# Why We Need Ethnographies in and of the Academy: Reflexivity, Time, and the Academic Anthropologist at Work

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*Abstract:* The 21st century academy is changing the conditions of possibility for producing anthropological knowledge. Ethnographic studies of the academy are few yet do provide points of departure for anthropologists to consider the specificities of their home institutions and its effects on anthropological practice. Audit cultures, bureaucracies of virtue, discourses of "excellence" and regimes of intellectual property management are recognized as spreading, but unevenly. This article encourages considering tensions between being an academic anthropologist who happens to be an employee and an employee who happens to be an academic anthropologist and considering how active transformations of the academy also transform anthropology.

**Keywords:** anthropology of academia, neoliberalism, reflexivity, science policy

*Résumé :* Le milieu universitaire du 21ème siècle modifie les conditions qui rendent possible la production du savoir anthropologique. Les études ethnographiques du milieu universitaire sont rares mais fournissent néanmoins des points de départ pour permettre aux anthropologues de s'intéresser aux caractéristiques spécifiques de leurs institutions et à leurs effets sur la pratique anthropologique. On reconnaît que des cultures de vérification, des bureaucraties méritocratiques, des discours sur l'excellence, et des régimes de gestion de la propriété intellectuelle se répandent, mais de manière inégale. Cet article interroge les tensions entre la situation d'un anthropologue universitaire qui se trouve un employé et la situation d'un employé qui se trouve un anthropologue universitaire et analyse comment les transformations actives du milieu universitaire transforment aussi l'anthropologie.

**Mots-clés :** anthropologie du milieu universitaire, néolibéralisme, réflexivité, politique des sciences

> It is illusory to hope for "another" anthropology unless and until we have dismantled one by one the certainties that still keep us locked in the old building. Hanging the walls with reflexive mirrors may brighten the place but offers no way out. [Fabian 1991:194]

## Introduction

Here is a simple premise: academic anthropologists' conditions of employment shape anthropologists' practice. It shapes their expertise. Given the attention directed to the many contexts and practices summarized by the term *fieldwork*, there has been surprisingly little ethnographic research concerning the academy as an institution and the place of the anthropologist *as employee* within it. Although useful fragments have been proposed in terms of the neoliberalization of the academy, the rise of "bureaucracies of virtue" in research ethics clearance, the critique of the "university of excellence" and the ascendency of "audit cultures" in employee performance assessment, particular studies of universities and colleges embedded within and overlapping with, other communities have yet to be undertaken. What I am proposing, then, is that academic anthropologists embark on multi-sited ethnographic studies (Marcus 1995) of their campuses to develop a comparative ethnology of the contemporary academy in transition.

What follows is not such a study but rather an extended appeal for such study to take place on campuses where ethnographers, anthropological or otherwise, practice. Although there is certainly a space in such investigations for "corridor talk" (Downey et al. 1997) or the kinds of editorializing found, for example, in the *Chronicle of Higher Education*, the *Times Higher Education* or Canada's *University Affairs* magazine, it is specifically formal, full-blown, participant-observational and multi-sited studies I am calling for. There is broad agreement among academic faculty that post-secondary education is transforming globally, but much of this agreement emerges from quantitative methodologies, generalizations

lacking in nuance and variation or anecdotal evidence. That these have been the terms of assessment, I will argue, is indicative of some of the changes occurring in post-secondary education that would benefit from ethnographic investigations and comparative analyses.

I was confronted by these kinds of issues as a consequence of conducting ethnographic research of a bioscience research facility on the campus where I work, the University of Prince Edward Island. Here I am positioned by students, faculty and the public as an "expert," colleague, employee and instructor among others similarly positioned. I am a part of the academic context which I examine; yet, I inhabit different *spacetimes* (Barad 2007) in an academy that is a multiple singularity, an institutional "body multiple" (Mol 2002) without a stable ontological core. Consequently, I also encourage consideration of the blurred boundaries and tensions which emerge when balancing an "institutional reflexivity" (Fischer 2005, 2007) with the related yet distinct self-reflexivity usually associated with ethnographic fieldwork. Studying and researching our campuses is a manner of investigating our anthropological selves but from positionalities too frequently neglected.

## The UPEI Campus: How the Personal Prompted Questioning the General

May 2008. I arrived at my fifth floor office in the main Faculty of Arts building at about 8:15 a.m. After booting up my computer, I nibbled my breakfast while wading through a few emails. At this time of year the mornings are still cool but quite compatible with a light jacket. I was already anticipating that by July the heat and humidity in my office would be intense, over 30 degrees Celsius, nearly all the time. Designated a heritage building at present, this red brick structure, whose keystone over the main entrance is engraved 1862, was granted immunity from modernizing influences which would alter its external appearance, such as rooftop air-conditioning units or even individual air-conditioners precariously perched partly in and partly outside the 3-foot by 4.5-foot window found in every office in the building. Nearly a century-and-a-half earlier the fifth floor was designated a dormitory by a post-secondary institution largely devoted to providing a liberal arts education to budding young clergymen drawn, by ferrous red dirt roads, from all parts of the soon-to-be province in a soon-to-be new and expanding nation-state. I sometimes wondered how they coped with the heat of summer or the cold of winter. I wondered, too, when the ghost stories, occasionally still recited among students and faculty today, began to circulate.

With reveries and a couple of email responses sent off, I took my jacket and headed toward the newly built North Annex of the veterinary school. With the demands of teaching behind me and commitments to committees rapidly diminishing, I was looking forward to several weeks of uninterrupted fieldwork. Walking the 200 or so paces along the asphalt pathways, I came to the front entrance. Some maintenance staff were laying new sod in preparation for the formal opening ceremonies as others were adjusting the main doors. As I walked inside the climate-controlled environment and past the reception space harbouring the administrative staff for the Department of Biomedical Sciences, still others were moving equipment I could not yet name or tending electrical panels. It seemed as if there were not yet any ghosts because there were not yet any pasts. I made my way to the second floor and into the carrell my host had generously made available as an ethnographic base of operations. I would come to share that space with three other visiting researchers. Putting my notepad, recorder and book—just in case of a lull—on my desk, I picked my lab coat from its hanger. Once the weather warmed, before putting on the white coat, I would change from shorts to pants, and sandals to sneakers, both for safety and comfort—but not on that day in May.

The significance, the polysemy, of the white lab coat was not lost on me. It has become one of the most potent signifiers of modern times about modern times. I couldn't help but notice its transformative powers in this setting. A little after 8:30 a.m., I walked across the hall and into a suite of labs where a research associate and lab technician were already preparing a gel for electrophoresis. In the span of a few steps and a few minutes I had seemingly travelled worlds. I settled in for the morning with curiosity and questions. Among them, how many communities make up a campus? What and who counted? And how?

It is something of a truism in the anthropology of science and in science and technology studies (STS) more broadly, that once you are in a lab as an ethnographer, everything—people, ideas, waste, equipment, "discoveries" and so on—leads away from it. The introductions, those events which "lead in," leave the ethnographer with the problem of ducts, of "duction" (abduction, adduction, conduction, deduction, eduction, induction, production, reduction, reproduction, seduction, subduction, transduction). From the Latin for "leading," as in the way a path or channel leads (think of aqueduct), the problem of duction, of leading and being led, imposes itself quite quickly. It is a problem only insofar as limited and limiting choices and interventions must be made, continuously, regarding which

paths or channels are to be followed to the exclusion of other choices. These choices involve, always, some senses of reflexivity, temporality, and some senses of expertise, but here, too, there are choices to be made. Notably, there is no form of duction which allows a permanent retreat, or even a respite: an eduction is always already another introduction. I take as given that ducts have no origins or finality, that insofar as they ontologically "are," it is a "being-as-doing;" they are (always already) in motion at different speeds and in different directions, intensities and extensities.[1]

From 2007 to 2009, I was an interested participant/observer in a brand new, state-of-the-art multiuser bioscience facility at the University of Prince Edward Island, which also happens to be the campus where I perform my other academic duties beyond ethnographic fieldwork. My concern in this article does not speak so much to the intra-actions (Barad 2007) radiating from within those labs as it does to some of the other channels into which I was drawn. Among other things, I was compelled to consider not only the facility, or the research happening in the facility, but also the place of the facility within the university and the university as an institution itself under significant pressures for change from provincial and federal governments, which in turn, they claim, were (and are) responses to a variety of global neoliberal economic forces. Given the newness of the facility, there was, during the period of my research, more traffic between the rest of campus and this facility than would otherwise be the case as final infrastructural adjustments were made, tours were given and new equipment arrived, as well as, of course, new people, permanent and temporary. Under assumptions of performative ontology, I could not help but locate this series of shifting contexts within larger series of equally shifting contexts—a movement that can be considered "transductive" in Helmreich's (2007, 2009) sense—due to the kinds of professional ethnographic habits that anthropologists have developed. It is one form of cultural system, as Clifford Geertz might have said, with which anthropologists can question common sense.

