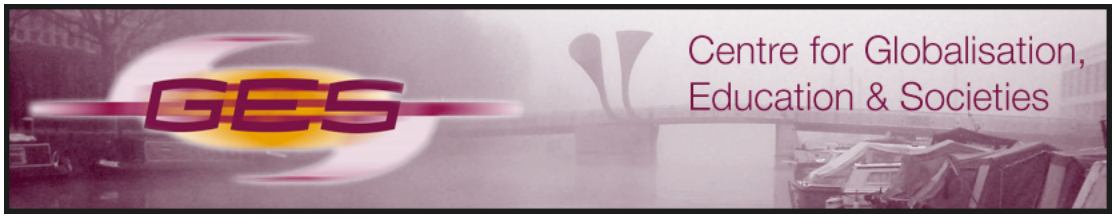

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Knowledge Mediators and Lubricating Channels: On the Temporal Politics of Remissioning the University

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Forthcoming in *TOPIA: Canadian Journal of Cultural Studies* - Special Issue: "Out of the Ruins: The University to Come", Fall 2012.

Abstract

Engaging with the work of Hartmut Rosa, this article offers an account of the politics of time in the contemporary corporatizing and enterprising university. It examines the emerging 'third mission' for the university, and ways in which this has enabled an array of new actors, their projects and practices, to operate in, and on, university spaces which in turn are aimed at reworking the socialities, spatialities and temporalities of university life. Drawing on empirical work, we focus particularly on a new kind of knowledge-worker in the academy - knowledge mediators/brokers - whose task it is to create the spaces and channels that move ideas between the university and the wider economy and back again, to negotiate and help navigate ideas from the world of business into the university, and to accelerate the development of ideas into marketable, scalable and profitable goods and services. Yet, we also show that these processes of acceleration are accompanied by a paradoxical set of counter-flows, undercurrents and backflows, which in turn feed processes of deceleration. We conclude by thinking through what a counter-hegemonic project might look like that critiques and recreates a new politics of time to underpin the conditions for new forms of knowledge creation in the academy.

Keywords: acceleration, temporality, deceleration, universities, knowledge, capitalism

Introduction

In introducing their account of radical changes that had taken taking place in universities during the 1990s, the result of more than a decade of neoliberal reforms in higher education in Australia, Marginson and Considine note: "What was often surprising to us, during the course of the case studies underpinning this book, was the speed and the extent of the changes now taking place" (2000: 2). This observation – of the pace and degree of change in the academy – also caused Marginson and Considine to record that they were "…astonished at the eagerness of these once stuffy institutions to reinvent themselves, not just in marketing terms, but in terms of their day-today lives, their very identity" (ibid: 2-3). And, as they tell it, what they were looking at were a set of transformations that were both daring *and* fraught. Daring, because what were being introduced were radically new systems of competition and performance into the academy, in turn subjecting the university and its workers to the disciplines of the market and money. Fraught, because in the process, the academy was at risk of losing the very identity that had given it status in the society, and for some, this was a loss that should be confronted.

Marginson and Considine are not alone in making these kinds of arguments. Over the past decade, there has been huge growth in critical work examining changes in university life, adding considerable evidence to arguments advanced by writers like Bill Readings (1996); that the contemporary university had lost its historical *raison d'etre*, and new alternatives were needed. Like others, we agree with Reading's diagnosis. However, we have also found ourselves thinking more deeply about

Marginson and Considine's remarks on the *speed* of change, and what part speed itself might play in the rhythm of the modern academy more generally, and in the nature and form of social transformations in the university in particular. To be sure, there is a considerable amount of work how we experience what Hartmut Rosa (2003) refers to more generally as 'acceleration' - and in this case, the pace of life in the academy today. However, analyses have tended to stop there; as a set of personal experiences of changes in the temporal rhythms of university life.

Yet within the social sciences more generally (cf. Chesneaux, 2000; Rosa, 2003; Rosa, 2005; Rosa & Sheureman (eds.), 2009; Hope, 2009; Hassan, 2010; Wajcman, 2010; Jessop, 2012), a lively debate has emerged around social acceleration as an object of social scientific enquiry; of the ways in which the rhythms of capitalism and modernity, and their particular temporal politics, shape the dynamics giving rise to the idea and experience of 'living in rapidly-changing world'. The question we therefore pose in this paper is: if these claims are correct, what does this mean for how we generate sociological accounts of the transformation of the modern university? For instance, could Readings' (1996) metaphor, of the 'university in ruins', be interpreted as the outcome of radical instability that, apart from intentional rearrangements of some core pillars of modern university, is rooted in accelerated (social) change? And, to what extent is 're-missioning' the university the outcome of a series of restructurings and reinventions that operate in synch with the logics of late capitalism, where "…speed has become a top-ranking concern, if not the ultimate criterion of evaluation in our efforts to ensure the dynamism of the economy and its various sub-systems" (Chesneaux, 2000: 409)? What are the

implications of a critical temporal account for how we re-imagine the university? And finally, can we draw on insights into social acceleration and the academy to develop a counter-hegemonic politics of time which might then in/form a different kind of community within the academy; one in the words of Readings (1996: 188) whose social relations are shaped by question marks that slow down modes of enquiry, rather than pace it up with tidy answers? These questions are at the heart of our paper, and central to any critical sociological and political account of transformations in the contemporary university.

