### Hypermobility 1NC

#### Thesis: Infrastructure social constructs time and space. Transportation policy designed to accelerate the pace and increase the scale of life produces a hypermobility for some but exclusion for the vast majority.

#### A. Infrastructure investments warp the construction of space and time to support economic and social hierarchies.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism p.11-12)[Cepin]

Second, and following on from this, infrastructure networks, with their complex network architectures, work to bring heterogeneous places, people, buildings and urban elements into dynamic relationships and exchanges which would not otherwise be possible. Infrastructure networks provide the distribution grids and topological connections that link systems and practices of production with systems and practices of consumption. They unevenly bind spaces together across cities, regions, nations and international boundaries whilst helping also to define the material and social dynamics, and divisions, within and between urban spaces. Infrastructure networks interconnect (parts of) cities across global time zones and also mediate the multiple connections and disconnections within and between contemporary cities (Amin and Graham, 199 8b ). They dramatically, but highly unevenly, 'warp' and refashion the spaces and times of all aspects of interaction - social, economic, cultural, physical, ecological. Infrastructure networks are thus involved in sustaining what we might call 'sociotechnical geometries of power' in very real- but often very complex - ways (see Massey, 1993). They tend to embody 'congealed social interests' (Bijker, 1993). Through them people, organizations, institutions and firms are able to extend their influence in time and space beyond the 'here' and 'now'; they can, in effect, 'always be in a wide range of places' (Curry, 1998, 103). This applies whether users are 'visiting' web sites across the planet, telephoning a far-off friend or call centre, using distantly sourced energy or water resources, shifting their waste through pipes to far-off places, or physically moving their bodies across space on highways, streets or transport systems. The construction of spaces of mobility and flow for some, however, always involves the construction of barriers for others. Experiences of infrastructure are therefore highly contingent. '*For the person in the wheelchair, the stairs and door jamb in front of a building are not seamless sub tenders of use*, but barriers. One person's infrastructure is another's difficulty' (Star, 1999, 380). Social biases have always been designed into urban infrastructure systems, whether intentionally or unintentionally. In ancient Rome, for example, the city's sophisticated water network was organized to deliver first to public fountains, then to public baths, and finally to individual dwellings, in the event of insufficient flow (Offner, 1999, 219). We must therefore recognize how the configurations of infrastructure networks are inevitably imbued with biased struggles for social, economic, ecological and political power to benefit from connecting with (more or less) distant times and places. At the same time, though, we need to be extremely wary of the dangers of assigning some simple causal or deterministic power to technology or infrastructure networks *per se* (Woolgar, 1991). Infrastructures and technologies do not have simple, definitive and universal urban 'impacts' in isolation. Rather, such large technological systems (Summerton, 1994a) or technical networks (Offner, 1993) are closely bound up within wider sociotechnical, political and cultural complexes which have contingent effects in different places and different times (see Tarr and Dupuy, 1988; Joerges, 1999a).

B. High-speed travel necessitates social inequality that privileges the time-rich, affluent citizen.

HARRIS, LEWIS, & ADAM 04 1. Peter Harris, 2. James Lewis, 3. Barbara Adam, Emerita Professor of the Social Sciences at Cardiff University, founder-editor of the international journal Time & Society, Ph.D. in Sociology and DsCEcon from Cardiff University. (Harris, Lewis, and Adam: “Time, Sustainable Transport and the Politics of Speed”, World Transport Policy & Practice, Vol. 10 No. 2, 2004

p. 7-8

This section examines how the previously identified implicit, taken-for-granted temporal assumptions within transport can affect societal groups differently and in doing so cause temporal inequity amongst them. To do this we shall examine groups that are defined by age, gender and geographical location. Current trends show that the over-sixty population of the EU-15 has grown at an average of 1.3% per annum over the last thirty years, with the Accession Countries showing a similar rate of increase (Eurostat, 2002). Similarly, life expectancy at sixty-five is also increasing for both men and women (Eurostat, 2002). This means that the European population has aged and is likely to continue aging in the future. This aging society will lead to a rise in both retirees and economically active elderly people in Europe. The mobility needs of both these groups have, and are continuing to have, a significant impact on the transport system. Once people retire they become time-rich, which means that they have a lot of time at their disposal. To utilise and enjoy this ‘discretionary time’ often requires mobility, which means that this group will need to use either privately-owned cars or be dependent on the public transport system for their day- to-day social and leisure activities. Meanwhile, those who work for a longer period in their lives are time- poor, meaning that they have little discretionary time due to their work commitments. This group also requires the full range of the transport system in order to fulfill its employment commitments. Consequently, both of these groups require the transport system for a longer period of their lives than was previously the norm. With advancing age tends to come reduced physical mobility and therefore an increased reliance on both public and private transport for short distance journeys. However, the current transport system is underpinned by high-speed principles, and is therefore biased to best serve those who require high-speed transport over longer distances. Timetables and schedules that enforce this pace are predominantly geared towards the temporal needs of the middle-aged (i.e. 18–65 age group) who largely work the five-day week. This pace can alienate those who, for whatever reason, live and operate at a slower pace, be it as a result of lifestyle, age, illness or immobility. Thus, those on the margins of these groups, such as the elderly, sick or disabled, who live at a different pace from those who work in gainful employment tend to be poorly served by current transport policy. This temporal inequity within transport has yet to be fully acknowledged in policy. While these societal groups are not completely isolated or marginalised by our transport network, it is their specific temporal needs, implicit in their way of life, which, if considered, might provide a more equitable service. There are other inequities that can be seen as a direct result of the valorisation of high-speed. Increased velocity in transport requires more time to build up and longer to slow down. Thus, for example, for high-speed rail, stopping and starting becomes inefficient, meaning that high-speed rail routes have fewer stops than services operating at a slower pace. Likewise, motorways have fewer junctions than the smaller roads that carry the slower local traffic. To further maximise time-savings, high-speed infrastructure is tied to the shortest and most direct/straight path between two points. This means communities who are distant from high-speed corridors as well as those who are not close to stopping points along these corridors are at a disadvantage when using public services for both long and short journeys. People who do not want to embrace high- speed transport, such as those car-users who do not want to drive on motorways, are also disadvantaged by this system that prioritises high speed. Again this is another way in which the valorisation of high speed has caused a temporal blind spot in current mainstream transport policy, where users who do not fit into the standardised temporal regime are being disadvantaged. A final equity issue tied to speed and transport relates to the different mobility patterns of men and women with families. Temporal structures for women frequently differ from those of men because of the larger amount of household and care work that they undertake (Belloni, 1998, 250). This extensive range of tasks leads to a trip and travel schedule where many activities are fulfilled in one outing, leading to ‘trip chaining’ as opposed to the single purpose, direct trips that tend to characterise the mobility requirements of men in employment, (Turner and Grieco, 2000, 130). ‘Trip chaining’ requires a public transport system that is aware of the temporal needs of its female users, a need that is not catered for by current policy regarding transport routes and scheduling (Turner and Grieco, 2000, 130). The current public transport service is shaped towards direct, single-purpose trips with single destinations, which means that women who try to fulfill a number of tasks have to follow an extensive round trip of different services that may take up a long period of time. This necessity to combine a number of different mobility requirements whilst using public transport can create time poverty in women’s lives, which can prevent them from carrying out their required daily activities. It would seem unfortunate that in a transport system biased towards speed valorisation the lack of synchronisation between services means more time is lost for people dependent on combinations of transport provisions. The three areas identified above are marked by a temporal inequity between social groups. Those who are time-poor/money-rich and who tend to operate within the dominant timescapes of Western society have a higher mobility choice than those who are time-rich/money-poor. This is because the time-poor can exchange their money for time by buying speed and thereby save time whilst the money-poor tend not to be able to exchange their surplus time for money and must use slower forms of mobility. Thus the current transport system is organised to the time of the clock which tends to suit the middle-aged, affluent, weekday worker. Given this neglect of the transport needs of a wide range of social groups it is not surprising that many people prefer their own private transport to the inequitable public provision.