The University of Prince Edward Island (UPEI) campus where I teach is relatively small; there are only about 4,500 full- and part-time students. It is the only university in this primarily rural island province of 140,000 people. Attached to UPEI is a veterinary school containing state-of-the-art biomedical research, in addition to clinical teaching facilities. This circumstance, in itself, is quite atypical for a campus this size, and it is this peculiarity which has sounded so loudly and sharply for me the kinds of changes most post-secondary institutions are currently moving through, though perhaps in more muted fashion. Veterinary programmes in Canada are limited in number and geographically dispersed, with the Atlantic Veterinary College (AVC) drawing from and serving mostly the four Atlantic Canadian provinces. Ron Freedman, CEO of Research Infosource, is quoted in Ryder (2006) as saying: "The level of research there [at the AVC—UK] is as if UPEI had its own medical school. That kind of presence has an impact that goes beyond the campus. It brings university researchers who want to collaborate with the AVC professors, it attracts business ... and it just adds spending and industrial activity to the community."

Quite simply, the federal and provincial governments, private industry and Prince Edward Island's two post-secondary institutions (a college and a university) are more tightly bound than at any time in the past in an effort to produce the critical mass for a self-sustaining bioscience-based business cluster as a means of capitalist wealth generation and economic development. This is termed the "Triple Helix" approach to the emergent "knowledge economy" in STS (Etzkowitz 2003).[2] Like many advanced capitalist nations, Canada's federal and provincial governments, in varying degrees, have drawn on concepts that have emerged in the science policy literature since the 1980s and 1990s. These concepts may vary in terms of scale and focus but all share a sense that the raison d'être, the social and institutional functions, of post-secondary education *should* change. Various levels of government have appropriated or endorsed language such as that of the Triple Helix (Etzkowitz 2003), "Mode 1" and "Mode 2" universities (Gibbons et al. 1994) or the "business cluster" model promoted by Harvard business professor Michael Porter (1998a, 1998b, 2000) as a framework for approaching the emergent global "knowledge economy." Indeed, the notion of a "PEI biocluster," actively pursued as a provincial economic development strategy, is drawn directly from Porter's conceptual framework.[3]

In that regard, consider these events on Prince Edward Island from over approximately the last 10 to 15 years. At UPEI, graduate programmes have appeared in the Faculty of Science, the Faculty of Education, the Faculty of Arts; research-based Ph.D. programs have been developed in the veterinary school; a Master of Business Administration, including a stream specializing in "Biotechnology Management and Entrepreneurship," has been launched; there has been the construction of a federal advanced bioresearch facility on the university campus (the National Research Council Institute for Nutrisciences and Health); a graduate program in the School of Nursing has been established; and the university has welcomed its first Fulbright Fellow specializing

in biocluster development. Related, yet extending beyond the immediate campus, consideration should be given to the relocation of UPEI and Holland College from the provincial Department of Education into a newly created Department of Innovation and Advanced Learning; the establishment of a "Bioscience Technology" lab technician program at the main Holland College campus; and finally, the establishment of a non-profit umbrella organization (the PEI Bioalliance) to coordinate activities and contacts between government, industry and academia. Without question, this is a big investment, relatively speaking, for such a small place (140,000 people), much of it concentrated on a small university campus of about 200 full-time and 100 contract instructors.[4]

From the brief outline above, it is evident that there is an emphasis on biomedical and pharmaceutical research and that it is intended to be an important means of biocapitalist growth (Cooper 2008; Rajan 2006) in a "knowledge economy." These particular observations and experiences at UPEI led me to wonder about the extent to which UPEI was reproducing similar changes elsewhere—changes often placed under the banner of the corporatization and neoliberalization of the academy—and the extent to which local developments were uniquely enacted with local conditions in mind.

## Science Policy Concepts in Vogue

Concepts such as Triple Helix, Mode 1 and Mode 2, and clusters have been made commonplace in governmental science policy establishments in advanced capitalist nations. They *are* popular there, though these three terms are not the only ones in use. Although I do not intend to approach these and similar terms grammatologically (Derrida 1976), their broad contours will be offered here, insofar as their adoption in policy circles likely has had multiple and uneven effects on particular campuses, departments and individual researchers in particular ways, depending on how they are implemented and used by policy-makers. In Gibbons and colleagues' (1994) formulation, Mode 1 universities predominated in Europe and North America during the first two-thirds of the 20th century. They were characterized by a predominance of "basic" research, high degrees of institutional independence (though not necessarily for individual faculty), and they were only weakly integrated into their surrounding geographic communities in terms of research and economic activities. The research conducted on campus was often freely available to the scientific community but was often not immediately relevant to the many, but very different, needs of local communities. A shift to Mode 2 universities began to take place in the 1970s as demands for greater community engagement and interaction by citizen groups, industries and governments increased. This coincided with a shift to neoliberal economic policies as well. The knowledge produced in universities was expected to have greater local relevance by responding to local social, political and economic "stakeholders" and, as such, promoted a greater emphasis on "applied" research and lower degrees of institutional independence.

In the Canadian context, an important transitional moment from Mode 1 to Mode 2 prevalence occurred when the federal government put in place the Networks of Centres of Excellence program in 1988. It was a conscious effort to change Canadian academic research culture, especially in the natural sciences. As Janet Atkinson-Grosjean notes, "The tradition of serendipitous discovery was far too anarchic for the policy establishment; research should not only be managed—a novel concept—but managed on private sector rather than academic principles" (2006:xiv). To that end Michael Gibbons, who contributed to formulating the Mode1/Mode 2 distinction, was invited by Industry Canada—the federal government department charged with overseeing the program—to serve as a policy advisor and participate in the selection committees (Atkinson-Grosjean 2006:54). Since that time, the management of federally funded research along private sector principles in Canada has become both more intensive and extensive. The kinds of pressures exercised through policy could be fairly direct, as when each of Canada's three major federal funders of academic research[5] now explicitly expect applications to have incorporated Mode 2–like features into research programmes and projects. Researchers have also been compelled by indirect means as well. For example, in recent years Canada's Social Science and Humanities Research Council unilaterally decided to no longer fund all social science and humanities researchers of health and biomedicine. They are now expected to apply to the Canadian Institutes of Health Research, part of the very "community" anthropologists, economists, historians, philosophers and others study. Whether by accident or design, the effect has been to lessen researcher independence and dampen critiques of health and biomedical research, while epistemologically and methodologically subordinating them to a much larger group of clinical and biomedical practitioners who operate through very different principles of knowledge formation—principles which have had longer exposure to neoliberal policy tenets—when adjudicating research awards.