With these questions in mind, the paper proceeds in the following way. We begin by introducing the argument advanced on the dynamics of modern social life; that social acceleration is a constitutive trait of modernity, and a central logic in the workings of capitalism. We then examine what this means for the modern university, itself a child of modernity and site of reason, enlightenment, progress), and central to the social reproduction of capitalism through the formation of political elites, and ongoing capital accumulation. Here we are concerned with how structural transformations of the university are being reshaped by new forms of social acceleration. We explore the dynamics of these processes through the emergence of an explicit 'third mission' for the academy and its closer engagement with the market and world of business. This remissioning of the university – to now include teaching, research *and business*, has created new spaces within the university that an array of actors/projects that operate both in, and on the university (such as tech transfer offices, ideas accelerators and incubators, enterprise boot-camps, knowledge transfer partnerships), and which in turn are challenging, and changing,

the temporalities of university life. We focus particularly on the emergence of knowledge mediators/brokers (Robertson & Kitawaga, 2011; Osborne, 2004) whose work it is to create the spaces and channels that move ideas between the university and the wider economy and back again, to open the university to ideas from the world of business, and to accelerate the development of ideas into marketable, scalable and profitable goods and services. Yet, we also show these processes of acceleration are accompanied by a paradoxical set of counter-flows, undercurrents and backflows, which in turn feed processes of deceleration. We conclude by arguing that a counter-hegemonic politics of time needs to understand these processes and to use this understanding as basis of questioning, challenging and changing the temporal order of the neoliberal academy.

Theory of Social Acceleration (and Deceleration)

Only over the last decade or so the relationship between speed, acceleration and capitalist modernity has appeared to attract an increasing number of systematic social scientific treatment (cf. Scheureman 2004; Hassan & Purser (eds.) 2007; Tomlinson, 2007; Duffy, 2009; Hassan 2009; Laux 2011; Glezos 2012). Many of these accounts are directly or indirectly animated by the work of Hartmut Rosa whose corpus stands for an important benchmark in this emerging line of enquiry. In agreement with earlier, scattered, and in many ways problematic, remarks on speed and acceleration (e.g. McLuhan, 1964; Virilio, 2000), Rosa notes that "...the history of modernity seems to be characterized by a wide-ranging speed-up of all kinds of technological, economic, social, and cultural processes and by a picking up of the general pace of life" (Rosa, 2003: 3). Highlighting deceleration as a directly related

flipside of acceleration, Rosa prompts us to understand this dialectical relationship not 'only' as an aspect of modernity, but as its constitutive feature which runs through its other defining characteristics: differentiation (structural transformation), rationalization (cultural transformation), individualization (transformation of modern subject) and domestication (transformation of nature). For this reason we have drawn particularly on his work for this paper because of our interest in a dialectical account.

Drawing on the corpus of work attributed to the classical sociologists, and inspired by van der Loo and van Reijen (1997), Rosa lays out the contradictory dynamics of these core modern aspects. Pointing to: (i) Durkheim, who showed how differentiation leads to disintegration and fragmentation (anomie); (ii) Weber who explored how rationalization of bureaucratic processes leads to the emergence of an undesired and unintended 'iron-cage'; (iii) Simmel who noticed that increasing individualization leads to the emergence of mass culture; and (iv) Marx who alerted us to how domestication and domination of nature may lead to unexpected backlash of environment, Rosa highlights the temporal texture of modernity (Rosa, 2003: 4-5). However he does not simply add acceleration and temporality to other features of modernity; rather he states it helps to structure the contradictory dynamics of these distinct modernization processes.

Rosa also identifies several conceptual difficulties with acceleration by asking the question: *what* is it that is actually accelerating in modern society (2010: 14)? This seemingly banal question is of great importance, as the answer determines the

frame of reference of any attempt at subsequent analysis. He straightforwardly refuses the impressionistic assertion of some popular commentators (e.g. Gleick, 1999); that 'everything' is accelerating or that time itself is accelerating: "an hour is an hour and a day is a day – regardless of whether or not we have the impression it passed by quickly" (2010: 14-15). He also poses questions such as: is acceleration a singular process or should we think about a multitude of unrelated phenomena that unevenly accelerate? And, are we dealing with isolated accidents or systematic patterns of acceleration? (2010: 15) Rosa develops answers to these question by pointing out there are many social phenomena and processes that *do* evidently accelerate. He proposes three analytically distinct, yet mutually dependent, categories for an understanding of acceleration – technological acceleration, acceleration of social change, and acceleration of pace of life, each propelled by a distinct 'motor' – which in turn compose an 'acceleration-cycle'.

Technological acceleration appears to be both more obvious and a more easily measurable form of acceleration. It can be defined as "the intentional speeding up of goal-directed processes of transport, communication, and production..." (Rosa, 2010: 16). This category is significant because it complements Harvey's (1990) 'time-space compression' whereby the contradictory moment is that space virtually 'contracts' or is 'annihilated'. Importantly, technological acceleration includes new accelerative forms of organization and administration that can be broadly defined as technologies where the main motor is the logic of capital accumulation.