#### C. Infrastructure investment produces spatial inequality.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Above all, the increasingly 'hybrid' nature of contemporary cities, where powerful digital connections elsewhere articulate every aspect of urban life, requires us continually to rethink the paradigms that we use when analysing cities. Such processes 'challenge the long-held privileged status of Cartesian geometry, the map, and the matrix or grid. Infrastructural links and connectors, as well as information exchanges and thresholds, become the dominant metaphors to examine the boundless extension of the regional city' (Boyer, 2000, 75). Increasingly, as Manuel Castells (1996, 1997a, 1998) suggests, these processes are directly supporting the emergence of an internationally integrated and increasingly urbanised, and yet highly fragmented, network societythat straddles the planet. New, highly polarised urban landscapes are emerging where 'premium' infrastructure networks - high-speed telecommunications, 'smart' highways, global airline networks - selectively connect together the most favoured users and places, both within and between cities. Valued spaces are thus increasingly defined by their fast-track connections elsewhere, as any examination of the intensifying transport, telecommunications and energy links between the dominant parts of 'global' cities reveals. At the same time, however, premium and high-capability networked infrastructures often effectively bypass less favoured and intervening places and what Castells calls 'redundant' users. Often such bypassing and disconnection are directly embedded into the design of networks, both in terms of the geographies of the points they do and do not connect, and in terms of the control placed on who or what can flow over the networks. Through such processes, Castells predicts that: The global economy will expand in the twenty-first century, using substantial increases in the power of telecommunications and information processing. It will penetrate all countries, all territories, all cultures, all communication flows, and all financial networks, relentlessly scanning the planet for new opportunities of profit-making. But it will do so selectively, linking valuable segments and discarding used up, or irrelevant, locales and people. The territorial unevenness of production will result in an extraordinary geography of differential value making that will sharply contrast countries, regions, and metropolitan areas. Valuable locales and people will be found everywhere, even in Sub-Saharan Mrica. But switched-off territories and people will also be found everywhere, albeit in different proportions. The planet is being segmented into clearly distinct spaces, defined by different time regimes. [14-15]

#### **D. Hierarchical mobility is unethical – our freedom to move is a form of escapism that discourages us from caring for others. The aff treats unproductive others as disposable.**

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People who move and act faster, who come nearest to the momentariness of movement, are now the people who rule. And it is the people who cannot move as quickly, and more conspicuously yet the category of people who cannot at will leave their place at all, who are ruled. Domination consists in one’s own capacity to escape, to disengage, to ‘be elsewhere’, and the right to decide the speed with which all that is done – while simultaneously stripping the people on the dominated side of their ability to arrest or constrain their moves or slow them down. (Bauman, 2000: 120) This means that the capacity to be mobile seems be stratified and functions also as a stratifying force. Yet, as Bauman suggests in the quotation above, and as, amongst others, Weiss (2005) demonstrates, occupying a powerful positionality within social space does not necessarily come along with a high degree of corporeal mobility but rather with a high degree of ‘spatial autonomy’ (Weiss, 2005: 714). Since social spaces are fields of power relations, the power or capitals of these positionalities allow some individuals to move information, goods and people to one’s own place, that is, to make others move.14 On the other extreme of social stratification there are positionalities to be found, characterized by sparse resources and very little mobility capacity (cf. Castells, 2005: 48; Weiss, 2005: 715–16). Concerning geographic space, as Urry (2007a: 187) points out, it is the notion of ‘“access” to activities, values and goods’ which was the main way in which mobilities have entered the debate of social stratification and inequality. Yet, not only does the access or appropriation of resources entail mobilities, but mobilities themselves rest upon certain premises not equally disposable. However, as Urry (2007a: 192) and Cass, Shove and Urry (2005: 543 ff.) argue, although mobilities are crucial forces of stratification, social inequality cannot be reduced merely by improving access to the means of mobilities. What is at stake are the activities, values and goods to which mobilities allow access (Urry, 2007a: 187): I call this network capital to bring out that the underlying mobilities themselves do nothing. What are key are the social consequences of such mobilities, namely, to be able to engender and sustain social relations with those people (and to visit specific places) who are mostly not physically proximate, that is, to form and sustain networks. So network capital points to the real and potential social relations that mobilities afford. This formulation is somewhat akin to Marx in Capital where he focuses upon the social relations of capitalist production and not only upon the forces of production per se. My analogous argument is that it is necessary to examine the social relations that the means of mobility afford and not only the changing form taken by the forces of mobility. (Urry, 2007a: 196; emphasis in original)

#### E. This unethical production of disposable life is a political evil that must be rejected.

Patrick **HAYDEN** Senior Lecturer IR @ St. Andrews **‘7** “Superfluous Humanity: An Arendtian Perspective on the Political Evil of Global Poverty” *Millennium* 35 (2) p. 289-290

Much like Arendt, Bauman argues that modernity is characterised by instrumental rationality and a drive towards bureaucracy and technological order, with a resulting emptying out of moral responsibility. The era of neoliberal globalisation, Bauman contends, exposes how the project of modernity - or more accurately, of compulsive modernisation - necessarily produces ‘human waste’.52 Here three historical strands of modernisation converge: order-building, economic progress, and capitalist globalisation. For Bauman the modernisation process is defined by the drive to design, engineer and administer society, most fundamentally in terms of the ‘freedom’ to consume. The corollary of this process is that whatever cannot be assimilated into the model of modernisation (or ‘development’) as consumption must be treated as unfit, undesirable, redundant, useless, and disposable. Immigrants, refugees, and the impoverished are simply superfluous populations who, if they cannot be directly eliminated in the ‘post-totalitarian’ era, at least can be made to disappear from our consciousness. In Bauman’s words, we ‘dispose of leftovers in the most radical and effective way: we make them invisible by not looking and unthinkable by not thinking. They worry us only when the routine elementary defences are broken and the precautions fail.’53 The wasted lives of human refuse are stripped of dignity, driven to the furthest margins of society, and eradicated from public space while hidden in plain sight. Bauman’s argument, couched in language that evokes the parallels drawn by Arendt between totalitarian systems and the basic conditions of modern capitalist society, lends support to the central claim of this article: that global poverty ‘erases’ the global poor, excludes them from recognition as fellow human beings, and denies them standing as equals within a shared public world. Simply put, global poverty makes a vast portion of humanity superfluous. The global poor have become, to borrow Arendt’s phrase for those deprived of their human rights, ‘the scum of the earth’, because of who they are (or where they are born) rather than what they have done.54 As Dana Villa asserts, in today’s world ‘untold millions will have to suffer the crushing fate of being no use to the world economy’.55 Along these lines, Thomas Pogge has proposed that extreme global poverty may constitute ‘the largest crime against humanity ever committed, the death toll of which exceeds, every week, that of the recent tsunami and, every three years, that of World War II, the concentration camps and gulags included**’**.56

#### **F. Alternative -- We should construct a more equitable construction of space and time. Infrastructure should respond to democratic needs, not the economic requirements of global capital.**

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

It is clear that strategies and practices of urban splintering must negotiate complex ambivalences: continued urban mixings, active resistance and the exploration of alternative and more democratic ways of constructing urban and network spaces. Such are their magnitude, pervasiveness and power, however, that it still seems likely that the processes of splintering urbanism outlined in this book will work to underpin more and more starkly polarised economic and social geographies of closely juxtaposed privilege and disconnection within many - perhaps most - contemporary cities. We would therefore expect social and political tensions within many cities to increase. A central theme of urban politics and urban social movements in the first decades of the new millennium will therefore centre on the struggle between the 'global' forces of attempted, 'pure' boundary control and the customization of premium, commoditized network spaces, versus the imperatives of infrastructural, urban and technological democratization and the need for more egalitarian and democratized practices and principles of development (see Sassen, 1996, 1998, 2000b). Kevin Robins asks the crucial question 'What kind of city can we imagine in this global context?' His answer is both stark and bleak: This global city is the place where the newly mobilized and displaced populations gather in their millions. Each city contains within itself the dynamics of the new world disorder - its dramatic contrasts of rich and poor, its polarizations and segregations, and its encounters and concentrations. It also constitutes a new kind of city, as the coherent and ordered structure of the 'modern city' becomes overwhelmed and superseded by the sprawling, chaotic mega-city or megalopolis (the information and communications systems are ensnared and entangled in this urban anarchy). (1999,54) The point leads us to the final task of the book: to establish some starting points for imagining frameworks of politics, planning, and what we might call a 'spatial imaginary', to support the challenges of addressing and researching the splintering metropolis. Rejecting the tendency of postmodern theory to withdraw from practical policy suggestions on issues of socialization, urban planning and the desire nature of the state, the imperative here must be to explore how, in Holston's words, we 'can develop a different social imagination - one that is not modernist but that reinvents modernism's activist commitments to the invention of society and to the construction of the state' (1998, 39). Our starting point is that the required spatial imagination and politics need 'to bridge the multiple heterogeneities, including most emphatically those of geography, without repressing difference' (Harvey, 1996, 438). It must be conscious of the complex ways in which networked infrastructure of all types, and the diverse technological motilities they support, become bound up in the production of space, identity and meaning in urban life at various scales, within the context of globalization and extending metropolitan regions (Graham and Marvin, 1999). It must directly engage with the complex superimpositions of ranges of sociotechnical connections and disconnections throughout the urban fabric that are such a characteristic symptom of contemporary urbanization (Roberts *et ai.,* 1999). Clearly, 'the emergence of new territories, which change the scale of understanding and intervention in urban projects, and multiplies their complexity, demands new planning styles and instruments and a new kind of architectural design' (Ezquiga, 1998,7). Finally, the new spatial imagination must be fully founded on an appreciation of the diverse processes underpinning trends towards splintering urbanism in cities across the world: sociotechnical, geographical, political, legal and discursive (see Lefebvre, 1984). We believe that it is critical, above all, that any new urban spatial imaginary must actively seek to work towards urban democratization in its fullest sense and in all urban contexts (Painter, 1999). To achieve this, there is a need, first, to struggle against the forms of (attempted) sociotechnical closure of urban network spaces of all kinds represented by strategies of splintering urbanism. New compromises will be required between perceptions and experiences of security and the perceived need for closure and the democratic ideals of openness and interconnection. For, as Albert Pope suggests, there are, in a sense, understandable reasons in contemporary cities 'why the people who can afford it chose the security of closed corporate development over the greater freedom and choices of the declining open city' (1996, 185). However, 'what ought to be disparaged', he believes, is 'the fact that one must make a choice between security and freedom at all'. To him: The recent history of urban form tells us that such a compromise is not necessary, that cities have traditionally provided both. Despite the fact that we cannot return to historical urban forms, we must ultimately insist on cities that do not demand the surrendering of either security or freedom. (Ibid. ) [405-407]

Critiquing society’s desires for mobility and speed can we creates an equitable system of justice for present and future generations.