Although there are significant differences between Mode 1/Mode 2 science policy conceptions and those of the Triple Helix (Mirowski and Sent 2005), for our purposes what matters more are the similarities between

the ideal Mode 2 university and the university as envisaged in the Triple Helix of academia, government and industry. Etzkowitz and Leydesdorff (1997) argue that, as each helix becomes more integrated with the other two, new metrics—that is, new methods of measurement—became necessary to evaluate the products of research and research as a product. The movement of universities into closer ties with government and industry, ostensibly to foster closer ties to very vaguely defined local "communities," already is suggestive of new economic expectations of universities.

Moreover, the cluster concept has also found a receptive audience in science policy circles, whether in government, industry or the academy. Michael Porter's notion of "business clusters" is derived from certain notions in economic geography (Cooke 2007; Martin and Sunley 2003). Porter proposes that physical proximity of businesses in related fields of research development and production are more successful than those that are geographically dispersed, even when advances in information technology are taken into consideration. Silicon Valley serves as a well-known example for the information technology industry. Many related enterprises of varying sizes are clustered together to facilitate embodied as well as disembodied forms of communication. On PEI, and elsewhere, there are conscious efforts to establish bioscience clusters (Singapore's Biopolis project being a well-known example). Clustering, in particular, lends itself to research-intensive industries. When this is combined with a growing trend to outsource larger shares of research from private industry and government laboratories to more or less publically funded academic institutions, clustering tends to occur around university campuses (Cooke 2007; Mirowski and Sent 2005).

The brief descriptions of these policy platforms currently in fashion are simplifications, to be sure. My point is that *they are enacted* and *they are popular* in policy circles. Even a rudimentary overview, such as offered above, suggests that these policy measures and concepts privilege an economic "character" beyond the narrowly economic. They are directed more toward STEM fields (science, technology, engineering and mathematics) than humanities and social sciences and, significantly, assume that knowledge should be commoditized. In the course of my own research, I encountered people in university administration, the provincial government and local industry who agreed that universities should be engines of economic growth *in addition to* their previous functions. In short, regarding my campus, and insofar as I pursued the matter, there is an expectation to be Mode 1 *and* Mode 2; to pursue applied *and* basic research; to teach civics *and* promote technocratic solutions. The kinds of tensions these conflicting demands place on faculty are aptly summarized by the phrase "the schizophrenic university" (Shore 2010).

## Audit Cultures, Bureaucracies of Virtue and the Value of Excellence

The kinds of changes just outlined are not entirely new to most campuses globally since the early 1980s—save perhaps the speed, relative scale and intensity with which they have been conducted on Prince Edward Island. It is easy for anthropologists who are off-campus researchers to miss such changes in medium to large research and graduate programme universities by virtue of their size, populations and physical dispersion, and it is easy to miss them in small, primarily undergraduate institutions because they tend not to have the kinds of scientific infrastructures which garner the attention of industry or government. Nonetheless, while studies are few, limited in scope and fragmented, there are a handful of anthropologists and STS scholars attuned to how the cross-currents of the Triple Helix impinge on ethnographic practices in their respective fields. These studies, with their own political and ethical spaces and dynamics of personal, professional and institutional boundary constructions and boundary crossings, can serve as introductions to greater multiplicities, not least of which are those concerning reflexivities and expertises in ethnographic practices. In this regard, the Triple Helix has been indexed in anthropology in particular by the rise of "audit cultures" (Strathern 2000) to review the performance of individual faculty, departments and entire universities; the emergence of "bureaucracies of virtue" (Jacob and Riles 2007) around ethics review processes; and the use of "university of excellence" as a signifier to transform moral values into economic values (Menzies 2010). They are lively objects in a "Dingpolitik" (Latour 2005:41) located on new ethical plateaus (Fischer 2005, 2007).

It should be noted that these kinds of studies, while important and suggestive, are not yet full-scale and detailed ethnographies of particular academic institutions and their relations to their surroundings. That work remains to be done and is crucial. Participant observation won't come easily in those circumstances where it can be done, but it is all the more important because of that.[6] Beyond classic ethnographic methods is the need for the range of multisited techniques that allow the ethnographer to follow the metaphor, money or object (Marcus 1995). Present analysis of post-secondary educational phenomena labelled neoliberal tends too much toward the homogenous, with its attendant problems (Mirowski and Sent 2005; Ong 2006).

The campus to which I am attached, like most Euro-American universities, or even post-secondary institutions globally, is in the throes of what has been variously dubbed corporatization or neoliberalization (Roseman 2010; Wright and Rabo 2010). Anecdotally commented upon by most of us in the academy as "corridor talk" (Downey et al. 1997), investigated and critiqued in fragmented fashion by a few, thoroughgoing anthropological studies of particular universities or even the contemporary academy "in general" is not a project most of us are inclined to take on.[7] The need for doing so, however, has direct bearing on our anthropological practices wherever or however they are conducted, or whoever conducts them, for a mutual leading and being led is at work here. *Our* anthropological terms of expertise are, in part, produced and productive here (Wright and Rabo 2010).

### *Audit Cultures*

In a volume edited by Marilyn Strathern (2000), the contributors focused on the emergence of "audit cultures" in post-secondary education, especially the United Kingdom. Audit, as Strathern (2000:3) reminds us, is a "ritual of verification" that has been elevated from the world of financial accountancy to a generalized principle of evaluation in fields as diverse as education, law and medicine. Audit, as the guarantor of "value for money," has become neoliberal "common sense." Nonetheless, the spread of audit in post-secondary education is a highly uneven process, as the Strathern volume and the special issues on university reforms in journals edited by Roseman (2010) and Wright and Rabo (2010) indicate. For example, the UPEI campus, in particular, and Canadian campuses broadly presently experience audits most strongly in research areas where academic intellectual property is a concern, typically in STEM fields; whereas campuses in the United Kingdom and New Zealand (Shore 2008, 2010; Shore and Wright 1999, 2000) currently experience audits as a much more generalized phenomenon on their campuses through some version of the (by now infamous) Research Assessment Exercise. This does not mean, however, that non-STEM disciplines in Canada are untouched, nor that elsewhere audit culture has completely succeeded. Again, specific inquiries need to be made before further generalization is considered.

### *Bureaucracies of Virtue*

Since requests for research monies are increasingly under scrutiny under the guise of "value for money," the auditing process, among other things, tends to subordinate and diminish basic research to applied research, but without eradicating basic research entirely (Atkinson-Grosjean 2006). The process of subordination must not only appear as a commonsensical governmentality, in Foucault's sense (Shore and Wright 2000), but seem ethically desirable in a manner deemed transparent. As Jacob and Riles (2007) suggest, ethics must *be* evident and be *evident*; it must be stable, demonstrable and measurable through formal, quantifiable mechanisms of oversight they term "bureaucracies of virtue." Although audit cultures and bureaucracies of virtue are separate but related phenomena, an ethnography of a university should definitely consider the extent to which these, and other forces, mutually shape one another.

Academic research proposals, for example, regardless of discipline or methods, have for some time been subject to formal ethical review procedures. Like audit cultures, such bureaucracies of virtue have been expanding because their premises seem commonsensical (Bosk 2007; Swiffen 2007). Both give the appearance of being rational and reasonable, of being accountable and responsible. The prevailing assumption at the policy-making level, but also among many faculty researchers, is that more oversight through control, in Deleuze's (1992) sense, leads to "better" research, while less is thought to place research subjects at risk and is taken as indicating the researcher is of questionable moral fibre. (Lederman 2006a, 2007; Shore 2008).

### *Universities of Excellence*

Like audit cultures and ethics creep, Charles Menzies's (2010) thoughts on the changing meanings and practices enacted through the sign of excellence emerged in and through the rise of neoliberal economic doctrine in the 1980s. In particular, he emphasizes that, in the post-secondary context, the term *excellence* has come to connote quantity rather than quality. To generate the consent to effect that shift among faculty there is, whether purposive or not, a reductive blurring of moral and economic values as synonymous. He reminds us that as excellence is reduced to a statistical norm, that norm is not merely operating as a portion of a mathematical distribution but has become a moral and political injunction. Paradoxically, then, "being" excellent means "being" normal. In order for excellence and norms to be comparable, qualities must be reduced to quantities.

