The calculus of speed: Accelerated worlds, worlds of acceleration.

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Hassan, R. 2009. *Empires of Speed: Time and the Acceleration of Politics and Society*. Leiden: Brill.

Rosa, H., and W. Scheuerman eds. 2009. *High-Speed Society: Social Acceleration, Power and Modernity*. Philadelphia: Penn State University Press.

Warf, B. 2008. Time-Space Compression: Historical Geographies. London: Routledge.

Acceleration is in some ways old news. People have been bemoaning it and praising it in equal measure for at least two centuries. The essence of the debates remains the role of speed in society. Their relative speed has been identified as one of the characteristic features of societies. Speed is the metric of circulation, be that measured through the movement of ideas, information, money or materials. Such circulation has two dimensions – first, looking at the speed of traversing the earth, i.e. speed crossing space, and, second, the speed of processing and consumption, i.e. speed intensifying time. In the former the issue is the extension of our spatial horizons, in the latter it is the foreshortening of our temporal ones. One might then characterise places and eras, and many casually and habitually do, with regard to either of these dimensions. The two dimensions have also been classically combined in characterising the pressures for and effects of urbanisation. Urban settlements can be seen as machines for intensifying time use. Thus by creating a dense set of possible interactions in a small space the city uses space to accelerate time. As we move into an era characterised by more than half the world living in cities this process may then be seen as

becoming generally pervasive. Thus for instance, one might look at the lovely world map produced in Williams (2009) of how long surface transport would take to get to the nearest city of 50,000 or more people by combining information on terrain and road, rail and river networks. This isochrone map suggests that less than 10 per cent of the world's land is more than 48 hours of ground-based travel from the nearest reasonable sized city. Even in Amazonia the extensive river networks and an increasing number of roads mean that only 20 per cent of the land is more than two days from a city – which is roughly the same as for Quebec.

This continues a line of studies linking distance, travel and the textures of everyday mobility that have become the hallmark of time-geography. It is revealing that some of the early classics of connecting time to geography speak to analysing the acceleration created by transport technologies. As Allen and Hamnett put it there has been a time-space compression comprising the 'reordering of distance, the overcoming of spatial barriers, the shortening of time horizons, and the ability to link distant populations in a more immediate and intense manner' (cited in Warf, page 8). In the inverse move to looking at intensification of time in place, we have studies of speed extending action across space. So early historical geographies looked time taken to cover distances between places like Lansing and Detroit in Michigan which were 1300 minutes apart by stagecoach in 1840, but the train had reduced that to 180 minutes by the 1870s and in the twentieth century the automobile reduced that to 80 minutes (Warf, page 15), or using isochrones maps – that is measuring distance travelled in a given time - in studies of expanding commuting such as Schjerning's 1903 analysis of Berlin (op. cit. p119-22) compared to more recent reconstructions of train speed isochrones for the nineteenth century in Britain (page 93) or the USA Eastern seabord (page

99). Warf's book provides a rich history of the long run of time-space compression. In essence the book provides an epochal history divided into what it calls early, late and postmodern timespace. A society creates and inhabits forms of time and space that are both characteristic of it, and shape its characteristics. It is a story of shifting social, spatial and temporal relations written on a broad scale that uses timespace compression as a lens on social orders and transformations, depicting not only people's interactions across the earth's surface but also examining how they reveal their understandings of their world. In this there is little new in itself, rather Warf's account provides an effective synthesis of a great deal of scholarship. It focuses on the big picture of the effects of different forms of communication and technology, linking them to changing political economies. In one sense then the book avoids both the fine grained analysis of numerous technologies as used in daily life which might complicate and challenge a variety of accounts. It professes a studied ambivalence regarding the exact relationship of political economy, technologies and timespace—in order to eschew a technologically determined account. If anything the political economic ordering is seen as driving and requiring shifts which leads to a characterisation of the epochs of timespace into broadly an early modern stretching from early colonialism to high empire, a modern period which coincides with a Fordist regime of capital and postmodern period of fragmented production, deepening financialised globalisation and fragmented timespaces.

Hassan's book rather more clearly foregrounds these different senses of constellations of politics, economics, technologies and timespace. Hassan provides a sound review of the numerous competing characterisations that have appeared – for instance characterising the present as timeless time (Castells), the society of transmission (Virilo), the videosphere

(Debray) and more. Hassan, as the title of 'Empire' hints, is challenging the contemporary framing of globalisation with the invocation of Hardt and Negri's analysis. He presents a resolutely politicised analysis of the current total world of speed. The eventual framing of epochs echoes that of Warf, especially in the present era which is once again presented as somehow exceptional or novel. This does I suppose beg the question as to why the present is so often seen as exceptional in social analysis. Hassan though sees not only oppositions of present to past era but as much an emergence at a higher level. While clearly seeing the lineaments of power and control persisting, in ways that might be downplayed in liberal accounts, for Hassan the present era is characterised by the radical intensification of speed to become the organising principle of the contemporary era.