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Redemption’s radical vocation lies in its identification with the suffering and injustices of the past. It involves not restoration of the past but reparation for the wrongs committed in the past which still haunt the present. In contemporary society, some of the most important issues related to this subject have to do with the persistence of the consequences of colonialism, the slave system, and genocide. A cosmopolitan ideal that does not address the issue of redistributive justice will matter very little to a great proportion of people living in the world today. This also reveals that a chronopolitan concept based on the notion of redemption does not separate the past from the future. Whatever their distinctive attributes are, past and future generations belong to the same historical chain of rights and responsibilities. Indeed, in view of some of the irreversible consequences of the technological degradation of the environment, the notion of redemption is already fit to describe the responsibility towards past and future generations alike. How does chronopolitanism affect the idea of the present? As suggested above, the cosmos that is the intended spatial extension of cosmopolitanism must now be viewed as a complex, evolving space that is intersected by a diversity of rhythms of social life. To be sure, many of the new cosmopolitanisms discussed earlier advocate an openness to otherness and an appreciation of difference. It is now clear that cosmopolitan projects must be able to deal with the conditions of multiculturalism and postcoloniality that characterize the majority of places in the world. Indeed, the persistence of local attachment has led some scholars to combine the richness of place and the cosmopolitan perspective, thence Sachs’s ‘cosmopolitan localism’ (Sachs, 1999: 93–109) and Tuan’s ‘cosmopolitan hearth’ (Tuan, 1996). This acknowledgement of diversity, however, can always fall into the shallow differences that constitute the global market place. The chronopolitan ideal calls attention to the diversity of rhythms of social life: not only calendars and other time symbols, but also modes of production and exchange, ecological adaptations, authority, and decision-making. As such, chronopolitanism provides a critique of capitalist homogenization of economic life as well as of the temporal rigidity of liberal democracy in an age of speed and invisible hazards (Adam, 1998). Chronopolitanism attempts to provide alternatives for the model of single- track development of the global economy. It calls for a universal form of citizenship that protects the way of life of tribal peoples, as well as other cultural differences. This universalism does not correspond to the subjection of different places to the hegemonic model of development and progress, but instead to specific conditions for a peaceful dialogue between civilizations (Sachs, 1999: 107). One of the bases for this dialogue is a concept of multi-track development that allows for the coexistence of different socio-ecological systems across the globe. Although stressing interdependence, the chronopolitan ideal advocates the need for distance and autonomy. As a result, it does not take modern mobilities for granted: it demands a critique of mobility as well as speed as a way of expressing diverse cultural and historical rights. As suggested before, the ethical and legal basis of chronopolitanism must take into account notions of global distributive justice (Jones, 1999). While it is possible, at one level, to render the terms of such justice in a universalist fashion (e.g. the right of every living person to access the valued resources of the global community), the chronopolitan ideal also calls for the temporalization of global justice in the language of particular claims and histories. The subjects of redemptive justice, as it could be called, are the particular instances of inter- national and transnational injustice in the past. In this way, the ‘moral status of persons of varying geographical and institutional distance from us’ (Jones, 1999: 6) cannot be determined without recourse to the particular histories that produced, and still reproduce, contemporary global inequalities.

### General Infrastructure Links

#### Infrastructure projects create elite enclave forms of space.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Jon Jerde - architect of some of the most massive and influential 'rebundled' complexes, such as LA City Walk, California, Canal City Hakarta in Fukuoka, Japan, and the nineteen-storey, 2 million ft2 Core Pacific City complex in Taipei, Taiwan - captures the supporting argument perfectly. To him 'the "art" of citymaking disappeared with the segregation-by-use theories of contemporary real estate' practices and functional and modern urban planning. 'Instead of city,' he continues, 'we now have office park, cultural center, government district, etc.'. The task of his largest projects, as he sees it, is nothing less than to 'reassemble the city from the current disarray' *(sic.;* quoted in Wieners, 1999, 307; see Jerde Partnership, 1999). So, just as infrastructure networks become 'unbundled', the built spaces of many cities are tending to become 'rebundled'. Both processes mutually support each other and the attempted secession of new, elite, sociotechnical configurations from the wider metropolis. The result in many contemporary cities - both Northern and Southern - is a mosaic of 'packaged developments' (Knox, 1993b): shopping and entertainment malls, affluent housing complexes, hotels and convention centres, business parks, theme parks, airport complexes, refurbished heritage and cultural zones, resort complexes, affluent housing enclaves, administrative districts, etc. Each space tends to be separated off by highways, design strategies and security practices from the poorer zones which often geographically surround or adjoin them. This new urban landscape, writes Rowan Moore: is manifest in shopping malls, airports, new residential enclaves, and in hybrids like the themed shopping mall or the airport retail area. Each element creates a self-sufficient, artificial, all-embracing experience that is both controlled and controlling. The space between them is seen as background, as something you see through a a car window when travelling from one such space to another. (1999,10) Such urban 'megaproject' developments represent new, specialised urban development products, which are rapidly diffusing across the globe through the operation of internationalizing real estate capital and planning and design consultancies (Logan, 1993; Peacock, 2000). Byway of example, Table 6.1 lists the urban 'megaprojects' that were under way or planned in the cities around the Pacific Rim in 1995. The efforts of city authorities to secure buildings from 'star' architects such as Norman Foster, Frank Gehry or Rem Koolhaas serve to encourage further the construction of high-status 'edifice buildings' as symbolic capital to demonstrate the dynamism of the host city as a node on global networks of flow (DunhamJones, 2000). In all such developments the goal is to maximize profitability by carefully packaging enclave style 'total environments' (Crilley, 1993, 127) encompassing a range of uses, differentiated according to logics of geodemographic marketing (Knox, 1993 b ). In this rebundling of cities, casinos, theme parks, multiplex cinemas, virtual reality centres and hotels and transport facilities are built together with offices and affiuent housing within integrated 'macrobuildings' (Cerver, 1998,29) (see Figure 6.1). [223]

#### Large-scale infrastructure investment obliterates local space and time in favor the flow of capital.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

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As the expanding cities emerge as archipelagoes of economic, social, ethnic and cultural enclaves, so the use of networks to link beyond the city with international infrastructures supporting intense flow, exchange and mobility, managed through unprecedented logistical precision, becomes critical. 'The landscape currently being punched out [of cities] is characterized by a major reorganization of production and distribution, mostly linked to changes in logistical processes (such as just-in-time production)' (Storper and Walker, 1989,205). As Richard Skeates suggests, our world of exploding megacities, of extending urban regions, of expanding urban corridors and of transnational 'network cities' thus raises the prospect of the 'infinite city' (1997,6). To him, we are moving from the modern world of the discrete 'city' to an 'all-pervasive and ever-present urbanization .... The urban is becoming the overwhelmingly predominant way in which the world is experienced by the majority of people whether they live in the city or not.' In such sprawling and 'supermodern' urban landscapes, notions of networked infrastructures configuring 'centre' and 'periphery' become much less clear. An 'amorphous homogeneity' (ibid.) of the urban emerges which, in rapidly growing 'megacities' like Sao Paulo or the Pearl River Delta, seems to eclipse completely any traditional, modern notion of , city ness' at all (Castells, 1996). New, sprawling Special Economic Zones like Shenzen, for example, are massive archipelagoes loosely laced together by huge new infrastructure networks - private tolled superhighways, airports, optic fibre grids, new water and energy networks, ports and logistics centres. In such places position and centrality are configured less by geographical location with respect to 'downtown' than by the conditions of buildings and places with respect to global-local networked infrastructures like international airports, high-speed rail and port terminals, transglobal optic fibre links, broadband Internet 'pipes' and satellite terminals, and, increasingly, links with distant water and energy reserves.