Menzies also indicates some of the consequences of aiming for excellence in terms of what it entails for anthropologists and other academics *as employees*. Drawing on examples from his home institution and elsewhere, he suggests that an emphasis on the quantity of publications by researchers puts downward pressure on their quality. At the same time, the national ranking

systems used to judge institutions or journal impact factors to rank publication venues situates researchers on a moral continuum. In the Canadian case, it has resulted in a preference for hiring academic anthropologists with non-Canadian credentials, even though there is no evidence to suggest Canadian credentials are inherently inferior (2010:49).

Audit cultures, bureaucracies of virtue and discourses of excellence, as three realms within the contemporary Mode 2 university, already provide us with some sense of how they affect anthropological practice, both in the field and in the classroom. As suggested above, more needs to be done in terms of considering other realms of common sense in the Mode 2 university, including different *kinds* of university (primarily undergraduate or research, large or small in population, located in urban or rural areas, public or private, etc.). Nonetheless, based on the work addressing audit cultures, bureaucracies of virtue and universities of excellence, it would seem that the realms of common sense rely on two very modernist, even positivist, ontological assumptions. First, the majority of administrators and faculty alike don't question a conception of ethics and value (whether economic or not) that is ontologically singular and can be established before their enactment (Lederman 2007). Performative ontological notions of the university as a singular multiplicity, a (corporate) "body multiple" (Mol 2002) as it were, or as an apparatus or phenomenon intra-actively emergent (Barad 2007) is likely to be thought of as anathema by many. Second, the widespread assumption that the act of measuring does not influence that which is measured, be it risk or financial efficiency or teaching performance, be it "quantitative" or "qualitative," has yet to receive intensive investigation. As Law and Urry (2004) and Barad (2007, 2008) have argued, measuring, as enacted practice, is not "neutral" in intention, process, affect, effect or means (see also Strathern 2000).

At my institution, the pressures that are spreading what Shore and Wright (2000:61) term "neoliberal governmentality"—the econometricization of society, its institutions and individuals—were applied initially to the nonclinical programs of the veterinary school, followed by portions of the Faculty of Science, then the School of Business. The remaining faculties and schools are just now beginning to register, at a variety of levels, those pressures. This has not been a direct process, but rather has been indirect insofar as university administrations have increasingly taken the econometricization of the biosciences and business *as the standard by which to measure all faculty activities*.[8] It is unfortunate and unfair, though to some extent understandable, that some social science and humanities faculty blame the natural sciences and the scientists for this state of affairs, rather than examining differences among the natural sciences and scientists. In many respects the antagonisms between the two cultures of academia described by C. P. Snow (1993) persist, with efforts to establish a third culture still to be realized (Rabinow 1996). This, too, deserves attention in an ethnography of the academy. Moreover, few in the human sciences self-reflexively ask about the extent to which they are complicit (Amit 2000). I cannot, however, presume this is the case elsewhere, save perhaps in very broad contours. It would be worthwhile, I think, to pursue more of such investigations to establish with greater specificity *how* neoliberal governmentality spreads in academia and how it is resisted.[9]

## Studying Up and Studying Across

Points of contact between institutional ethics, research ethics, excellence and the econometricization of the academy and academics are multiplying (Fortun and Fortun 2005; Lederman 2006a, 2006b, 2007; Marcus 2007; Pels 2000). This is leading to suggestions that we need ethnographies and fieldwork on academic research to diminish and resist the trend toward establishing ever-greater numbers of "quantitative" metrics, which are frequently based on "knowledge economy" approaches hybridized with biomedical standards in order to audit "qualitative" forms of research.[10] Here also, the issue is often framed as a two culture problem by academics, administrators and policy makers. Simply stated, we have been too busy in the field *as ethnographers* to be aware *of* the field qua field in shaping expertise (Kalir 2006). The importance of a reflexive application of fieldwork on fieldwork should not be underestimated in researching a university as a multisited ethnographic object, especially if it is an institution with which the investigator is affiliated. Lederman proposes the term "informality" to describe "the undemarcated moments of ethnographic practice when 'research' and 'daily life' are inextricable. Informality is a prominent feature of partly or wholly unfunded (self-funded) research pursued part-time at home [i.e., one's 'home' institution-UK]" (2006a:477).[11]

Within anthropology, to date, it is neoliberal governmentality surrounding audit and ethics review processes that have received the most attention. STS ethnographies have focused more on the commercialization of the academy, especially the sciences, though as Mirowski and Sent (2005) note, there is an overall dearth of investigations. I recognize considerable commentary exists in the form of blogs or university-focused magazines and

research on general trends, such as Martha Nussbaum's (2010) or Henry Giroux's (2007) work. Such work is valuable, yet is still limited by a lack of specificity and detection of nuanced patterns which emerge from sustained ethnographic investigation.

Beyond these topics, however, are others worthy of ethnographic attention to track changes in the rapidly changing campus body multiple. Topics that need to be studied up *and* integrated into ethnographies of particular academies include the extent, kinds and reach of unionized and nonunionized employees; the growing importance placed on matters of intellectual property (and their potential for revenue) by university administrations; the corporatization of food services on our campuses; the growing corporate arm of universities (i.e., business enterprises incorporated by and for universities); the research and recruiting activities of military and state paramilitary organizations; the growing pace and place of forms of online instruction; the increasing number of students who have never known anything other than "neoliberal times" and, consequently, tend to develop a "neoliberal agency" (Gershon 2011a, 2011b); the decline of tenured faculty positions; the "globalization" of individual universities (see Ong 2006); a growing trend toward "teaching-only" positions; the acceptance or, less frequently, resistance to governmental science and education policy by university administrations; changing relations between and within human versus natural sciences; the growing size and changing background qualifications of administration and management; the changing balance between and definitions of research and teaching among faculty; and so on. This manner of "studying-up" (Gusterson 1997; Nader 1974), whether on one's own campus or another, is needed to plan paths of engagement but, as Amit (2000) reminds us, it should not take the place of engagement. More accurately, it should not be the *only* path of engagement.

Given the changing nature of the academy—should that be academies?—over the past 30 years, it should come as no surprise that anthropologists and others, with varying degrees of conscious awareness, are revisiting the issue of reflexivity in methodology broadly and in fieldwork in particular. As the "schizophrenic university" generally, though as yet, inconsistently, moves toward privileging "applied" over "basic" forms of research, within nations and regions and between disciplines and faculties, we should not be surprised to encounter anthropologists drawn in conflicting directions. There is less weight placed on Mode 1 (basic) forms of critique and its dilemmas (Fabian 1991), with the move toward Mode 2 (applied) forms of engagement instead (and its attendant ethical and ontological changes in method). Put somewhat differently, academic anthropologists have been much more thoughtful about their discipline, qua discipline, and its methods, but have lagged behind in their consideration of the post-secondary institutional matrix, which is one of its most important conditions of possibility. In recent years, anthropology programmes around the world (as have many social science and humanities programmes), have been closed, threatened with closure or downsized. The place of reflexivity and thus also *our* expertise is being reconsidered and refashioned. Increasingly, there are calls to transact the self-reflexivity of recent years into "post-reflexive" engagements for individual investigators (Helmreich 2007, 2009; Maurer 2005) and attend to the growth of institutional reflexivities (Fischer 2007; Nowotny 2007; Wynne 2007).

Fischer's (2007) call for anthropologists to attend to institutional reflexivities is salutary, but it must include more than the anthropological discipline as an institution or the structural phenomena that are the most frequent objects of study (such as medicine, family, or economy).