Acceleration of social change is not so much concerned with technological

advancements but rather with processes of social change that are intimately related to technological change and which "render social constellations and structures as well as patterns of actions and orientation unstable and ephemeral" (Rosa, 2010: 17). This gives rise to the increasing transformation of patterns, practices, forms and substances of social associations. The rate of change has many destabilizing and fragmenting implications for individuals, institutions and social formations. The main motor Rosa identifies here is that of functional differentiation. Drawing on Niklas Luhmann's theory of temporization, Rosa notes: "In a society that is not primarily segregated in hierarchical classes but rather structured along the lines of functional "systems", like politics, science, art, the economy, law etc., complexity increases immensely. As a result, the future opens up to almost unlimited contingency, and society experiences time in the form of perpetual change and acceleration" (2003: 14).

Acceleration of the pace of life is the most symptomatic and endemic and implies a spectacular 'time-famine' of modern (western) societies where it seems that we are constantly running out of time. This western experience appears uncanny given the promises invested in technologization, industrialization and digitalization of diverse socioeconomic processes and instances. It is striking that whilst modernity promised that by increasing the number of episodes of action or experience per unit of time we can do more things in less time (Rosa, 2010: 21), virtually all available evidence exploring the 'speed of life' suggests the exact opposite. In this sense the motor is defined as a drive towards the 'good life' rather than by individual and/or collective identification with technological advancement of compartmentalization of social

systems and formations. It appears that in secular western modernity, 'good' or 'fulfilled life' is measured by the sum, breadth and depth of experiences and developed capacities and hence "if we live '…twice as fast...we can double "the sum" of experience, and hence 'of life' within our lifetime" (Rosa, 2010: 30).

Simultaneously, in each sphere of acceleration, there is a host of social instances that remain intact, or decelerate, either as paradoxical effects of acceleration or as reactionary stances and attitudes. In this sense Rosa makes an important distinction for temporal analysis. There is a need to distinguish the mechanisms and effects of unsteady processes of social acceleration that evolve in waves, often brought by new technologies and/or new forms of socioeconomic organization. Technological acceleration is a crucial feature of modern society's relation to nature, acceleration of the pace of life is of overriding importance for the late modern subject, and the overall acceleration of social change is intimately related to both cultural and structural transformation (Rosa, 2003: 25).

Social Acceleration and the University

Given that speed, acceleration, and temporality in general have until recently been under-theorized in social inquiry, it is no surprise that studies in higher education (HE) are relatively silent on this topic (for notable exceptions, see recent explorations of the tensions between institutional and personal temporalities in the accounts by Ylijoki & Mantyla, 2003; Sabelis, 2007; Menzies & Newson, 2007; Gill, 2009; Chow *et al.,* 2010; Ylijoki, 2011). In many respects the modern academy embodies an institutionalized and path-dependent permeable space that reflects, incorporates,

and accommodates, cultural and economic developments making it ideal territory for the investigation of modernizations temporal differences.

Universities are thus particular kinds of social worlds connected to, but discrete from, the wider social formations in which they are located. Whilst different universities are oriented to different cultural circuits and status economies, with some being more local with others more global, nevertheless they are broadly connected through a commitment to the creation and circulation of knowledge. Even a cursory inspection tells us that universities also have their own temporal orderings, in part through how life in the academy is organized and experienced. In this sense, it could also be noted the university has historically been an institution which has struggled to secure time for thought, consideration, and slower scientific conduct, deliberately detached from the faster pace of capitalist production and its ideological apparatuses (Pels, 2003). However, at the same time the university has also been a symbol and instrument of modern progress, where individual scholars have formed institutionalized and disciplinary scientific associations and alliances. The modern university therefore is also a site where scholars have tended to advocate various degrees of societal and economic change and preserve progressive and dynamic 'scientific speed' (Pels, 2003: 215). Drawing on Rosa's schematic, we can see (i) the deployment of time-making technologies (lectures, seminars, lab time, research time, time taken to public papers, open day, term, semester, program, and so on); (ii) a politics of time (such as university autonomy in order to ensure the right to pursue knowledge production as an end in itself); and (iii) the experience of the pace of life (such as feeling overworked, too much to do, feeling marginalized in

relation to others who seem to be more in control of their time).

Despite the rhetoric of universities as 'ivory towers', separate from the presumed 'reality of everyday life, universities have always been engaged with the economy and wider society in some sense' (Mowery et al., 2004). Given then that universities *are* part of everyday life and reality, it is important to grasp hold of what is politically at stake regarding the claim to a different temporal rhythm and social space. Newman and Humboldt were of course advancing arguments for the 'idea of the university' when they insisted there was a different 'politics of time' regarding the creation and sharing of knowledge. Both Humboldt's view of the university as a repository of reason and culture (Humboldt), and Newman's idea as a community engaged in the education of character and intellect (Newman) (Holmwood, 2011: 13), were also arguments for a particular class of elites to have the time to read and think, engage in debate and sharing, and to become someone.

Yet as Holmwood observes; "…these ideas were already in decline when Max Weber wrote his essay on 'science as a vocation' [(1948)]". According to him, scholarship and research were becoming more specialized and a university appointment was increasingly seen, not in terms of a 'vocation', but in terms of employment and a career within a bureaucratic organization (2011: 13). Weber of course was reflecting on transformations taking place in universities in the U.S. during the 1840s, and his view that an increasingly more practical/commercial attitude to education and its value was evident (see also Veblen, 1918). This of course reflected a deeper held view going back to de Tocqueville that science should be more concerned with

application (Mowery et al., 2004: 10). However, U.S. universities were historically also more dependent on their local communities for funding (including private universities), and therefore were required to be responsive to their needs. In contrast, France and German universities were closely tied to the production of elite government officials, whilst in Britain universities were the primary means of reproducing social elites.