### Mobility/Efficiency/Connectivity Links

#### **Pursuit of increasing mobility produces spatial and class inequalities.**

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The global order is increasingly criss-crossed by tourists, workers, terrorists, students, migrants, asylum-seekers, scientists/ scholars, family members, business people, soldiers, guest workers and so on. Such multiple and intersecting mobilities seem to produce a more ‘networked’ patterning of economic and social life, even for those who have not moved. And materials too are on the move, often carried by moving bodies whether openly, clandestinely or inadvertently. The multinational sourcing of different components of manufactured products involves just-in-time delivery from around the world, while the ‘cosmopolitanization’ of taste puts all kinds of consumer commodities and ‘travelling objects’ into motion (Lury, 1997). These changes are having many effects. Mobilities are centrally involved in reorganizing institutions, generating climate change, moving risks and illnesses across the globe, altering travel, tourism and migration patterns, producing a more distant family life, transforming the social and educational life of young people, connecting distant people through ‘weak ties’ and so on. The human body and the home are transformed, as proximity and connectivity are imagined in new ways and often enhanced by communication devices and likely to be ‘on the move’. Changes also transform the nature, scale and temporalities of families, ‘local’ communities, public and private spaces, and the commitments people may feel to the ‘nation’. Crucially, the nation itself is being transformed by these mobilities, as is the city. New economic and political geographies of ‘state rescaling’ and urban restructuring emphasize the historicity of social space, the polymorphism of geographies, the restructuring of scale and the remaking of state space (see Brenner, 2004; Brenner & Theodore, 2002). Drawing on Harvey’s historical geography of capitalism and Lefebvre’s theory of the production of space, Brenner for example argues that deterritorialization and reterritorialization, or what we also call mobilities and moorings, occur dialectically, and that the ‘contemporary round of global restructuring has entailed neither the absolute territorialization of societies, economies, or cultures onto a global scale, nor their complete deterritorialization into a supraterritorial, distanceless, placeless, or borderless space of flows’ (Brenner, 2004, p.64). Instead, ‘the image of political-economic space as a complex, tangled mosaic of superimposed and interpenetrating nodes, levels, scales, and morphologies has become more appropriate than the traditional Cartesian model of homogenous, self-enclosed and contiguous blocks of territory that has long been used to describe the modern interstate system’ (Brenner, 2004, p.66). This shift away from the ‘traditional, Westphalian model of statehood’ based on national-territorial containers towards more ‘complex, polymorphic, and multiscalar regulatory geographies’ (Brenner, 2004, p.67) is, we would add, fundamentally related to the emergence of complex mobility systems and their restructuring of both space and time. Mobilities cannot be described without attention to the necessary spatial, infrastructural and institutional moorings that configure and enable mobilities – creating what Harvey (1989) called the ‘spatial fix’. Thus the forms of detachment or ‘deterritorialization’ associated with ‘liquid modernity’ (Bauman, 2000) are always accompanied by rhizomic attachments and reterritorializations of various kinds (Shurmer-Smith & Hannam, 1994; Sheller, 2004a). There are interdependent systems of ‘immobile’ material worlds and especially some exceptionally immobile platforms, transmitters, roads, garages, stations, aerials, airports, docks, factories through which mobilizations of locality are performed and re-arrangements of place and scale materialized. The complex character of such systems stems from the multiple fixities or moorings often on a substantial physical scale that enable the fluidities of liquid modernity, and especially of capital. Thus ‘mobile machines’, mobile phones, cars, aircraft, trains and computer connections, all presume overlapping and varied time-space immobilities (Graham & Marvin, 2001; Urry, 2003a). There is no linear increase in fluidity without extensive systems of immobility, yet there is a growing capacity for more flexible and dynamic scalar shifting, polymorphism of spatial forms and overlapping regulatory regimes. We can refer to these as affording different degrees of ‘motility’ or potential for mobility (Kaufmann, 2002), with motility now being a crucial dimension of unequal power relations.

### High Speed (Rail) Links

#### High speed transportation networks connect the elites leaving the undesired disconnected

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism) p. 200 [Cepin]

Which brings us to the fourth and final key issue that emerges in our discussion of spatial political economy: imagining the urban geographies of unbundled infrastructures, 'strategic localism', 'glocal scalar fixes' and (re)commodified infrastructures in a little more detail. Clearly the shift from relatively homogenizing and hierarchically organized infrastructures, oriented to the urban and national scale, to infrastructures configured for global interaction makes the maintenance of infrastructure networks that were (more or less evenly) laid out over urban and national spaces to 'bind' them more and more problematic (Offner, 2000). But what happens to such homogenizing networks? We believe that they increasingly become punctured and ruptured; in our language, they are unbundled and splintered, ushering in new geopolitical and geoeconomic logics based on the highly uneven warping of time and space in highly localised and valued places. Advanced telecommunications and fast transport, in particular, are being used to link producers, distributors and consumers acrosS distance in radically new ways. 'More complex geographical arrangements' are emerging, write Beckouche and Veltz (1988). In these 'the production-distribution system can fight it out in space using the length of the infrastructure and communication networks on a national, even planetary level'. Guiseppe Dematteis (1994, 18) notes 'the passage from a functional organisation [within cities] in which the centres are graded with a multi -level hierarchy (as in tlle models of the economic geographers Christaller and Losch) to interconnected networks organized on the basis of the corresponding complementarities of the nodes and the synergies produced'. To some, these trends mean that the old territorial identity of the city economy, as the heart of its hinterland, has been totally lost; instead 'the city is divided into as many fragments as the networks which traverse it' (Dematteis, 1988). This new emerging type of unbundled infrastructure logic is shown schematically in Figure 5.1. Telecommunications, fast transport networks (and, to a lesser extent, customised energy and water services) now interconnect cities into systems of , hubs' and 'spokes' across wide distances. Instead of standardized infrastructure networks operating more or less homogeneously to 'bind' a city, there is a set of so-called 'tunnel effects'. These are caused by the uneven 'warping' of time and space barriers by the advanced infrastructure networks, targeted on valued parts of the metropolis and drawing them into intense interaction with each other. Andreu believes that 'in our search for maximum speed, roads have been turned into tunnels. But this tunneling effect is not only confined to roads. Present in all modes of transportation today, tunneling isolates us from reality and cuts us off from the intelligible world. This is even true with trains and airplanes' (1998, 59). Often these unbundled infrastructures link nodes together into networks whilst using such tunnel effects to exclude and bypass much of the intervening spaces, excluding them, in turn, from accessing the networks. Good examples of such 'tunnel effects' can be found in the advanced telecom systems that link New York, London and Tokyo in a single global 'virtual' financial market place, the global 'hub and spoke' arrangement of airline networks and airports, and the fast train or TGV networks that link up the major European Cites whilst excluding smaller intervening centres from access. [200]

#### **The desire for high-speed transport is a deeply embedded and unique feature of capitalist Western society**.

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Travelling quickly has become strongly prioritised because people want to be able to go from A to B in the fastest possible time. Any opportunity to reduce journey-times is constantly sought, be it through increasing speed or by travelling on the fastest, or shortest, available route to a destination. With regard to the transport system this emphasis on high-speed travel has become the dominant prevailing attitude of both the public and transport policy. It has become so highly valued that it has been elevated almost to the status of an inalienable right, where the ability to travel as fast as possible is no longer questioned. This attitude towards high-speed, we want to suggest, has developed on the basis of the dominant position that clock-time has taken within Western industrialised societies and the values that this subsequently informs and underpins. Historically, the organisation of social life to the time of the clock has spread with industrialisation. Thus, for example, the development of railways was dependent on its reliable metre as it needed an invariable and precise time-form for their timetables (Le Goff, 1980; Adam, 2004). The clock is different both from natural temporal rhythms and indigenous social time structures in that it is abstract, decontextualised and therefore universally applicable. The global spread of clock-time was accompanied by a new economic attitude, pertinently described by Benjamin Franklin as ‘time = money,’ an attitude that has become deeply embedded within contemporary Western culture. Within this relationship time becomes a quantity that is inextricably tied to economic exchange. Thus, to maximise profit it is economically advantageous to complete activities in the least possible amount of time. It is this attitude that leads to the prioritisation of speed within transport as the ‘time = money’ rationale has meant that high-speed becomes imperative. Faster is seen to be better, as it achieves more in a given time frame. High-speed is viewed as less time consuming and therefore less costly and thus more efficient and profit creating or enhancing. It is within this context that the temporal connection between high-speed temporality and transport is observed. However, the question of what temporal effects this coupling of time with money and speed with profit has on society in general and on the development of sustainable transport in particular is rarely addressed. As has been previously mentioned, speeds of travel are increasing within all modes of transport. For example, the average power of motorcars in production throughout the EU today has consistently increased since 1990 (ACEA), and similar statistics apply to most modes of travel, both sustainable and non-sustainable. Yet the implications of moving fast are significant. Within this paper we are focusing on these implications with regard to four central concerns associated with mobility and transport policy. These are congestion and sustainability, equity, and safety.