> Reflexive social institutions are responses to decision-making requirements when unprecedented ethical dilemmas arise ... reflexive social institutions need to be built where multiple technologies interact to create complex terrains or "ethical plateaus" for decision making. Reflexive social institutions integrate knowledge from multiple sources, often are self-organizing and learning organizations, and respond to new circumstances more easily than brittle, bureaucratic forms of agrarian empires, industrial societies, or closed system, input-output, command-and-control economies. [2007:540–541]

Academic anthropologists ought to be asking the extent to which the academy in general fits this description but, perhaps more importantly, they ought to be asking the extent to which the college or university which employs them fits that description. The force fields generated by the expansions and contractions of the disciplinary and employment institutions upon one another likely have a bearing on anthropological practice that requires more than cursory or bird's-eye view investigation.

## Reflexivities

In reviewing these material-semiotic productions, I was struck by a sense of déjà-vu. Twenty years ago both Johannes Fabian and Gilles Deleuze, each in their own way, intimated that reflexivity could be necessary but never sufficient, for engaged practice. Deleuze had suggested we had been introduced to, and seduced by,

the real subsumption of the "societies of control," if I may be allowed an old Marxian phrase, eclipsing the disciplinary societies so well explicated by Foucault (see also Bagué et al. 2010). The newly hegemonic neoliberal economic era, often associated with the onset of the Reagan-Thatcher political era, heralded "the introduction of the 'corporation' at all levels of schooling" (Deleuze 1992:7). As anthropology settled into its "post" age, Fabian was already drawing attention to the limits of self-reflexivity. The discipline's "dilemma," he wrote, "lies in the contradictory predicament of wanting to reject hegemonial interests by practising critical approaches and yet having to work in relationships that are determined by the context of those hegemonial interests... the question can only in part be how to avoid the damage.... Perhaps, under the circumstances the question must be how to do damage" (1991:191, 194).

The term *reflexivity* itself has expanded well beyond the intended realm of methodology, coming to connote a kind of *inherently* progressive political stance more easily asserted than demonstrated (Lynch 2000). Lynch argues a reflexive condition may well be cognitively inescapable, since "it alludes to the embodied practices through which persons singly and together, retrospectively and prospectively, produce *account-able* states of affairs" (2000:34). It is not so much a matter of "being" reflexive as strategically "doing" it as one means among many to generate certain effects and engagements.[12] Transductive ethnography (Helmreich 2007, 2009) is another means, one which opens productive juxtapositions and their potential incommensurabilities, where the ethnographer emerges as part of ongoing intra-action, rather than a reduction to a unified ethnographic ego in self-reflexivity.

Reflexivity, then, is not inherently anything. Yet, for academic anthropologists it is complementary, in Karen Barad's sense and this is a vital element when considering an ethnography of a post-secondary institution.

> This is because you need to make a choice between two complementary situations: either you think about something, in which case that something is the object of your thoughts, or you examine your process of thinking about something, in which case your thoughts about what you are thinking (about something), and not the something itself, are the object of your thoughts. (Barad 2007:21)

Such a condition of complementarity affects and effects changes in academic anthropologists and, by extension, the institutions in which they are employed. There are two overlapping "recursive publics" (Kelty 2005) diffractively in tension or superpositioned (Barad 2007) here, a disciplinary one directed at research and an academic one directed at teaching and service. These are realms usually held apart, even though there is widespread recognition at an informal and anecdotal level that each to some extent shapes the other. It is exactly their complementarity that is at issue. Here also, solid ethnographic evidence is lacking.

Recent years have also led to calls, quite probably in connection with the rise of Mode 2 universities within Triple Helices—that is, the neoliberalization of the academy—for introducing (and differentially engaging within) reflexive *institutions*, institutions which are said to be more flexible and responsive to new "ethical plateaus" (Fischer 2005, 2007; see also Fortun and Fortun 2005). Such reflexive institutions are called forth by rapid technoscientific change. They are sites where new technologies, be they abstract or material, administrative or disciplinary, come together in a play of opening and foreclosing choices and possibilities. Such may indeed be the case for the emerging "flexible workplace" associated with neoliberal economic enterprises, though I suspect Lynch's caution concerning the inherent progressiveness of self-reflexivity has a parallel application in institutional reflexivity. Moreover, the various "enunciatory communities" (Fischer 2005; Maurer 2005) of expertise within post-secondary institutions may not all have an equal interest or say in "being" reflexive, since institutional reflexivity is not a "natural" state of affairs in unstable and shifting communities of practice (Wynne 2007:499–500).

Certainly, much of this applies to my own university, one which, I suspect, fits the larger pattern, and irony, of progressively expanding on a Chandlerian model of management, with its tight vertical integration of units, while much of the corporate business world moves away from this model (Mirowski and Sent 2005:656; see also Bagué et al. 2010:11).[13] So, if the university is becoming more Chandlerian to manage its internal differences, it is becoming less reflexive (doing less reflexivity) but, at the same time, closer connections to industry and government compel more reflexivity, at least of particular (econometric) kinds. These contradictory forces are another expression of the schizophrenic university as an institutional body multiple. No doubt more investigation is needed here, since this is an important space in which to apply one's expertise, anthropological or otherwise. Building on Shore's notion of the schizophrenic university, ethnographies of the academy need to consider not only the conflicting demands placed on faculty (themselves fragmented along various axes) but also those confronted by administrators and other

personnel within the institution and vis-à-vis integration into the local Triple Helix.

Here we return once again to the "dilemma" of an "engaged" anthropology for those anthropologists based in the academy: how to conduct fieldwork when the institution which makes professional activity possible also shapes the very terms of engagement for how, when, why and with whom fieldwork is conducted, be it across the globe or across campus. Now, the path of logic I have found myself following may seem distant from those bioscientists and their new facility mentioned at the beginning. However, they too are part of those enunciatory communities of expertise often referred to as "the faculty;" they too are interested, in all senses of the term, in what the Triple Helix of academy, industry and government entails. Such communities, in terms of fieldwork, are not only to be studied up or down, but also across, with at least an offer, and its attendant potentials, of friendships. Such communities are not likely to be homogeneous, yet it will require balancing the complementary enactments of the anthropologist-who-happens-to-be-an-employee with the employee-who-happens-to-be-an-anthropologist to come to some kind of dialogic relations with other academic, administrative, service or maintenance employees.

## Temporal (Re)Productions

Fortun and Fortun propose anthropologists of science immerse themselves into their field sites via new experimental methodologies, challenging the dominant trend in science studies to judge when and how science and scientists overdetermine the social (2005:51). They suggest a supplemental approach which engages scientists on their own terms through a method they term "friendship," "conceived as a way of relating to others that demands reciprocity yet tolerates times out of joint, the not-always-predictable circuit of gifts, and the way exchange can work even when not a simple, reciprocal transfer that returns an investment" (2005:51). Inside the facility I studied on my campus, I felt compelled to conduct myself this way, since there was little to be gained from being self-reflexive later. It prompted me to think about my superpositioned state of both anthropological researcher and employee of the university. Such a method is, to use Fabian's phrase, one means to "do damage" against the neoliberalizing academy. To be sure, there is no intent on my part to romanticize the past. Universities from their inception have always been tied to wider social inequalities and reliant on powerful patrons. They have always had internal divisions along a variety of axes. There is no going back to a pre-1980 golden age, nor would I want to do so. We do, however, need to be more politically conscious about how we do damage on our respective campuses as employees informed by anthropology, precisely because we cannot be formulaic.

The matter of doing damage, however, is a temporal matter as much as an affective one (Adams at al. 2009). Better, it is enacted through *spacetimemattering* (Barad 2007). A comparative ethnology of campuses would likely shed light on the relationalities among histories, historicities[14] and historialities.[15] The superpositioned anthropologist, who is simultaneously an employee, split by research time, service time and teaching time, cannot think of time as homogenous and empty (Benjamin 1968) despite the allure of various homogenizing pressures (neoliberal policies not least among them). An attitude of time being natural, homogenous, linear and ontologically independent is a postagrarian, industrial phenomenon, now familiar globally (Mirmalek 2008). More recently the hegemony of neoliberal economic policies has promoted not only this flattening of time and temporalities but also coaxed and coerced acceptance of a recursive anticipation as a kind of promissory time calculated in terms of risk (aversion).