The Temporalities of Neoliberalization

If western universities were following the patterns of the 19th century and were increasingly becoming more instrumental over the course of the 20th century, it was the 1970s crisis of the global economy that was to mark another turning point in their long history. This deep structural crisis not only kick-started the search for a new value-base for the developed world whose economies had stalled, but provided the conditions for the launch of radical political project, broadly referred to as neoliberalization, which could be described as "an open-ended and contradictory process of politically assisted market rule" (Peck, 2010: xii).

Since then, there has been a widespread shift to neoliberalization agendas in political and economic practices - couched as modernization agendas - which are also reordering the spatialities and temporalities of university life. Universities are now under pressure to act in the national interest, to become more 'efficient' in their deployment of public/community funds, to expand the production of human capital for the putative knowledge economy, and reform itself as sector in order to generate value through international trade in education, and the creation of

intellectual property (Marginson and Considine, 2000). A clustering of technologies have been rolled out (Hood in 1991 called this clustering of managerial-driven reforms 'New Public Management' (NPM)), with their focus on efficiency, outputs, auditability and accountability, have reworked the temporal ordering of the academy. Yet to leave our account there, as the uniform and forward march of a political project, with its technologies that it deploys, would be to fail to account for the different ways in which the forward movement of neoliberalism has at the same time been accompanied by a series of reversals, opposites, and paradoxes. Or, as Peck so eloquently puts it: "…neoliberalism has lurched through moments of innovation, overreach, correction and crisis" (Peck, 2010: 20).

Most contemporary accounts of the transformation of the academy fail to develop a more structural reading of institutional change through the lens of time. This tends to lend the grand integrative narrative of neoliberalism within the academy and science as something coherent and stable, despite the difficulties arising from the rapidly-changing and inherently heterogeneous institutional realities of the university. Furthermore, the unevenly accelerating change of the institutional configuration of universities partially stems from neoliberal forms of governance and from associated changes in the meta-management of requirements and expectations that various institutional divisions, units and individual academics are subjected to. These instances are far from being uniformly accepted and recognized in the academic environment (see Shelton & Agger, 2010). Despite this heterogeneity of academic landscapes where the temporalities of different political inclinations are in tension, the dominant neoliberal reformist agenda neither admits

any of the oppositional claims nor any of the crises/dilemmas it may have generated. Nonetheless, this does not mean that the neoliberalization/modernization agenda ignores tensions, frictions, crises and deadlocks that originate in its initial arrangements.

Neoliberalization, as Peck notes, is not "bloodless, semi-automatic process, but the work of situated social actors..[with]..a share of vision and determination" (2010: xii). Many neoliberal academic-mangers appropriately recast and incorporate ruptures into its reformist programme. The operational dynamics of institutionalized neoliberalization and arrangements underpinned by forward-marching progressivist visions (e.g. knowledge society, excellence, internationlization) often seek the qualitative and quantitative acceleration of particular desirable infrastructural processes. At the same time this process is also accompanied by ongoing, uneven acts of resistance to neoliberalization/modernization advancements. However, according to the logic outlined by Peck, these deceleratory instances act as feedback mechanisms in the process of advancing neoliberalization.

Paradoxically, therefore, neoliberalization is propelled rather than paralyzed by its very instability (see Peck, 2010). Having said this, we nevertheless seek to avoid epochal claims about neoliberalism which tend to overlook its diverse political forms, empirical manifestations, generative aspects of power and the possibility of multiple articulations of liberal techniques for diverse political projects (Larner, 2011: 325). Nevertheless, we also seek to avoid overly optimistic claims about post-neoliberal cracks and pockets whereby a different anti-capitalist political economy may

flourish. Informed by some ideas associated with the theory of social acceleration we propose that in outlining and understanding the interplay between neoliberalism's aspirational/reformist acceleratory *and* consequential/accompanist deceleratory moments, that this might form the basis of a tactical politics of intervention and subversion. We pick up these ideas in the conclusion.

We can see these temporal logics at work in what Slaughter and Rhoades (2004) call 'academic capitalism'; that is attempts to generate directly consumable and applicable knowledge. We note here the framing and ordering of time is likely to be slightly different in comparison to other dimensions of the academy's activities, such as learning and governance, and therefore demand a separate study. However, the overall aim of the following sections of the paper remains twofold; to bring temporality into focus by analyzing the specific dynamics in the contemporary academy, and to develop an account of contradictory tendencies related to the temporal preferences inherent in the neoliberalization/modernization processes aimed at reinventing the purpose of HE.

Social Acceleration and the Third Mission for Universities: The Case of the UK

Like the US and Canada, the United Kingdom has generated a series of HE policies directed at explicitly drawing universities into a relationship with industry to enable the development of a knowledge-driven economy (DTI, 1998). Three key policies have been foundational for setting the direction for research and innovation policy. The first of these was the UK Labour Government's 1998 White Paper, *Our Competitive Future: Building the Knowledge-Driven Economy*, published by the

Department for Trade and Industry (DTI). The key concerns of this report were arguments around performance gaps that had opened up between the UK and its global competitors in the UK's science base; investments in new technologies; investments in R&D; the ability to turn ideas into marketable products; of collaborations between universities and business; and entrepreneurship. Concerns over performance were then translated into a set of *UK Competitiveness Indicators* which were launched in 1999 (DTI, 1999).