**Claims of increasing efficiency reveal an obsession with speed that suffuses throughout the modern clock culture.**

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Today, however, we are aware of the shared experience of speed as never before. This is because the tempo of the pulsating dynamics of a globalizing world economy affects more of us at the same time than ever before, and more intimately than ever before. Acceleration is almost palpable. And constant acceleration-the rate at which our experience of time has broken free from the temporality of the clock-is the defining process of our postmodern, post-Fordist, and post-industrial age. This rate of acceleration still issues from the techno-economic energy of capitalism, but it no longer gradually pulls the broad realms of culture and society into its orbit. Rather, the dynamic of velocity, acceleration, urgency, momentum or whichever noun we choose to employ, suffuses culture and society to an extraordinary extent. Acceleration stems not simply from new industrial processes, but also rises up from the ways in which we interact and communicate across all walks of life. The postmodern 'acceleration of just about everything' as James Gleick (2000) has termed it, is no exaggeration or collective hallucination: it is our pressing reality. The rate at which we do things (or are expected to do things) both new and old, is now always oriented towards the fast end of an open-ended continuum of speed. We suffer now from a 'fetish' for speed that declares unambiguously and in all cases that the faster we do something, the better it is (Postman, 1993:19). Neoliberal economists and politicians call this speed obsession by another name. For them it is to be efficient. Moreover, the propensity for technologically enhanced efficiency is said to be what differentiates us from other species, is what makes us human. On a day-to-day level, to be efficient, as we are continually reminded by governments and employers and by the not-so-subliminal messages in the media, is to be on the cusp of the technological wave, to be alert to new opportunities, to be able to 'seize the moment' and squeeze it of its potential. To be efficient is also necessarily to be flexible-to be physically, cognitively, psychologically and metaphorically able to 'move fast' when the time comes. This may be a flexibility to change your job often, a flexibility regarding the way one does a job, a flexibility in your opinions (dogmatism is out for most of us), a flexibility with respect of your physical location, or even a flexibility in your physical appearance and how you construct your self-identity. To be efficient and flexible is to be able to move rapidly in response to 'outside' economic influences that constantly demand our attention. To be willing and able to move fast means that you can be 'successful' in your life, be able to 'synchronize' with fast-changing scenarios and rapidly unfolding events, staying 'ahead of the game' and hopefully out of trouble. The saying to 'move with the times' has never been more necessary or valorized than in our society.

#### **High-speed rail is a product of the need for speed that compresses global time and denies the existence of geographic differences caused by distance.**

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The double nature (best solution and social standard) of professional travel in the form of one-day round trips has already been pointed out. This context is highly favourable to the use, in the internal workings of organizations, of the ‘easy travel’ made possible by high-speed transportation. Rather than schedule far in advance the on-site services of a distant expert, those services may be available ‘on demand’ and scheduled at short notice. Rather than have units, set up in different cities and operating in different geographical zones, each carrying out the same tasks, companies can achieve scale economies by having each unit specialize in a specific function for all the geographic zones, while ensuring coordination of activities through frequent meetings. It is thus possible to imagine many examples of organizational systems based on the capacity of the TGV to reduce the importance of travel times and, consequently, of distances. These organizational systems constitute for companies a means to adapt to the uncertainty of their environment. But implementation of such systems profoundly transforms the way distance can be managed. The essential solidarity thus established between the geographically separate units makes high-speed transportation absolutely necessary to ensure correct operation of the company as a whole. In this sense, speed as a necessity is characteristic of organizations based on the denial of distance. Speed as a necessity may thus be interpreted as a component in an exacerbated process of intensification of the use of time. It is the sign of a certain reality in which travel time is not only reduced, but where the remainder has no social value because it is integrated by organizations and individuals (e.g. for the latter, via arrangements affecting both professional activities and private life). Speed as a necessity therefore clearly refers to the major characteristics used to describe fragmented time. However, the denial of distance is also consistent to a large extent with the organizational model for autonomy and integration. The territorial grounding of a production unit (Zimmerman, 1998) may be considered a means to preserve its capacity to produce specific resources (Colletis and Pecqueur, 1993). In this sense, territorial grounding constitutes a degree of autonomy. High-speed transportation is one of the conditions making it possible to reconcile autonomy with the pressure to integrate in a company with many sites.

### Urban Renewal/Agglomeration Links

#### What they call urban revitalization is a mask of gentrification – rent goes up, people are homeless, the elite get more land

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Such processes have set off spirals of gentrification, attracting considerable investment from restaurants, corporate retailers, property firms, 'loft' developers and infrastructure companies, and leading to the exclusion of lower-income groups from the newly 'high end' space (see Zukin, 1982). Rents have exploded and, somewhat ironically for an industry whose products can be sent on-line anywhere on earth, parking shortages have become critical. In both New York and San Francisco major urban social and political conflicts have emerged as 'dot-commers', with their extraordinary wealth, along with real estate speculators and service providers, have colonized selected districts. This has, not surprisingly, dramatically driven up rents, leading to the eviction or exclusion of many poorer residents and to growing efforts at disciplining those who are not tapped into the high-tech, consumerist gentrification (in this case the poor and the black). As Dolgon (1999) suggests, the reconstruction of urban neighborhoods as chic districts for young professional 'digerati' is often portrayed on the surface as the 'celebrating [of] a diverse and plural community' manifest in diverse ethnic restaurants, art spaces and shops. In reality, however, it tends to 'reinforce a class hierarchy that includes only those with access to new markets'. Furthermore the 'new landscapes of power' created in the process tend to 'further marginalize those whose downward mobility places them outside the marketplace of democracy, diversity, and identity except in their invocations as the hungry, the homeless, panhandlers, and the other "rude rabble'" (ibid.). In San Francisco's 'Multimedia Gulch' district, centred on the SOMA area of the city, political coalitions such as the 'Yuppie Eradication Project' are already fighting back against the 'dot-com invasion' from Silicon Valley to the south (Solnit, 2000). Their campaign operates under the banner 'The Internet killed San Francisco' (see Figure 7.7). Paul Borsook (1999) outlines the symptoms of what he calls the 'Internetting' of the city: commercial real estate rates rose 42 per cent between 1997 and 1999; the median-price apartment was $410,000 by August 1999; the median rental for an apartment was over $2,000 per month; homelessness rates were rising fast. Landlords, backed by the relaxation of rent controls and tenant protection. laws by the City Council in the 1990s, have instigated a huge rise in eviction. The rising stress levels which have resulted for older residents of gentrifying neighborhoods have been Inked with rapid rises in the death rates of elderly seniors (Nieves 2000, 12). The result is a severe housing crisis, the expulsion of poorer people from the city (as many cannot afford to remain) and accentuating landscapes of social and geographical polarization as pockets of the city are repackaged as places of work, leisure or living for Internet-based businesses and entrepreneurs.