Empire of speed places the nature of time at the centre of its account – looking at the ramifications and transformations from clock time, but most especially the dislocation of economic, social and political temporalities. Here he moves beyond Warf's account in two ways. First, he shifts the emphasis from extension of processes over space to the intensification of process in place. Thus where Warf uses accelerating transport to open his account, Hassan chooses the way it took Chrysler fifty-four months and 3,100 people to develop and launch its K-car in the late 70s, while the Neon in the late-80s took less than thirty-three months with a workforce of 700, and by 2000 a new model was taking less than twenty-four months to design and launch (page 21). When space is discussed then it is about ensuring the accelerated circulation of commodities (page 60). Second, as can be seen from that example he looks at accelerations. That is the rate of increase in speed – not just the speed of a society but how fast that velocity is increasing and how our society develops 'a fetish for open-ended speed in culture and society' (page 23). Speed at a

cultural level is seen as he terms it, in a metaphor mixing up his pharmacology with his Marxism, an opiate or an addiction. It is thus very much more ambivalently positioned than for Warf, as here it assumes the force of something now driving us to run ever faster to stand still, and that never delivers its promised fulfilments. He echoes the sentiments of someone like Eriksen (2001) with his scepticism as the value of speed and its costs for human experience, but Hassan extends that analysis with a sophisticated analysis of political economy.

Hassan dissects the types of time created by, facilitating and compelling acceleration. In part his story is about the transition from clock time to network time, but it is richer than that. One might wish that the discussion of the actual practices of clock time could have been enlarged – since that might offer some challenges to the speedy modernity outlined, and implicitly then to the hypermodern age following (for an account of the diversity of temporal practices associated with the rise of the clock see Glennie and Thrift 2009). But he asks us to think through the hegemonic timescapes and constellations of temporalities and technologies, with dominant and subsidiary temporalities. The dominant time of modernity is the accelerating Fordist production process, that of the second empire of speed is the network that produces a new enclosure, that eliminates the horizon in favour of a disparate fragmentary present and installs the ubiquitous always connected time of the network that disconnects us from local temporalities. Looking across to Warf's volume, its focus on differential accessibility to different places stands as something of a corrective to the assumed 'ubiquity' here; though Warf too at the end emphasises the reach and uniformity of digital communications technologies. Hassan then moves on to looks at the pathologies resulting from this ever quickening quest for speed. The discussion here provides a good

focus on historiographies of anxiety and 'abbreviated thinking' – which chimes again with Eriksen's argument - but perhaps misses the historiographies of infatuations with speed so ably, if perhaps too acceptingly, depicted by Tomlinson (2007). Tomlinson's volume also locates two different cultures of speed not necessarily as epochs but rather as two sides of the same coin – controlled speed and destructive speed. The continuing interrelationship of those rather than their successions might offer something more here to the story.

What is presented in *Empire of speed* is clearly a temporalised political economy – and one that provocatively raises questions of the relations of economic, technological and temporal formation. Hassan knowingly engages with technological accounts and their determinist histories – arguing that to deny the efficacy of technologies entirely is surely wrong, while in the end for his account it is political economy that really drives the relationships. Specific economic formations may depend upon technical configurations, but the underlying logic of speed is found in the political economy. And formal politics is written strongly into that account, with the conclusion really being about the failure of liberal democracy to cope with the accelerated worlds. Here Hassan tells effectively a story of the death of reflection in governance in the face of speed – or rather the growing deficit in the capacity to reflect and control. Here we see a slightly different sense of epochs where the social and economic planning of the fordist period appears as a temporary stabilisation in the otherwise smoothly accelerating arc of speed. Perhaps oddly given the book's title, what we see little of are the preceding temporalities of classically Imperial governance. One might make the case that the North American revolution was down to inadequate speeds of governance connecting London and its accelerating colonies, and there is a great deal to say on assumptions of linear fast time being located in imperial metropoles and cyclical traditional

time in the colonies (famously in works from Hegel, Mill and Marx on India, through to the educational governance of Macaulay), and then the actual practices of temporalised governance and chronological narration that served to create colonies (Kalpagam 1999). And for colonised, and colonising, cities there is a long history of the 'intertwining of times, of attitudes, of the coming together and moving apart of past and present, [that] has historically created [an] urban kaleidoscope. ... where many times coexist simultaneously.... compressed, layered, juxtaposed in this ... schizophrenic space and time capsule' (Mehrotra 1999 pages 64, 67).