They were also the basis of a range of policies aimed at increasingly the quality, relevance and commercial viability of research outputs. However, fundamental challenges have confronted policymakers in directing science and research policy through universities for the purposes of national competitiveness. This is the result of the principle source of funding for HE being directed through the Office of Science and Technology (OST) and its Research Councils, whilst institutional funding for HE is directed via regional HE funding councils (Wales, Scotland, England, Northern Ireland), on the one hand, and the Regional Development Agencies, on the other. However, a more serious impediment was a deeply embedded culture of academic autonomy, a view that universities ought to keep their research efforts at arms-length from industry, and that competitiveness and commercialization agendas were an anathema to the values of scholarship and scholarly activity.

The idea of the universities' third mission was championed by government and industry, aided by third stream funding to ensure that industry could benefit from the scientific knowledge and expertise of universities. With funding from the OST,

universities were encouraged to launch programs that would hothouse ideas, accelerate business start-ups and develop entrepreneurs. To this end, the Higher Education Innovation Fund (HEIF) was launched in 2001, followed by a series of rounds in 2003, 2005, and 2008 (HEIF2, HEIF3 HEIF4).

The second major policy initiative giving direction to science and innovation research was the Lambert Review on *University-Business Collaboration* which reported in 2003. Major concerns reported by the Lambert Review were the decline in R&D as a percentage of GDP (in contrast to competitor countries such as the US, Japan, France and Germany), very poor levels of investment in R&D by British firms, that UK business research tended to be clustered in a narrow range of industrial sectors (pharmaceuticals, biotechnology, aerospace/defence) and in a small number of companies, and poor levels of innovation. Of particular concern for Lambert was the growing trend for business R&D to go global, which meant locating research centers in their most important markets (such as China) rather than in their home country. The dependence on a small number of firms and sectors made the UK particularly vulnerable to the consequences of firms moving offshore.

A key solution for Lambert was that businesses should develop collaborations with universities in ways that were mutually advantageous, and which spread the risk associated with research. Collaborations were encouraged in order to open up a range of new ideas and talent for the economy, to university-business ventures, and were small to medium-sized enterprises (SMEs) could harness the capabilities of

universities to develop scalable innovations and longer term economic benefits. In doing so, it was hoped universities would learn more about the world of enterprise and commercialization and that these ideas would penetrate academic practice. These rationales were translated into policy initiatives, such as Knowledge Transfer Partnerships (KTPs), to the sponsorship of students in industry whilst studying, and to an expansion of new opportunities for consultancies.

The third major policy was Lord Sainsbury's Review of Government's Science and Innovation Policies titled *The Race to the Top* (2007). The Sainsbury Review covered much of the same territory as the earlier Lambert Review. However, there is a new tone of urgency in this document, in part a response to the emerging specter of India and China as low-wage economies now capable of competing with the UK. According to the Sainsbury Review, universities urgently need to synergistically align with business in order to compete in the global economy. He notes:

> A country's innovation rate depends on inter-linked activities that include: industrial research; publicly funded basic research; user-driven research; knowledge transfer; institutions governing intellectual property and standards; supply of venture capital; education and training of scientists and engineers; innovation policies of government departments; science and innovation policies of RDAs; and international scientific and technological collaboration (2007: 4).

Both industrial research and patenting are identified as particularly poor performers in the UK, despite the fact that research outputs from publicly funded R&D are high (ranked second to the USA on publications). The key for Sainsbury is how to better understand innovation, and from there, the roles that universities might play in fostering it. For many universities, the new policy and funding regimes that have followed have selectively altered their internal structures and incentive practices

(such as promotion, awards for best practice) to take in the 'third sector' mission largely around a narrower science and technology agenda. Divisions have been developed and expanded (such as Research, Enterprise and Development) and projects funded (such as the HEIF-funded SETsquared Partnership that operates at the University of Bristol, Bath, Surrey and Southampton) concerned with the interface between industry and the university.

The SETsquared Partnership is comprised of four SETsquared Business Acceleration Centres; one on each of the participating university sites (see Robertson and Kitagawa, 2011 for a more extensive account). The SETsquared Accelerator aims at bringing business know-how and networks into the university, on the hand, and to take ideas generated from within the university into the local economy, on the other. Yet, SETsquared is more than that. It is a 'differently constituted' space, with its own practices and purposes; those that create the new conduits, channels and trajectories through which ideas and actors can move between the worlds of the academy and business. It also explicitly embraces a different, more differentiated, and directional temporal language – such as 'incubation', 'pre-incubation', 'acceleration', 'start-up', 'spin-out', 'spin-in', 'hi-growth', 'grow-on', 'pitching', 'brokerage', 'scalability', 'drive forward' - to describe its knowledge shaping activities. And whilst the incubator directors are different in ways they bridge the worlds that they inhabit – the inside *and* the outside of the university – the purpose is the same; to identify, incubate and accelerate nascent entrepreneurs from within the academy and beyond (academics, students, wider community), taking their ideas and growing them rapidly so that they materialize as scalable high-tech start-ups. As

Moriarty (2011: 52) argues, the emergence of these actors is intended to reinvent the academy so that it becomes "not only business-facing but business-led, involving an evolution of academic science from a public good to a private good, and a concomitant focus on utilitarian, near-market and applied research."