### Water

#### Water transportation is grounded in strengthen the binary between the rich and poor.

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Here, then, we have the social construction of the very idea that coordinated infrastructure networks and urban plans might meaningfully connect the dispersed parts of the modern industrial city into an 'organic' whole, thereby supporting its wider role as a dominant national and international metropolis (see Figure 2.6). To Haussmann the road network was the city's circulatory system; the rationally engineered sewer and cemetery systems were the waste disposal 'organs' of the metropolis; and green spaces were the city's 'respiratory' system. The street system, in fact, was the physical framework for the 'bundling' of buried water networks, lighting, drains and sewers - a situation so familiar today that we take it for granted (Figure 2.7; see Moss, 2000). In every sense, then, the networks were seen as coordinated allies in the effort to rationalize, systematize and control metropolitan space as a whole. Haussmann dreamed of 'Paris as a whole [city which] could one day become a single organism quickened with a unique life' (Chaoy, 1969, 16). He aimed to 'cut a cross, north to south and east to west, through the centre of Paris , bringing the city's cardinal points into direct communication' (ibid., 26). The road and sewer networks were planned as a 'general circulatory system' with hierarchical tributaries linking the new plaza nodes (ibid., 16). Both sets of channels were celebrated as symbols of progress. His legacy was to 'open ... up the whole of the city, for the first time in history, to all its inhabitants' who could experience Paris as 'a unified physical and human space' (Berman, 1983, 153; see Picon and Robert, 1999). **SEWERS, WATER AND THE 'DOMESTICATION' OF THE URBAN BODY, 1880-1940** Hygiene is the modern project's supreme act. (Lahiji and Friedman, 1997,7) Surely the state is the sewer. Not just because it spews divine law trom its ravenous mouth, but because it reigns as the law of cleanliness above its sewers. (Laporte, 2000, 57) In the past [waste] water simply flowed over the street. Then engineers brought water underground. (Dieter Jacobi, cited in Moss, 2000, 63) Which leads us neatly to our third vignette: the construction by nineteenth century reformers and social elites of the notion that comprehensive underground urban water and sewerage systems served to 'domesticate' and cleanse the unruly 'body' of the modern city (Kaika and Swyngedouw, 2000; Laporte, 2000). 'The city,' writes Erik Swyngedouw, 'cannot survive without capturing, transforming and transporting nature's water. The "metabolism of the city" depends on the incessant flow of water through its veins' (1995b, 390). The construction of systems to deliver such water supplies, however, is fraught with difficulties. Urban water systems necessarily 'demand some form of central control and a coordinated, combined and detailed division of labor' over long periods of time (Swyngedouw, 1995b, 390). Again, Haussmann's regularization plans, which also extended to water and sewerage, laid the foundations of the modern infrastructural ideal's treatment of the burgeoning water demands of the modern metropolis. With Haussmann's new Paris sewer system, as Matthew Gandy contends, the city's 'new boulevards and shopping arcades now had their subterranean counterpart beneath the city's streets. The transformation of Paris made urban space comprehensible and visible to the public, thereby dispelling much of the opacity and heterogeneity of the pre-modern city' (1998,8). In an attempt to undermine the stench that characterized nineteenth century Paris, Haussmann, and other reformers, set in place many hygiene reforms with the central aim of the 'comprehensive "deodorization" of the urban environment .... Deodorization was to be applied to all areas of public and private space .... Thus emerged the fantasy of the odorless city, ideally sanitized to a zero degree of olfactory disturbance' (Prendergast, 1992,79). From the experience of Paris, and many other modernising cities, 'the lessons of modern urbanism were clear. Water and sewer systems were a city's lifelines. As such they were too vital to be left to either the good intentions or the caprices of private enterprise alone' (Schultz and McShane, 1973, 395). Thus we can also view Haussmann's schemes as the beginning of the broader project to 'domesticate' water as an agent in cleansing the city's 'circulatory' system (Swyngedouw, 1995b). The elaboration of extensive sewer and water systems, and the scientific discovery of bacteria, paved the way to a dramatic increase in the consumption of water which supported, in turn, the permanent washing of the urban 'body' and the privatization of bodily hygiene (see Melosi, 2000; Lupton and Miller, 1992). On the eve of the twentieth century the Viennese architect, Adolf Loos, famously implored that 'increasing water usage is one of the most pressing tasks of culture' (cited in Lahiji and Friedman, 1997,7). Water thus became urbanized and commoditized as another component in the infrastructural 'binding' of the city through standardized infrastructure services, accessible through single systems, access to which was initially limited to urban bourgeoisies (Melosi, 2000). Standardized water services allowed the emergence of a sanitised and deodorised public realm within the city **In** France, for example, Guillerme recounts how, in the late nineteenth century, private water firms and municipalities struggled to find the finances and technologies to develop qualitatively new water systems to meet social demand (1988). Whilst still ridden with social inequality and bias, such networks eventually extended over whole urban areas as access to quality water and sewerage networks, at standard tariffs, became normalized as part of the modernizing social world during the interwar period. As with other urban infrastructure networks, then, the ideals of modern urban engineering stipulated that water networks needed to be rationally planned, systematically rolled out through the urban fabric and coherently integrated into an integrated and relatively standardized functioning whole. **In** Europe this transition was smoother than in the United States, where the privatized provision of individual boreholes and cesspits persisted as the dominant model until the 1870s, despite many efforts to build systematic, public, modern water and sewer systems (Ogle, 1999; Melosi, 2000). Gavira (1995), discussing how the construction of a single monopolistic network occurred in Madrid, stresses the power of the idea of developing and mapping a systematic water and sewer network with maximum 'homogeneity and isotropy' (see Figure 2.8). **THE 'FOGGY GEOGRAPHIES' OF URBAN WATER SYSTEMS** Through such processes 'the urbanisation process itself [became ] predicated on the mastering and engineering of nature's water' (Swyngedouw, 1995b, 21). But the enormous systems of reservoirs, channels, chambers and shafts through which metropolitan life was watered maintained a curiously invisible presence in the city, embedded, as they were, in deep subterranean passages, excavations and culverts. Theirs was a world of 'foggy geographies'; the 'extent of [these] nearly invisible system[ s] was difficult to comprehend, extending to wider and wider fields and depths for sourcing increasingly scarce fresh water' (Reiser *et at.,* 1996; see Figure 2.9). Such linkages between water and the growing urban industrial metropolis remained complex and contested. The modern city relied on: capturing and controlling ever-larger watersheds, water flows, water territories and an ever-changing, but immensely contested and socially significant (in terms of access and exclusion empowerment/ disempowerment), choreography of national laws, rules and engineering projects. Local, regional and national socio-natures are combined with engineering narratives, and speculation and global water and money flows. (Swyngedouw, 1995b, 22) [55- 59]

#### Empirics – waterways extension of European colonial rule

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin] Pg 82- 84

The first focused on the provision of networked infrastructures for the colonial metropolis. Here, urban infrastructure systems were a key part of the local creation of variants of the unitary city ideal. However, in colonial cities networks and plans largely focused on the needs of metropolitan and local elites (with the later, often unrealized, promise of later network extensions to the majority population). The Western ideal of a unitary, orderly city, laced by networked infrastructure, was thus effectively remodelled as a system of spatial apartheid (Balbo, 1993). Modern networks were laid out for the population; the 'natives' remained confined to premodern, non-networked and informal settlements beyond cordons sanitaires of walls and major boulevards. In French colonial cities in North Mrica like Fez and Algiers, for example, garden suburbs were laid out according to best practice but only for European settlers. The native towns - the Muslim-dominated medinas - were mostly left intact and generally neglected in terms of improvement in sanitation and services (Robinson, 1999, 161). As Balbo argues, this partial completion of modern infrastructure was a very deliberate attempt to symbolize the superiority of colonial power holders over colonized civilizations. The large avenues of the European city, he writes, with 'its modern services and infrastructures were to show very clearly on which side progress, wealth and power were situated' (1993,25). Thus Western infrastructural and disciplinary concepts and practices were adapted and imposed in order to 'make non-western societies legible, ordered, and controllable' (Crang and Thrift, 2000, 10). Along with the construction of 'colonial medicine' and 'sanitary science' to support the networked infrastructures of the colonisers, the existing infrastructural practices of indigenous populations tended to be denigrated as 'backward', 'disease-ridden' and full of 'latent poisons' (Yeah, 1996, chapter 3). In Singapore, for example, 'the colonial medical and sanitary campaign' of constructing Western-style water and sewer systems, first for the colonial core of the city, 'not only served to legitimize imperial rule and to impart to it a gloss of munificence, an illusion of permanence, but was in itself an exercise of disciplinary power which penetrated the smallest details of everyday life' (Yeoh, 1996,28; for a discussion of similar practices in South Mrica see Minldey, n.d.). Those 'majority' populations beyond the very limited reach of modern infrastructure networks, in traditional and informal settlements, were therefore rarely acknowledged as urban citizens within the discourse of urban planning, modernisation and colonialism. At best they were ignored; at worst they were labelled illegal and their settlements were torn down in the name of modernisation (still a widespread practice today) (Bhabha, 1994). To Balbo then: the network city is the concretisation ofthe master planning approach to the idea ofthe unitarian city. Those who cannot afford to have their own w.e. or water tap and adopt other types of solution for their needs (oil lamps, street water vendors, foot travelling, pit latrines) are not acknowledged as citizens of the network city, even if they are the majority of the population. (1993,29) **COLONIAL HEADLINKS: INFRASTRUCTURE NETWORKS AND ECONOMIC EXPLOITATION** The second form of development was marked by the emergence of economic enclaves serviced with infrastructure. Colonial powers provided infrastructure networks, particularly communication systems such as rail and seaports, and international and regional telegraph and telephone cables, to incorporate selected areas of their dependencies into the world market, but on highly unequal terms. Usually this was done to support mineral exploitation, mines and plantations. Infrastructure was often explicitly designed to support the extraction of resources from productive enclaves whilst servicing the metropolitan elites in cities who organised production and maintained political control. Technically, local urban infrastructure tended to follow the same design and specifications as those of colonial powers - voltages, pressures, gauges, etc. - locking peripheries into particular trajectories of development and dependence on metropolitan powers for spares, maintenance and the capital equipment for major network extensions. The creation of 'enclaves' either took place through direct external control or through a relationship with local elites (Cardosa and Faletto, 1979,60). The objective was to incorporate local production processes, resources and labour into an economic system under strong external influence. The key economic function ofthis form of development was the growth of a node - a port or city - to serve as an infrastructural point of connection between local resources and international flows of raw materials and manufactured goods, a node through which metropolitan and colonial goods could flow. 'Colonial cities were hence planted as "headlinks" and designed to facilitate European capitalist penetration' (Yeoh, 1996, 18). Highly specialised infrastructures were developed with a powerful external orientation towards the export of resources to the Northern metropolitan core.