> Abduction ... is the concept we adopt and adapt to capture the processes of tacking back and forth between futures, pasts and presents, framing the life yet to come *and* the life that precedes the present as the unavoidable template for producing the future. Abduction names a mode of temporal politics, of moving in and mobilizing time, turning the ever-moving horizon of the future into that which determines the present.... Histories of the future are replacing histories of the present. [Adams et al. 2009:251]

Without doubt, much of the policy language and practice surrounding the Mode 2 university fits this sense of abduction, even as Chandlerian managerial and administrative practice also harkens back to previous notions of empty and homogenous time. (Think of slogans such as "moving our university into the future" or "destination university.") Such a rupture of, and in, time provides a point of intervention; one means of doing damage. As Barad (2007) carefully demonstrates, time is not uniform, linear, singular or independent of the phenomena through which it is related: it is not ontologically prior to phenomena, but a product of relating. We find ourselves amid an "ongoing" flow of agency through which part of the world makes itself differentially intelligible to another part of the world and through which causal structures are stabilized and destabilized does not take place *in* space and time but happens in the making of spacetime itself (2007:140). Spacetime is a

means of indicating temporal immediacy (Benjamin's [1968] *Jetztzeit*) *and* a radical openess to superpositioned possibilities, suggesting its multiplicity, agency and différance (Barad 2007; Derrida 1976; Rheinberger 1994, 1997).

It is understood and appreciated, though perhaps not frequently enough, that different disciplines' and subdisciplines' research practices and products emerge though at different speeds, intensities and extensities. The same can be said for research programmes or "experimental systems" (Rheinberger 1997) and even individual research projects. These qualitatively disparate spacetimematterings are increasingly compressed into quantitatively homogenizing histories of the future, which can never arrive because they must always (already) be uniformly anticipated (Adams et al. 2009). In other words, the productivity and "excellence" of, say, a neuroscientist and a sociocultural anthropologist are made econometrically auditable in part by an attempted reduction of their different research rhythms, recursions and repetitions (not to mention their very different onto-epistemological horizons and the agencies enacted by their objects of investigation) to an empty homogenous time. Faculty evaluations or employment offers not only are measured in terms of the number of conference papers presented or journal articles published, *but also within a (very) standardized time frame*, typically a fiscal or calendar year. Drawing attention to the *necessary* temporal multiplicities of our campuses is one (and far from the only) means to challenge the homogenizing, neoliberalizing forces acting in the spread of audit cultures, bureaucracies of virtue and campaigns for "excellence," for example. A comparative ethnology of campuses would likely help guide such ethnographies even as they are constituted by them.

## Conclusion

Among the important questions which remain is the extent to which such approaches can be used with other, more unevenly situated, enunciatory communities on or off campus—such as senior administrators, support staff or workers in related Triple Helix industries—to contest the new forms of control emerging alongside older sovereign and disciplinary forms without "watching your co-optation unfold in the slow motion of endless minutiae that university committees appear to have perfected" (Amit 2000:232–233). On Prince Edward Island, efforts to establish a self-sustaining biocluster is not so much due to some vague force called globalization as it is a local attempt to "be global" and create wealth and jobs in a historically have-not province where resource extractive industries are declining and tourism is stagnant. This change in economic emphasis will unquestionably lead to as yet unformed paths. Using what Rose (2007:142) calls a path-dependant theory of truth—one could say a ductive theory of truth—may be another means to "do damage," in this case not against economic "development" per se but the manner in which it is or is not allowed to be an object of contestation (Latour 2005). Universities can integrate into their Triple Helices in different ways and their Mode 2 performativity can be enacted in many ways. These enactments cannot be done in general, even if broad patterns can aid in framing questions.

My call throughout this article for multisited ethnographies of post-secondary institutions is a call for greater specificity. Not all actualized forms of the Triple Helix are the same, nor are the modes of constructing Mode 2 universities and colleges. Moreover, we need not accept the neoliberal histor(icit)ies of the future being written for us on a promissory note. Ong's (2006) investigations into local conditions led her to postulate "neoliberalism as exception;" it is a useful means to think, diffractively, through the multiplicitous singularity that is "the academy" and the manner(s) in which neoliberal policies are ab-, ad-, con-, de-, e-, in-, pro-, re-, repro-, se-, sub- and trans-ducted. As a practical matter, different forms of community and different forms of engagement matter for the institution as well as individuals. Pointing out the (historial) possibilities, as always (already) larger than we imagine, has been a long-standing strength of anthropology. In such circumstances, a superpositioned anthropological and employee practice is overtly transformative of both the discipline and the anthropologist, and the academic institution and the employee; it is transformative of spacetime. A recursive anthropological public must make choices. However, to date, the discipline has tended to focus more on the political, moral and ethical problem of duction for the anthropologist-as-researcher and very little for the anthropologist-as-employee. They cannot and should not be artificially separated from one another any longer, even if they cannot be reduced to a unity.

The present dilemmas of anthropological expertise in the academy overlap with those of an earlier, yet still vital, critical anthropology without, however, collapsing into one another. One path-crossing or point of transduction from critique to engagement in an anthropology of the academy is the dilemma "not about right or wrong; not my personal, or even my discipline's integrity are at stake, but the very 'conditions of possibility' of producing ethnographic knowledge" (Fabian 1991:187).

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## Notes

1 Barad's (2007) notion of spacetimemattering is a more eloquent expression of this idea.
2 For critiques within STS see, for example, Mirowski and Sent (2005) and Croissant and Smith-Doerr (2005).
3 The growth of a biocluster is not the only element in the province's economic development strategy. Efforts are underway to expand the aerospace, information technology and renewable/sustainable energy industries. That said, the greatest capital investments have been in the bioscience industry. See *Island Prosperity: A Focus for Change* (Government of Prince Edward Island 2008).
4 Contract academic staff are often referred to as "sessionals" in Canada and "adjuncts" in the United States.
5 These are the Canadian Institutes of Health Research (CIHR), the National Science and Engineering Research Council (NSERC) and the Social Science and Humanities Research Council (SSHRC).
6 When reflexivity in writing became an important issue in anthropology nearly 30 years ago, James Clifford drew attention to the perils of anthropology's disciplinary politics by stating: "To write in an unorthodox way... one must first have tenure" (1986:21). Having moved from disciplinary politics to workplace politics and the practices of writing to the practices of fieldwork, we can get a sense of how the ground has shifted beneath our feet. Perhaps the parallel statement at the present juncture might read: "To study-up in an unorthodox way ... one must first have tenure. Or nothing left to lose." It is precisely what lies between—then and now, tenure and nothing left to lose—that would be revealing.
7 See contributions to Roseman (2010) and Wright and Rabo (2010) for important exceptions.
8 See Kleinman (2003) for a related analysis of how industry substantially, yet indirectly, compels university-based science and scientists in certain directions rather than others.
9 Ong (2006) provides some important suggestions in chapter 6 of her work.
10 On the impact of bio-knowledges on the production of knowledge in general, see Rose and Novas (2005), Rose (2007) and essays available from the Anthropology of the Contemporary Research Collaboratory (http://anthropos-lab.net/).
11 I am not suggesting that ethnographic investigations of the academy should only occur in one's home institution. However, for reasons outlined in this article, and others beyond the scope of this article, it is the most likely scenario. That said, studying an academy other than the one(s) that employ the researcher will promote and require different kinds of reflexivities and positionalities than those discussed here. This too would yield benefits. My concern here has been to emphasize the academic anthropologist *as employee*, which in turn puts the home institution at the forefront of consideration. I would like to thank the anonymous reviewer for *Anthropologica* who drew attention to this ambiguity in my text.
12 As Boyer argues, in the different but related context of the recursive effects of cybernetics on journalism and anthropology, "It is not only possible but necessary to link the truth regimes of expert knowledge to the experiential and material conditions of expert knowledge practices. Analyzing this connection will help us to understand in a more nuanced way why various schemata of expert knowledge take the specific forms and contents that they do" (2010:92).
13 The Chandlerian business model refers to the work of Alfred Chandler, especially in "The Visible Hand" (1993). It both describes and promotes the organizational structure of large business firms that were horizontally divided and hierarchically organized in the "pyramid" structure of laissez-faire and Keynesian capitalism. It is now frequently contrasted with business models and organizational structures favouring the neoliberal flexible workplace (see, e.g., Sennett 2006).
14 By historicity, I intend the everyday sense of a means of conceptualizing history, as well as the more nuanced meaning Michel-Rolph Trouillot suggests as "the ways in which what happened, and what is said to have happened are and are not the same may itself be historical" (1995:4).
15 Here I follow the work of Rheinberger in particular (1994, 1997).