Yet a closer encounter with the activities of the high tech incubator also tells a different story; of only 10 percent of the ideas for businesses being generated from within the university, the other 90 percent come from outside; of many academics viewing rapid acceleration of an idea into a business product an alien idea, in part because of their own personal commitment to ideas as ideas and not business opportunities, and because the temporal rhythms of good academic practice - of disinterestedness, skepticism, rationality (Moriarty, 2011: 57) sitting uneasily with the demands of a business venture, of passion, pace, and risk. Nevertheless, these third stream ventures are intended to be channels that ease the friction between ideas produced in the academy and their take-up in business. Yet they also are spaces of oscillation, backflows and under-currents as the ongoing life of the university cuts across these flows of ideas.

Mediators, Lubricating Channels and Backflows: Technologies and Trajectories

So how might we think in more sociological ways about these new kinds of knowledge producers and circuits in the modern academy? Are they confined to the obvious spaces, such as incubators, or are they are more widely spread phenomenon? As Meyer notes: "there is nowadays an increasing number of – and need for – knowledge brokers, that is, people whose job it is to move knowledge

around and create connections between researches and their various audiences" (2010: 118). When Osborne discusses the role of intellectuals and knowledge workers he argues they are being "called upon to be something like 'mediators', bringing ideas *quickly* and decisively into public focus, brokering their ideas in the context of different spheres of influence" (2004: 435, emphasis added). Commercially-oriented knowledge mediators are designated roles as path-breaking actors brokering in the third mission of the academy (Moriaty, 2011).

Drawing on Foucault's notion of political economy of power, Callon provides a similar, though less metaphorical, definition when he analyzes translation as the most important feature and function of a knowledge mediator. The knowledge mediation process involves a series of critical moments: defining actors and potentially successful (profitable) ideas, testing, stabilizing and specifying the roles of actors and ideas, and finally rendering the ideas mobile and agile (Meyer, 2010: 121, citing Callon, 1986).

In reflecting on the different knowledge mediation/brokerage practices, it is possible to distil different temporalities at work that constitute new social practices, orders, and identities. In combination, these differently temporalized mediator practices aim to shorten the distance between an idea and its materialization as a commodity and profit-making venture. For instance, whilst 'incubation' should prepare and mature the idea so that it would be ready to maintain desirable momentum, its robustness is not enough. 'Acceleration' therefore aims to equip and 'trajectorize' the idea with an adequate and necessary propellant. Yet its robustness and integral energy is likely

to be confronted with obstructions in the knowledge streams and channels. 'Lubrication', such as special mentors or purpose built networks breaks through, and paves the way, for the idea, in order to secure its smooth movement into the world of business or the university, through eliminating the unnecessary and undesired frictions and hindrances.

More broadly, incubation is composed of activities associated with integrating and embedding knowledge into the business firm form that allows it to enter the capitalist arena. In the SETsquared Business Accelerator, 'incubation' was both spatialized and temporalized. Incubation was a space where the resident entrepreneur, as knowledge mediator, figured out how to add value quickly. Early start-ups were often located together in a particular site, given intensive attention from the resident entrepreneurs, and supported by significantly reduced rents. As the firm matured, the space the firm occupied was likely to change to one referred to as 'grow on', so that financial subsidies, and access to intensive mediation, also diminished.

There are multiple ways in which scientific knowledge and research outcomes are translated and transported, created and circulated. Yet, there is very particular acceleration logic at work when academics and their ideas encounter the world of business. The famous 'time is money' becomes a literal imperative in the case of these mediators. Wright and Rabo (2010: 2) note that in contemporary capitalism, new competitive frontiers lie in; "…the speed with which new knowledge is incorporated into products or used to create whole new industries and spaces for

capital exploitation". They exemplify this by way reference to Denmark's organizing slogan of university reform: 'from idea to invoice'. Similarly, Auckland University organized a conference in 2008 under the heading 'from ideas to markets' (ibid. citing Shore, 2009).

It could be argued that knowledge mediators and brokers operating on the boundaries of the academy and business-industry are 'merchants of speed'. Under the auspices of the knowledge-driven economy, commercially-oriented university research is intentionally and organizationally integrated *into* the circuit of capital whereby, as Marx and Harvey (2006) point out, *the turnover time* in production process determines the generation of surplus. The role of mediator is to considerably assist this process. Marx pertinently observed how the 'proper' speed of production process turns out to be life-blood of capital accumulation which conditions reproduction and multiplication of value. He argues that even spatial distance is reduced to time because the important thing is not the market's distance in space but the speed – the amount of time – with which it can be reached (Marx, 1973: 538).

Harvey observers: "…the turnover time of capital is, in itself, a fundamental measure which also indicates certain barriers to accumulation. Since an accelerating rate of turnover of capital reduces the time during which opportunities pass by un-seized, a reduction in turnover time releases resources for further accumulation" (Harvey, 2006: 86). In other words, speed and acceleration are fundamental systemic logics in capital accumulation. Knowledge mediators, therefore, are tasked with integrating

university-generated research into the temporal hegemony of global capitalist system, where speed – indeed their accelerating speed – is an essential modality.

Jessop illuminates the relationship between the contemporary global capitalist economy, or as he calls it neoliberal globalization, and speed:

> The most recent wave of globalization (dating loosely from the 1980s, depending on one's reference point) is distinctive less for the growing planetary integration of events, processes, institutions, systems and the lifeworld than it is for the growing *speed* of these interconnections and their successive ramifications thanks to new material and social technologies that facilitate more rapid integration and faster spread of its repercussions (2012: 204, emphasis in original).