### Highway

#### Highways offer a limited access that create a hierarchal ladder where connectivity is only offered to the elite

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The urban highway, that *Leitmotif* of virtually all modern urban plans between the 1920s and 1960s, was particularly associated with promising urban 'cohesion' whilst delivering fracturing and fragmentation (Dear, 1999, 110). Multilane highways, cutting through the urban fabric to 'integrate' urban regions through tunnels, cuttings and elevated sections, were 'seen as a marvel of the modern metropolis' (Gandy, 1998, 1). Designed as totalizing systems for smoothly integrating their limited entry points, major highways epitomized the standardized, centrally imposed design of segregated transport systems that was so central to modemist planning and traffic engineering. As with the mass-produced housing of the postwar era, the ethos was 'the more neutral, uniform, and quantifiable, the more bankable' (Easterling, 1999a, 3). Marshall Berman (1983) famously discussed perhaps the best-known example of the use of highway networks to force an industrial metropolis into some form of 'modern' integration through highway construction: Robert Moses' plans in New York. Over a period of about thirty years, Moses used bond issues to finance an ever-expanding web of public highways and works projects across New York, a program linked with the federal New Deal and highway programs (see McShane, 1988). Aimed at maximising regional markets, productivity and ease of circulation, Moses wanted the highways to unify the city, creating an 'integrated car-oriented urban form' (Gandy, 1998, 6). The resulting highways ploughed through disadvantaged highways ploughed through disadvantaged . He imagined a 'utopian new city of unified neighborhoods like Brooklyn in the process. But Moses' modernizing zeal was unabashed. He declared, in his defense, that 'when you operate in an overbuilt metropolis you have to, hack your way through with a meat axe' (Robert Moses, quoted in Berman, 1983,307). Echoing Haussmann, Moses wanted to 'create a system in perpetual motion' (ibid., He imagined a 'utopian new city of unified flow whose lifeblood was the automobile'. City spaces were thus 'conceived principally as obstructions to the flow of traffic' (Berman, 307). In that period, Berman remembers, 'to oppose his bridges, tunnels, expressways, housing developments, power dams, stadia, cultural centers, was - or so it seemed – to oppose modemity itself' (Berman, 1982,293). But the parkways were, according to Langdon Winner (1980), carefully configured to meet the needs of increasingly affluent suburban commuters whilst excluding the poor and black inner city populations (see Bayor, 1988). In one of the most infamous examples of building social bias into technology, Winner alleges, the Long Island State Park Commission engineers designed the parkways and highway bridges on Long Island to be only 9 ft at the kerb - 2 ft lower than the height of buses - thus guaranteeing that the roads would remain permanently for car use only (McShane, 1988, 81; although see Joerges, 1999a, for a refutation of this relatively simple interpretation) . One of the professed aims of, a coordinated, national system of urban highways in the United States was to bind cities and systems of cities into modern coherent wholes. After ali, such strategies drew their inspiration from Haussman's regularisation plans in Paris in the nineteenth century. In effect, though, they contributed not only to the enormous urban sprawl of the 1980s and 1990s, but to a retreat from the notion of the open, interconnected city (Pope, 1996). For they have served to fragment the traditional North American cityscape based on the urban grid, leading to a series of closed, hierarchical 'ladder' -style urban highways rather than an open urban street system. With the introduction of the freeway,' writes Alexander Pope, 'the continuities of gridded space are thrown into a fantastic reversal. [It] eliminates choice by enforcing a strict hierarchical movement along a primary route of transportation, [so] dramatically coarsening the urban fabric' (1996,109). Pope believes that such 'ladders' have supported a broader trend towards xenophobic enclaves. Through such processes, 'historically open urban centres degenerate into tourist sites. Main Street becomes a festival marketplace, the campus becomes a theme park, traditional suburbs become xenophobic enclaves, and one is (still) left wondering how it ever happened' (ibid., 96). To Pope, serendipitous interconnections and relationships - the essence of the urban - are severely limited by the new 'Iaddered' urban landscapes. The erosion of grids has also supported the centripetal shift of cities to ever wider regional fields where closed-off places are increasingly defined by rapid interconnections elsewhere by limited-access highways. [108]

### Air Transport

#### Air traffic control systems support elite spatial connection at the expense of the poor.

Sheller 04 (Mimi, Professor in Department of Sociology Lancaster University, John Urry, The new mobilities paradigm, August 2004, <http://www.ias.uni-> bayreuth.de/resources/africa\_discussion\_forum/ws08-09/new\_mobilities\_paradigm\_sheller\_urry.pdf) (Cepin)

Contemporary airports have historically developed from military airports. They emerge from the significance of air power and the huge military advantage that is accorded to those who control the air. As Kaplan (this issue) shows, movement through the air and the `bird's eye' or cosmic view across land that air accords introduces a new and massively effective form of mobile power. This sociotechnical system has been turned into a form of mass mobility. The contemporary carrying machine, the aeroplane, requires an exceptionally extensive and immobile place, the airport-city with tens of thousands of workers orchestrating the 4million air journeys taking place each day (see Pascoe, 2001). This airport space is a place of transmission of people (and objects) into global relationships, what Gottdiener calls a ``space of transition'' that facilitates the shrinkage of the globe and the transcendence of time and space (2001, pages 10 ^ 11). Air travel is one `space of flows' that increasingly moves people apparently (though never actually) seamlessly around the world especially connecting various hub airports located in major `global' cities (Urry, 2000). This emphasises the system of airports that links together places, forming networks that bring connected places closer together, while distancing those places that are not so connected. It is the system of airports that is key to many global processes, permitting travellers to encounter many people and places from around the world, face to face (see Gogia, this issue; Lassen, this issue). Moreover, contrary to the Auge¨'s ``cultural critique of placelessness'' associated with analysis of nonplaces ``where people coexist or cohabit without living together'' (1995, page 110), airports do in fact possess a specific contingent materiality. They seem places of material organisation and considerable social complexity. Airports are places of ``the boring, everyday, routine, but essential operations, processes, systems, and technologies, that enable global mobility to occur'' (Parker, 2002, page 16). Airports are places of work for often tens of thousands of workers located within airport-cities. Various nonhuman actants, combined with rule-following humans, enable, for example, air traffic control systems to effect high levels of safe take-off and landings. Airports are also a place of `cybermobilities' (Adey and Bevan, forthcoming) in which software keeps the airport system functioning smoothly and transforms it into a kind of `code/space' (Dodge and Kitchin, 2004). Wood and Graham (forthcoming) further suggest that automated software for sorting travellers as they pass through automated surveillance systems (such as iris-recognition systems) is increasingly producing a `kinetic elite' whose ease of mobility differentiates them from the low-speed, low-mobility majority. Software also enables the tight coupling of distinctive airport systemsöfrom the baggage X-ray and passenger surveillance systems to air traffic control and mechanical systems, passenger ticketing and ground transportation, and human resource systems that manage flight crews, ground workers, and security staffö such that breakdowns in one component of an airport system often have knock-on effects which can cause lengthy delays. Certain airports like Schiphol are being redesigned to make them destination places in their own right: ``the implosive articulation of a many-purposed pedestrian crowd creates a critical mass of social density, much like the busy downtown district of a large central city. With enough interacting people, the scene itself emerges as a distinct feature of place'' (Gottdiener, 2001, pages 21 ^ 22). As a consequence there is increasing `dwelltime' in places of transit. In such places: ``[I]nstead of experiencing waiting time as wasted time ... the urban traveller is invited to use transit time to accumulate useful experiences of leisure and work'' (Lloyd, 2003, page 94). Other travellers may be inadvertently forced to live in airports, like the character Viktor Navorski played by Tom Hanks in Stephen Spielberg's film The Terminal. For those detained, there are few ways to use transit time, as they experience a disconnection not only from physical arrival, but also from means of communication such as mobile telephones or Internet access. And increasingly air terminals are becoming like cities (Gottdiener 2001; Pascoe 2001) but also in what has been called the frisk society, cities are becoming like airports. The use of technologies such as detention centres, closed-circuit television (CCTV), Internet cafes, GPS (Global Positioning System), iris-recognition security,WiFi hotspots, and intermodal traffic interchanges are first trialed within airports before moving out as mundane characteristics of cities. And daily flows through airports contribute immensely to the production of contemporary urbanism, including diasporic cultural communities, `ethnic' restaurants and neighbourhoods, distant families and cosmopolitan identities, and exclusive zones and corridors of connectivity for the fast-tracked kinetic elite. The systems of airports are part of the process through which time and space are dramatically bent, as graphically seen in the events of September 11. Time ^ space is `curved' into new complex configurations as the `whole world' is brought dramatically closer (see Urry, 2002). Systems of interconnected material worlds produce new moments of unintended and dangerous copresence. The `gates' designed to prevent networks from colliding (and the narratives of security that underwrote the building of those gatekeeping processes) are less sustainable as flows of terrorists slip under, over, and through various borders, eliminating the invisibilities and screens that kept networks apart.