> Historiality not only has to accept and even postulate a kind of recurrence inherent in any hindsight—hence, interpretation or hermeneutic action. It has to assume that recurrence works in the differential activity of the *system* [such as a post-secondary institution-UK] that is *itself* at stake, and in its time structure. What is called its history is "deferred" in a rather constitutive sense: The recent, so to speak, is the result of something that did not happen. And the past is the trace of something that will not have occurred. Such is the temporal structure of the production of a trace. [1994: 66–67]

## Bibliography

Adams, Vincanne, Michelle Murphy and Adele E. Clarke
2009 Anticipation: Technoscience, Life, Affect, Temporality. Subjectivity 28(1):246–265. http://dx.doi.org/10.1057/sub.2009.18.

Amit, Vered
2000 The University as Panopticon: Moral Claims and Attacks on Academic Freedom. *In* Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy. Marilyn Strathern, ed. Pp. 215–235. London: Routledge.

Atkinson-Grosjean, Janet
2006 Public Science, Private Interests: Culture and Commerce in Canada's Networks of Centres of Excellence. Toronto: University of Toronto Press.

Bagué, Edurne, Núria Comerma and Ignasi Terradas
2010 An Analytical Proposal for Understanding the "Higher Education European Space": A View from the University of Barcelona. New Proposals: Journal of Marxism and Interdisciplinary Inquiry 3(2):9–19.

Barad, Karen
2007 Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, NJ: Duke University Press.
2008 Living in a Posthumanist Material World: Lessons from Schrödinger's Cat. *In* Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology. Anneke Smelik and Nina Lykke, eds. Pp. 165–176. Seattle: University of Washington Press.

Benjamin, Walter
1968 Theses on the Philosophy of History. *In* Illuminations: Walter Benjamin Essays and Reflections. Hannah Arendt, ed. Pp. 253–264. New York: Schocken Books.

Bosk, Charles L.
2007 The New Bureaucracies of Virtue or When Form Fails to Follow Function. Political and Legal Anthropology Review 30(2):192–209.

Boyer, Domenic
2010 Digital Expertise in Online Journalism (and Anthropology). Anthropological Quarterly 83(1):73–95. http://dx.doi.org/10.1353/anq.0.0114.

Chandler, Alfred
1993 The Visible Hand. Cambridge, MA: Belknap Press of Harvard University Press.

Clifford, James
1986 Introduction: Partial Truths. *In* Writing Culture: The Poetics and Politics of Ethnography. James Clifford and George E. Marcus, eds. Pp. 1–26. Berkeley: University of California Press.

Cooke, Philip
2007 Growth Cultures: The Global Bioeconomy and its Bioregions. London: Routledge.

Cooper, Melinda
2008 Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era. Seattle: University of Washington Press.

Croissant, Jennifer L. and Laurel Smith-Doerr
2005 Organizational Contexts of Science: Boundaries and Relationships Between University and Industry. *In* Making Things Public: Atmospheres of Democracy. Bruno Latour and Peter Weibel, eds. Pp. 691–718. Cambridge, MA: M.I.T. Press.

Deleuze, Gilles
1992 Postscript on the Societies of Control. October 59 (Winter):3–7.

Derrida, Jacques
1976 Of Grammatology. Baltimore: Johns Hopkins University Press.

Downey, Gary Lee, Joseph Dumit and Sharon Traweek
1997 Corridor Talk. *In* Cyborgs and Citadels: Anthropological Interventions in Emerging Sciences and Technologies. Gary Lee Downey and Joseph Dumit, eds. Pp. 245–263. Santa Fe: School of American Research Press.

Etzkowitz, Henry
2003 Innovation in Innovation: The Triple Helix of University-Industry-Government Relations. Social Sciences Information. Information Sur les Sciences Sociales 42(3):293–337. http://dx.doi.org/10.1177/05390184030423002.

Etzkowitz, H., and L. Leydesdorff
1997 Introduction to Special Issue on Science Policy Dimensions of the Triple Helix of University-Industry-Government Relations. Science & Public Policy 24(1):2–5.

Fabian, Johannes
1991 Dilemmas of Critical Anthropology. *In* Constructing Knowledge: Authority and Critique in Social Science. Lorraine Nencel and Peter Pels, eds. Pp. 180–202. London: Sage Publications.

Fischer, Michael M. J.
2005 Technoscientific Infrastructures and Emergent Forms of Life: A Commentary. American Anthropologist 107(1):55–61. http://dx.doi.org/10.1525/aa.2005.107.1.055.
2007 Four Genealogies for a Recombinant Anthropology of Science and Technology. Cultural Anthropology 22(4):539–615. http://dx.doi.org/10.1525/can.2007.22.4.539.

Fortun, Kim, and Mike Fortun
2005 Scientific Imaginaries and Ethical Plateaus in Contemporary U.S. Toxicology. American Anthropologist 107(1):43–54. http://dx.doi.org/10.1525/aa.2005.107.1.043.

Gershon, Ilana
2011a Neoliberal Agency. Current Anthropology 52(4):537–555. http://dx.doi.org/10.1086/660866.
2011b Un-Friend My Heart. Facebook, Promiscuity, and Heartbreak in a Neoliberal Age. Anthropological Quarterly 84(4):865–894. http://dx.doi.org/10.1353/anq.2011.0048.

Gibbons, Michael, Camille Limoges, Helga Nowotny, Simon Schwartzman, Peter Scott and Martin Trow
1994 The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies. London: Sage Publications.

Giroux, Henry
2007 The University in Chains: Confronting the Military-Industrial-Academic Complex. London: Pluto Press.

Government of Prince Edward Island
2008 Island Prosperity: A Focus for Change. http://www.gov.pe.ca/photos/original/IPS.pdf.

Gusterson, Hugh
1997 Studying up Revisited. Political and Legal Anthropology Review 20(1):114–119.