Rosa and Scheuerman's excellent collection picks up the political theme with a strong focus on speed and governance, indeed it concludes with essays on explicitly political process, reprinting Connolly on circulation, Virilio's state of emergency and a reflection on accelerated modes of citizenship by Scheuerman. It is good to see political process as well as economic and social change so explicitly addressed. It also works very hard to historicise the claims for speed, with a section devoted to classic statements from the nineteenth and twentieth centuries which serve to show the long history of social anxiety about speed. The continued relevance of, say, Schmitt's critique on speed as rationale for executive action, and the positioning of legislatures as blockages out of step is remarkable. It also begs the question of what can we say is really different now? And if we examine the examples we also find more complex temporal patterning than just acceleration. Thus the legislature may be a too slow process, it may find legislation born out of time, but equally in the case of Britain the executive enabling acts Schmitt was criticising (those that outline a principle but leave the rules to the executive, and indeed let the executive amend the legislation to fit later needs) are founded upon 500 year old precedents known as Henry VIII<sup>th</sup> clauses. It is a

sign of how this volume picks up on some of these counter-currents that the chapter by Urry contrasts the growth of 'capital's freedom from time and culture's escape from the clock' both being shaped decisively by information systems (page 189) with campaigns for a 'glacial time' in movements such as *Cittaslow* or *Commonground* where he points to the revalorisation of things like patina, as accumulated value and the rising popularity of conservation movements. It might be argued these are simply different responses to a similar analysis of social trends – they too see acceleration as a danger, but one they believe amenable to social action (see for instance the account by Parkins and Craig 2005). These movements and the chapter do not question whether acceleration exists but whether it can be held or what its limits might be. If anything such struggles might be seen as confirming a popular belief in (deleterious) acceleration. Perhaps more striking is the critique offered by Stephen Breuer elegantly summarising Virilio's theory of dromocratic revolution then taking on its reductivist central assumptions. This essay is important since while most people eschew the extremes to which Virilio goes, the drift of his argument is often left unchallenged.

The core of the volume as one might expect is really an elaboration and debate over Rosa's elegantly put thesis, developed from the work of Hermann Lübbe (who provides a summary in this volume) that acceleration can be demonstrated in the contraction of the meaningful present (*Gegenwartsschrumpfung*)— usefully defined as the period for which a stock of knowledge (or things, though that is less clear here) remain useful. This remains one of the most original and effective moves in the literature on acceleration that gets us beyond attempts to infer speed from social anxiety. The question which emerges from the chapters here on economic organisation is to what extent is acceleration an accurate

characterisation? The examples provided show increasing institutional instability resulting from fragmentation. The desynchronisation of different parts of social, political and economic life and even different parts within each of those realms, is convincingly articulated. Acceleration we might say must though involve a general direction of travel rather than just ever more frenetic but aleatory instabilities.

And so, the grand narrative of acceleration seems rather too sweeping, too uniform at times. For sure, there is a dialectical sense that if there is one thing worse than being subject to acceleration, it is not being subject to it. But the sense Hassan offers of back eddies and different temporalities, that Urry finds, that Warf shows in differential compression only ever appears sotto voce. Indeed when counter-currents appear they are positioned as opposing, more or less successfully, the trend of hegemonic political economic organisation. But what of slowness produced by the world system? Many borders have been rendered less permeable to movement for the majority of people, as fast as electronic bits have overcome one kind of borders then others have reappeared. Nor is it all about the future. Increasingly digital media are being used to popularise and reanimate archives, the last half century has seen a massive revalorisation of traditional built forms, and increasingly value resides in slower production and indeed an economy of presence now equates privilege with personal contact. These books make powerful, if depressing, reading. They offer an impressive sweep and analysis of contemporary social change and the temporal transformations ensuing. The danger is that in depicting a dromocentric society they offer a dromocentric story and other temporalities get downplayed. Is that justifiable? It can be argued so. Is it just wishful thinking wanting alternative temporalities to be given more

room? Well, for sure, they do not appear likely to challenge the hegemonic time regime. But equally we should not overestimate the reach of that hegemony.

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## References:

Eriksen, T. H. 2001. *Tyranny of the Moment: Fast and Slow Time in the Information Age*.

London: Pluto Press.

Glennie, P., and N. J. Thrift. 2009. *Shaping the day : a history of timekeeping in England and Wales 1300-1800*. Oxford: Oxford University Press.

Kalpagam, U. 1999. Temporalities, History and Routines of Rule in Colonial India. *Time* & *Society*:141-159.

Mehrotra, R. 1999. Working in Bombay: the City as Generator of Practice. In *Anytime*, ed. C. Davidson, 64-9. Cambridge, MA: MIT Press.

Parkins, W., and G. Craig. 2005. Slow living. Oxford: Berg.

Tomlinson, J. 2007. *The culture of speed : the coming of immediacy*. London: SAGE.

Williams, C. 2009 Where's the remotest place on Earth? . New Scientist 20 April