Viewed in this light, knowledge mediators/brokers are situated on an axis of immaterial value chains that have been gaining in importance and significance in seeking to build the basis of a knowledge-driven economy. At the same time, they aim to provide the temporal and spatial conditions for bringing university knowledge production more squarely into the capitalist arena. Importantly too, as Giroux (2007) notes, these actors are also carriers of 'corporate time' in the other direction, that is into the university space.

Whilst acceleration is a core component of knowledge mediation, it operates in interplay with lubrication. Whereas incubation and acceleration are widely used terms by knowledge mediators, lubrication is a process that is not explicitly defined yet seems to appear indispensable in the process of knowledge mediation. Lubrication enables the emergence of fast policies, and certain types of vehicular – or fast moving – ideas. These movements are extensively discussed by Peck (2011), as he traces how the idea of the creative economy/city moves around, and by McLennan (2004) who illuminates the vehicularity of the concept of the 'Third Way'.

These analyses examine the ways in which policies and ideas become (hyper)mobile, and smoothly and swiftly travel across multiple environments to new destinations and contexts. Additionally, fast policies and vehicular ideas can/do function as 'trojan horses' that carry specific agendas, disguised by strangeness, vagueness, ambiguity and mutability, in part as they are combined with attractive catch-phrases, buzzwords and trendy concepts that "serve as inclusive umbrellas under which quite a range of advocates can shelter, trade and shift their alignments and allegiances" (McLennan, 2004: 485). In essence, the fast mobility and vehicularity of knowledge is a core feature of lubrication aimed at securing a frictionless path in turn assisting the intensification of the rate of knowledge-movement brought by incubation and acceleration.

Finally, lubrication works as an organizing characteristic of knowledge mediation. Although all three technologies operate in a relational way, they are also all implicated in a process of fast knowledge movement made possible through lubricating channels and pipelines. The mobility, applicability, malleability and profitability of ideas is therefore enabled through the processes of defining the aim of an idea, its testing, stabilizing and specifying the desired destination, desired technologies of movement, rendering it mobile and fast. On the website of one U.S. knowledge mediator we can read the following:

> The organization views its "sweet-spot" as the "beginning of the food chain" – the point when the market potential of an innovation is being assessed and then commercialized. Toward this end, [the organization] works with innovators in research institutions, early stage and growth companies and major corporations (*incubation*). Whether a company is looking to spin out or license an innovation, launch a second or third product into a new market or evaluate the commercial potential of a discovery (*acceleration*), [the organization] has experienced entrepreneurs-in-residence who can assess the innovation and coach the innovators

through the process (*lubrication*) (CONNECT, 2011, italics added).

These three technologies recontextualize the operational logic of knowledge mediators, meaning that they are not merely passive and functional 'media' which enables knowledge and ideas to travel fast. By processing and expediting ideas, mediators also add considerable value to them.

Accordingly, these technologies and modalities facilitating the commercialization and privatization of knowledge, science and academic labour are not only about a changing temporal rhythm of the movement of ideas within and out of the academy. Knowledge mediation/brokerage as a practice may also reconstitute fields of power as mutation, mobility, and intense movements of ideas in turn remake the relations between sites, whilst breaching borders construct symbiotic networks and circulatory systems (Peck & Theodore, 2010: 170). In this regime, application and production are intimately related, and this reconfiguration decomposes boundary divisions between the respective sites and venues of production/creation and application. These spaces are not easily distinguishable by borders as various, previously incommensurable; peripheries may be integrated into a single or at least emerging order and logic. Moreover, it must be however noted, that the university is not the exclusive site of knowledge mediators (Osborne, 2004: 436) as they seem to operate as boundary organizations converging academic practices and cultures with the sites of 'application'. Even though the majority of knowledge mediators are formally located within loose institutional structures of university, they function rather as boundary organization often sitting on more than one margin (for an example focusing on boarders between university and industry in the U.S. see

Slaughter & Rhodes, 2008). Meyer calls this 'double peripherality' (2010: 122). In other words, commercially-oriented knowledge mediators are situated in peripheral 'in-between' spaces; hence mediators. Osborne argues that occupation of in-between spaces turns knowledge mediator into an active agentic force: "...for the mediator an idea is seized or appropriated as much as it is created out of nothing" (2004: 440). The space mediators occupy is not only one where things gets moving where mediators operate as 'boatmen' who carry 'knowledge/ideas cargo' – it is also space that bridges two (or more) worlds and in turn reborders them. This complex mediation space also embodies somewhat different features than the ones these organization were originally designed for.

There is also evidence of deceleration at work, or what we are calling backflows, oscillations and undercurrents. For instance, despite the hype about the third mission in universities, there is considerable evidence there are "ongoing frictions between the culture of the university and the culture of the world of business" (Robertson and Kitagawa, 2011: 33), made evident when the different missions of the university collide. As one of the interviewees made plain in Robertson and Kitagawa's study, "we don't get big points in Research Assessment Exercises for losing a 5* research academic to a company for two to three years" (2011: 34). A study of knowledge mediators from Portugal suggests that despite third mission activities in the university, it essentially fails to create innovations ready for market (Marques et al., 2010).