Helmreich, Stefan
2007 An Anthropologist Underwater: Immersive Soundscapes, Submarine Cyborgs and Transductive Ethnography. American Ethnologist 34(4):621–641. http://dx.doi.org/10.1525/ae.2007.34.4.621.
2009 Alien Ocean: Anthropological Voyages in Microbial Seas. Berkeley: University of California Press.
Jacob, Marie-Andrée and Annelise Riles
2007 The New Bureaucracies of Virtue: Introduction. Political and Legal Anthropology Review 30(2):181–191.
Kalir, Barak
2006 The Field of Work and the Work of the Field: Conceptualising an Anthropological Research Engagement. Social Anthropology 14(2):235–246.
Kelty, Christopher
2005 Geeks, Social Imaginaries and Recursive Publics. Cultural Anthropology 20(2):185–214. http://dx.doi.org/10.1525/can.2005.20.2.185.
Kleinman, Daniel Lee
2003 Impure Cultures: University Biology and the World of Commerce. Madison: University of Wisconsin Press.
Latour, Bruno
2005 From Realpolitik to Dingpolitik or How to Make Things Public. *In* Making Things Public: Atmospheres of Democracy. Bruno Latour and Peter Weibel, eds. Pp. 14–41. Cambridge, MA: M.I.T. Press.
Law, John, and John Urry
2004 Enacting the Social. Economy and Society 33(3):390–410. http://dx.doi.org/10.1080/0308514042000225716.
Lederman, Rena
2006a Introduction: Anxious Borders Between Work and Life in a Time of Bureaucratic Ethics Regulation. American Ethnologist 33(4):477–481. http://dx.doi.org/10.1525/ae.2006.33.4.477.
2006b The Perils of Working at Home: IRB "Mission Creep" as Context and Content for an Ethnography of Disciplinary Knowledges. American Ethnologist 33(4):482–491. http://dx.doi.org/10.1525/ae.2006.33.4.482.
2007 Comparative "Research": A Modest Proposal Concerning the Object of Ethics Regulation. Political and Legal Anthropology Review 30(2):305–327.
Lynch, Michael
2000 Against Reflexivity as an Academic Virtue and Source of Privileged Knowledge. Theory, Culture and Society 17(3):26–54. http://dx.doi.org/10.1177/02632760022051202.
Marcus, George
1995 Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography. Annual Review of Anthropology 24(1):95–117. http://dx.doi.org/10.1146/annurev.an.24.100195.000523.
2007 Notes on the Contemporary Imperative to Collaborate, the Traditional Aesthetics of Fieldwork That Will Not Be Denied, and the Need for Pedagogical Experiment in the Transformation of Anthropology's Signature Method. http://sts.ucdavis.edu/summer-workshop/Workshop%202009%20Readings/Marcus%202006%20Notes%20on%20the%20Contemporary%20Imperative%20to%20Collaborate.pdf.
Martin, Ron, and Peter Sunley
2003 Deconstructing Clusters: Chaotic Concept or Policy Panacea? Journal of Economic Geography 3(1):5–35. http://dx.doi.org/10.1093/jeg/3.1.5.
Maurer, Bill
2005 Introduction to "Ethnographic Emergences." American Anthropologist 107(1):1–4. http://dx.doi.org/10.1525/aa.2005.107.1.001.
Menzies, Charles
2010 Reflections on Work and Activism in the "University of Excellence." New Proposals: Journal of Marxism and Interdisciplinary Inquiry 3(2):40–55.
Mirmalek, Zara
2008 Working Time on Mars. KronoScope 8(2):159–178. http://dx.doi.org/10.1163/156771508X444602.
Mirowski, Philip, and Esther-Mirjam Sent
2005 The Commercialization of Science and the Response of STS. *In* Making Things Public: Atmospheres of Democracy. Bruno Latour and Peter Weibel, eds. Pp. 635–689. Cambridge, MA: M.I.T. Press.
Mol, Annemarie
2002 The Body Multiple: Ontology in Medical Practice. Durham, NC: Duke University Press.
Nader, Laura
1974 Up the Anthropologist—Perspectives to Be Gained from Studying Up. *In* Reinventing Anthropology. Dell Hymes, ed. Pp. 284–311. New York: Vintage Books.
Nowotny, Helga
2007 How Many Policy Rooms Are There? Evidence-Based and Other Kinds of Science Policies. Science, Technology and Human Values 32(4):479–490. http://dx.doi.org/10.1177/0162243907301005.
Nussbaum, Martha
2010 Not for Profit: Why Democracy Needs the Humanities. Princeton, NJ: Princeton University Press.
Ong, Aihwa
2006 Neoliberalism as Exception: Mutations in Citizenship and Sovereignty. Durham, NC: Duke University Press.
Pels, Peter
2000 The Trickster's Dilemma: Ethics and the Technologies of the Anthropological Self. *In* Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy. Marilyn Strathern, ed. Pp. 135–172. London: Routledge.
Porter, Michael
1998a Location, Clusters and the "New" Microeconomics of Competition. Business Economics (Cleveland, Ohio) 33(1):7–17.
1998b Clusters and the New Economics of Competitiveness. Harvard Business Review 76(6):77–90.
2000 Location, Competition and Economic Development: Local Clusters in a Global Economy. Economic Development Quarterly 14(1):15–34. http://dx.doi.org/10.1177/089124240001400105.
Rabinow, Paul
1996 Steps Toward a Third Culture. *In* Essays on the Anthropology of Reason. Paul Rabinow, ed. Pp. 153–161. Princeton, NJ: Princeton University Press.

Rajan, Kaushik Sunder
2006 Biocapital: The Constitution of Postgenomic Life. Durham, NC: Duke University Press.
Rheinberger, Hans Jörg
1994 Experimental Systems: Historiality, Narration, and Deconstruction. Science in Context 7:65–81.
1997 Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube. Stanford: Stanford University Press.
Rose, Nikolas
2007 Genomic Susceptibility as an Emergent Form of Life? Genetic Testing, Identity, and the Remit of Medicine. *In* Biomedicine as Culture: Instrumental Practices, Technoscientific Knowledge, and New Modes of Life. Regula Valérie Burri and Joseph Dumit, eds. Pp. 141–150. London: Routledge.
Rose, Nikolas, and Carlos Novas
2005 Biological Citizenship. *In* Global Assemblages. Technology, Politics and Ethics As Anthropological Problems. Aihwa Ong and Stephen J. Collier, eds. Pp. 439–463. London: Blackwell Publishers.
Roseman, Sharon
2010 Introduction to Special Issue on "Universities, Corporatization and Resistance." New Proposals: Journal of Marxism and Interdisciplinary Inquiry 3(2):5–8.
Ryder, Ron
2006 UPEI Sits Atop Rankings for Research at Low Price. The Charlottetown Guardian, June 28: A4.
Sennett, Richard
2006 Cities Without Care or Connection. *In* Talking About People: Readings in Contemporary Anthropology. William A. Haviland, Robert J. Gordon and Luis A. Vivanco, eds. Pp. 121–124. Boston: McGraw-Hill Higher Education.
Shore, Cris
2008 Audit Culture and Illiberal Governance: Universities and the Politics of Accountability. Anthropological Theory 8(3):278–298. http://dx.doi.org/10.1177/1463499608093815.
2010 Beyond the Multiversity: Neoliberalism and the Rise of the Schizophrenic University. Social Anthropology 18(1):15–29. http://dx.doi.org/10.1111/j.1469-8676.2009.00094.x.
Shore, Cris, and Susan Wright
1999 Audit Culture and Anthropology: Neo-Liberalism in British Higher Education. Journal of the Royal Anthropological Institute 5(4):557–575. http://dx.doi.org/10.2307/2661148.
2000 Coercive Accountability: the Rise of Audit Culture in Higher Education. *In* Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy. Marilyn Strathern, ed. Pp. 57–89. London: Routledge.
Snow, C. P.
1993 The Two Cultures. Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511819940.
Strathern, Marilyn
2000 Introduction: New Accountabilities. *In* Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy. Marilyn Strathern, ed. Pp. 1–18. London: Routledge. http://dx.doi.org/10.4324/9780203449721.
Swiffen, Amy
2007 Research and Moral Law: Ethics and the Social Science Research Relation. Political and Legal Anthropology Review 30(2):210–228.
Trouillot, Michel-Rolph
1995 Silencing the Past: Power and the Production of History. Boston: Beacon Press.
Wright, Susan and Annika Rabo
2010 Introduction: Anthropologies of University Reform. Social Anthropology 18(1):1–14. http://dx.doi.org/10.1111/j.1469-8676.2009.00096.x.
Wynne, Brian
2007 Dazzled by the Mirage of Influence: STS-SSK in Multivalent Registers of Relevance. Science, Technology & Human Values 32(4):491–503. http://dx.doi.org/10.1177/0162243907301086.