academic.
- Marcus G (2008) The ends of ethnography: social/cultural anthropology's signature form of producing knowledge in transition. *Cultural Anthropology* 23(1): 1–14.
- Marres N (2012) The redistribution of methods: on intervention in digital social research, broadly conceived. *Sociological Review* 60 Issue Supplement S1: 139–165.
- Montfort N and Bogost I (2009) *Racing the Beam: The Atari Video Computer System*. Cambridge, MA: MIT Press.
- Mezzadra S and Neilson B (2013) *Border as Method, or, the Multiplication of Labor*. Durham, NC: Duke University Press.
- Moten F and Harney S (2004) The university and the undercommons: seven theses. *Social Text* 22(2): 101–115.
- Neilson B (2013) Logistics of cultural work. In: Banks M, Gill R and Taylor S (eds) *Theorizing Cultural Work: Labour, Continuity and Change in the Creative and Cultural Industries*. Abingdon: Routledge.
- Neilson B (2013) Life and code: logistics, culture and economy. In: Bennett T (ed.) *Challenging (the) Humanities*. Melbourne: Australian Scholarly Publishing, pp. 99–116.

- Neilson B and Rossiter N (2005) From precarity to precariousness and back again: life, labour and unstable networks. *FibreCulture Journal* 5. Available at: http://www.journal.fibreCulture.org/issue5/neilson_rossiter.html (accessed September 2013).
- Neilson B and Rossiter N (2008) Precarity as a political concept, or, Fordism as exception. *Theory, Culture & Society* 25(7–8): 51–72.
- Neilson B and Rossiter N (2011a) Still waiting, still moving: on labour, logistics and maritime industries. In: Bissell D and Fuller G (eds) *Stillness: Dynamics of Passivity in a Mobile World*. London: Routledge, pp. 51–68.
- Neilson B and Rossiter N (2011b) The logistical city. *Transit Labour* 3: 2–5.
- O'Reilly T and Battelle J (2005) What is Web 2.0? Available at: <http://oreilly.com/web2/archive/what-is-web20.html> (accessed September 2013).
- Platform Associates (2006–10) What is a platform business? Available at: <http://platformassociates.com/manifesto> (accessed May 2010).
- Rogers R (2010) Internet research: the question of method – a keynote address from the YouTube and the 2008 election cycle in the United States Conference. *Journal of Information Technology & Politics* 7: 241–260.
- Rogers R (2013) *Digital Methods*. Cambridge, MA: MIT Press.
- Rossiter N (2009) Translating the indifference of communication: electronic waste, migrant labour and the informational sovereignty of logistics in China. *International Review of Information Ethics* 11. Available at: <http://www.i-r-i-e.net/issue11.htm> (accessed September 2013).
- Rossiter N and Zehle S (2013) Acts of translation: organizing networks as algorithmic technologies of the common. In: Scholz T (ed.) *Digital Labor: The Internet as Playground and Factory*. London: Routledge, pp. 225–239.
- Sakai N (1997) *Translation and Subjectivity: On 'Japan' and Cultural Nationalism*. Minneapolis: University of Minnesota Press.
- Sakai N (2006) Translation. *Theory, Culture & Society* 23(2–3): 71–86.
- Shirky C (2008) *Here Comes Everybody: The Power of Organizing without Organizations*. New York: Penguin.
- Shirky C (2010) *Cognitive Surplus: How Technology Makes Consumers into Collaborators*. New York: Penguin.
- Shukaitis S and Kanngieser A (2010) Cultural workers, throw down your tools, the metropolis is on strike. In: Naik D and Oldfield T (eds) *Critical Cities: Ideas, Knowledge and Agitation from Emerging Urbanists*. London: Myrdle Court Press, pp. 64–75.
- Smith N (1996) *The New Urban Frontier: Gentrification and the Revanchist City*. New York: Routledge.
- Solomon J (forthcoming) The transnational study of culture and the indeterminacy of people(s) and language(s). In: Bachmann-Medick D (ed.) *The Trans/National Study of Culture: A Translational Approach*. Berlin: de Gruyter.
- Standing G (2011) *The Precariat: The New Dangerous Class*. London: Bloomsbury.
- Stevens A and Mosco V (2010) Prospects for trade unions and labour organisations in India's IT and ITES industries. *Work, Organisation, Labour and Globalisation* 4(2): 39–59.
- Terranova T (2000) Free labor: producing culture for the digital economy. *Social Text* 18(2): 33–58.
- Terranova T (2006) Of sense and sensibility: immaterial labour in open systems. In: Krysa J (ed.) *Data Browser*, vol. 3: *Curating Immateriality: On the Work of the Curator in the Age of Network Systems*. New York: Autonomedia, pp. 27–36.
- Tsing A (2009) Supply chains and the human condition. *Rethinking Marxism* 21(2): 148–176.