Similarly Fabrizio (2007) presents strong evidence that patenting – one of the core

moments in knowledge mediation – slows down, rather than accelerates, knowledge movement. She concludes: "…university patenting is associated with slowing pace of knowledge exploitation, especially in technology areas that rely more heavily on science as input to innovation. This evidence suggests that university patenting may indeed be hindering or at least slowing industrial innovation" (2007: 505). Similarly, Krucken (2003) investigating university-industry links in the German academy arrived at the conclusion that due to legal barriers and lack of support from the relevant actors in political realm, and clashing priorities of academic culture and industrial requirements, the third mission remains marginal and that "the necessity of organizational units facilitating the transfer of knowledge between academia and industry does not necessarily lead to the creation of effective bridging institutions" (2003: 31).

This seeming failure of third mission business activities does not mean knowledge mediators cease to embody agents of institutional change and reshuffling of objectives. As we show, the main functions that are embedded in the very function and design of knowledge mediators – acceleration, incubation and lubrication of knowledge – result in contradictory dynamics – deceleration, neglect, inhibition of knowledge. Nonetheless, these counter-flows and inertias are processed by a 'logic of expectation', and are thus re-integrated into the ways in which neoliberal sites of university also contribute to the reinvention of the university (Peck, 2010).

To what extent is it possible to see deeper processes of social acceleration at work in the university as it is mediated through efforts to more closely link the production of

ideas to the creation of profit centers/profitable firms? Recall Rosa's four dimensions of modernization we introduced at the beginning of our paper; differentiation, rationalization, individualization and domestication. It is possible to sketch out the ways these processes are also at work within the remissioning of the university. The third mission generates greater levels of *differentiation* within the academy, not only with regard to a new, additional mission to teaching and research, but a whole new cadre of workers, units, divisions, networks, set of languages and spaces which are constituted through this process. The third mission and its logics add to the further disintegration of the university, as we have shown. The aim to accelerate change potentially accelerates disintegration in the structure of the university - and especially some sciences and disciplines - as it is encouraged to operate in new knowledge circuits designed to integrate university and industry. With regard to *rationalization*, whilst the third mission acts to rationalize the university to the wider public by suggesting that it has a role to play in that wider society (including the world of business), the same rationalization also promotes greater levels of accountability and new forms of auditability. Concerning *individualization*, whereas third mission activities are highly attentive to various processes that aim to promote individual firms or entrepreneurs, it ironically begins to produce a culture of sameness and uniformity, in part because it is instrumentally tied to particular logics of capitalist development, such as scaling up innovation, and particular forms of science and technology as the route to creating profitable firms. Finally, regarding *domestication*, third stream activities tend to favor quick science and ideas that might be turned into profits, in turn undermining those forms of (basic) science that might underpin major innovations. The attention to quick marketable science and

technology is likely to paradoxically limit our capacity to deal with bigger societal and environmental threats and disasters as the very areas of science that might deal with these problems are increasingly marginalized.

Revisioning the Academy: Toward a Counter-Hegemonic Politics

What might a counter-hegemonic politics of time look like within the academy? There are at least three moves we might consider with regard to this question. A first move is to problematize time in the academy in ways that link structural changes in temporalities to the experiences of acceleration and deceleration. This means asking questions, such as: how does social acceleration *structure* cultural and social life within the academy and beyond? What are the consequences of closer integration of the academy into circuits of capitalist production, with its logic of social acceleration, for knowledge production within the academy? How might third mission activity within the academy engage with non-capitalist social innovation and strategically deploy temporalities to secure a slowing down of resource depletion, or a pacing up of political awareness. And so on. A second move follows from the first. Through identifying the deeper structural and cultural dynamics at work, we are then in a position to disrupt this politics of time, its technologies and our consequent experiences of it in ways that enable us to generate, and stabilize, alternative social practices, meanings and structures with a politics of time that opens up time and space for communion, communication, and reflection. As our paper suggests, a perspective informed by Hartmut Rosa's theory of social acceleration could serve as a viable entry point for exploring the structural transformations arising from a critical politics of time in the contemporary university. A third move is more fundamental in

that it would seek to expose the logics in both capitalism and modernity which define the context for the contemporary university and its knowledge claims around what it means to be productive, and the linearity of time, and the consequences of these ways of looking at the world for the creation of knowledges, the recognition of difference and diversity, and notions of truth. Here we draw from the work of Boaventura de Sousa Santos (2004: 14) and his sociology of absences. Arguing that western modernity (and its privileging of linear time) and free-market capitalism (and its privileging of capitalist productivity and efficiency) are presented as universal experiences, in turn producing as absent other possible temporal and productive realities, Santos calls for a sociology that actively seeks out that which is made residual and redundant. In other words, a critical engagement with the conditions of knowledge production within the academy would argue for a diverse ecology of temporalities and forms of productivity, and the possibilities these would generate for new kinds of social relations and social understandings. Attempts at re-imagining university would benefit from such understandings, readings and means of engagement. For this reason we would resist turning to deceleration as the basis of a counter-hegemonic engagement in that some forms of knowledge production and circulation may well demand rapid engagement. In other words we would advocate a diverse ecology of temporalities within the academy where 'appropriate' speed is the basis of dialogues and encounters. Here a starting point can be framed by the question of whether business currents within contemporary academy and dominant institutional imperatives have a place within the academy. In conclusion we argue non-accelerative temporal protocol should become a normative rival (not an alternative) to the accelerative one that underpins the third mission's

commercialized, entrepreneurial and market-oriented temporality that, for the moment, is busy promoting a largely capitalist-driven form of scientific and scholarly advancement.

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