#### Airports are a central place for the development of elite mobilities.

Hannam et al 6 [KEVIN HANNAM\*, MIMI SHELLER\*\* & JOHN URRY\*\*\* \*School of Arts, Design, Media and Culture, University of Sunderland, UK, \*\*Department of Sociology and Anthropology, Swarthmore College, Swarthmore, Pennsylvania, USA, \*\*\*Department of Sociology, Lancaster University, Lancaster, UK; “Editorial: Mobilities, Immobilities and Moorings”; Mobilities Vol. 1, No. 1, 1–22, March 2006; Boyce]

Contemporary airports have historically developed from military airports and the drive for ‘airpower’, which afforded a huge military advantage to those who controlled the ‘cosmic view’ from the air (Kaplan, 2006). This socio-technical system has been turned into a form of mass mobility that requires an exceptionally extensive and immobile place, the airport-city with tens of thousands of workers orchestrating the four million air journeys takin g place each day (see Pascoe, 2001). This airport space is a ‘space of transition’ that facilitates the shrinkage of the globe and the transcendence of time and space (Gottdiener, 2001, pp.10–11), especially by ‘seamlessly’ connecting major ‘global’ cities (Urry, 2000) – though mainly for the hypermobile elite. The system of airports links together places, forming networks that bring connected places closer together, while distancing those places that are not so connected. They are one of many ‘transfer points’ (Kesselring & Vo¨ gl, 2006), ‘places of in-between-ness’ involved in being mobile but immobilized in lounges, waiting rooms, cafe´s, amusement arcades, parks, hotels, stations, motels, harbours – an immobile network so that others can be on the move. Contrary to Auge´’s’ (1995, p.110) ‘cultural critique of placelessness’ associated with analysis of non-places ‘where people coexist or cohabit without living together’, airports do in fact possess a specific contingent materiality and considerable social complexity. Airports are places of: ‘the boring, everyday, routine, but essential operations, processes, systems, and technologies, that enable global mobility to occur’ (Parker, 2002, p.16). Various non-human actants, combined with rulefollowing humans, enable, for example, air traffic control systems to effect high levels of safe take-offs and landings (see Harper & Hughes, 1993). Airports are also a place of ‘cybermobilities’ (Adey & Bevan, 2006) in which software keeps the airport system functioning smoothly and transforms it into a kind of ‘code/space’ (Dodge & Kitchin, 2004). Wood and Graham (2006) further suggest that automated software for sorting travellers as they pass through automated surveillance systems, such as iris-recognition systems, is increasingly producing a ‘kinetic elite’ whose ease of mobility differentiates them from the low-speed, lowmobility majority. Software also enables the tight coupling of distinctive airport systems – from the baggage X-ray and passenger surveillance systems to air traffic control and mechanical systems, passenger ticketing and ground transportation, and human resource systems that manage flight crews, ground workers and security staff – such that breakdowns in one component of an airport system often have knock-on effects which can cause lengthy delays. Increasingly air terminals are becoming like cities (Gottdiener, 2001; Pascoe, 2001) but also in what has been called the frisk society, cities are becoming like airports. The use of technologies such as detention centres, CCTV, Internet cafes, GPS systems, iris-recognition security, WiFi hotspots and intermodal traffic interchanges are first trialled within airports before moving out as mundane characteristics of cities, places of fear and highly contingent ordering within the new world disorder. And daily flows through airports contribute immensely to the production of contemporary urbanism, including diasporic cultural communities ‘ethnic’ restaurants and neighbourhoods, distant families and cosmopolitan identities, and exclusive zones and corridors of connectivity for the fast-tracked kinetic elite. Indeed as other analysts of global networks argue, the increase in crossborder transactions and of ‘capabilities for enormous geographical dispersal and mobility’ go hand-in-hand with ‘pronounced territorial concentrations of resources necessary for the management and servicing of that dispersal and mobility’ (Sassen, 2002, p.2). Airport systems are part of the process through which time and space are dramatically bent, as graphically seen in the events of 11 September 2001.When civilian aeroplanes are turned into weapons, time-space is violently rent and ‘curved’ into new complex configurations as the ‘whole world’ is brought dramatically closer (see Urry, 2002). Systems of interconnected material worlds produce new moments of unintended and dangerous co-presence. The ‘gates’ designed to prevent networks from colliding, and the narratives of security that underwrote the building of those gate-keeping processes are less sustainable as flows of terrorists slip under, over and through various borders, eliminating the invisibilities and screens that kept networks apart. More generally, the mobilities of money laundering, the drug trade, sewage and waste, infections, urban crime, asylum seeking, arms trading, people smuggling, slave trading and urban terrorism, all make visible the already existing chaotic juxtaposition of different spaces and networks. Thus global diseases rapidly move and the ‘world has rapidly become much more vulnerable to the eruption and, more critically, to the widespread and even global spread of both new and old infectious diseases…. The jet plane itself, and its cargo, can carry insects and infectious agents into new ecologic settings’ (Mann, cited in Buchanan, 2002, p.172). Only a few longrange transport connections are necessary to generate pandemics, such as those threatened by SARs that spread across the very mobile Chinese diaspora in 2003, especially moving between south China, Hong Kong and Toronto (Sum, 2004; Little, 2006), or the feared global spread of avian influenza from birds to humans and then from human to human in a repeat of the 1918 flu epidemic that killed 50 million people worldwide.

### **Public Private Parternships/Deregulation Links**

#### **Privatizing and commodifying infrastructure policy destroys commitments to the public good and social justice.**

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Finally, the changing political economies of cities and infrastructure have often amounted to a decollectivisation of energy, water, waste, transport and telecommunications services, and the reduction of their status as quasi-public goods to be consumed by all, at similar, generalised, tariffs. Instead, infrastructure services are being remodelled and recommodified to be distributed within more or less regulated markets between liberalised, competing providers. 'Throughout Western countries, it seems now self-evident that the role of the state as the provider of a wide range of public services, rooted in the promise of dramatically evening up the life chances of individuals and populations, is coming to an end' (Leonard, 1997,1). As Saunders argues, it seems possible from current standpoints that 'collective consumption is proving to be not a permanent feature of advanced capitalism but a historically specific phenomenon' - a 'holding operation' between old and new forms of market provision (Saunders and Harris, 1994,211). This is supporting the fragmentation of the production of infrastructural goods and services as firms struggle to engage with the instruments of market research and advertising, as well as the individualising capabilities of information technology, to carve lucrative niches for themselves within volatile contexts (Clarke and Bradford, 1998,874). **SOCIAL LANDSCAPES OF CONNECTION: NEW EXTREMES OF INEQUALITY** Infrastructure networks, thus, can no longer be dismissed as immanent, universal and homogeneous grids; as local public goods which can remain the arcane and technical preserve ofthe civil engineer. Market-based and consumerist logics are increasingly being imprinted on to such networks. The assumptions that underpinned the public, monopolistic provision of infrastructure services are increasingly being challenged. Across the advanced industrial world, utility infrastructures are now the focus of radical reregulation. Public, monopolistic models of regulation and ownership are being challenged by waves of privatisation and liberalisation. Generally, this 'means a loss of the redistributive, social role implied by such public monopolies' (Little, 1995,9). Such a shift is 'imposing an ethos of individual choice which belies the role of consumption in the systemic reproduction of capitalism' (Clarke and Bradford, 1998, 874). This infrastructural 'choice', however, often tends to be limited to certain social and spatial groups within the city. The ability to access competing providers is usually highly dependent on wealth, location, skills and how lucrative one is to serve. **In** some parts ofthe city, then - perhaps those that used to pay above-cost rates for services so that cross-subsidies could support poorer districts - the splintering of networks that come with imposing a logic of consumer choice on previously public infrastructures is likely to lead to considerable variety, choice and improved service. Such groups will be actively seduced into 'premium' markets for the most capable road, energy, telecommunications and water networks. In poorer parts of cities, however, large parts of the population seem likely to be forced to remain with incumbent monopolies, as they are not lucrative enough to attract competition and the seductive attention of new, risk-averse, market entrants. Such groups and areas are likely to remain highly vulnerable to the efforts of states to shift from the mass, collective organisation of social infrastructure to a dwindling 'safety net' covering only the needs of the most desperate for fuel, communications and water. The danger, of course, is that the consumerism and individualism of the new debates on social access to infrastructure will undermine the position of the poor, who often tended to benefit most from universal service obligations and cross-subsidies inherent in the approaches of the modern infrastructural ideal. Markets for advanced infrastructural services seem likely to fail such people, possibly even excluding them from access to very basic and essential infrastructures in the process. Sophie Body-Gendrot wonders whether, even in Western Europe, where public service principles and welfare states have been most comprehensively elaborated, the restructuring of welfare states means that: we are now observing the exhaustion of a model for state-provided protection against hardship .... National societies seem to be disarticulating in a strange movement of demodernisation .... In an era of globalization, the processes of disintegration, disempowerment, social invalidation, marginalization - whatever terms one wishes to use - fracture post-industrial cities ... into a myriad of patterns. (2000, xx) [102- 103]

### K Prior

#### Discursive analysis of spatial politics should precede policy decisions. Resist naturalizing hierarchical spatial imaginaries.

Michael **SHAPIRO** Poli Sci @ Hawaii **’92** *Reading the Postmodern Polity* p. 88-89  
The kind of discursive practice implicit in spatial arrangements is rarely available as part of political understandings because in most contemporary policy talk, the shape of the arena within which policy is conceived is taken for granted. These arenas, the resultants of spatial practices, are not an audible part of policy talk. They exist at a silent level, or, to turn to a lexic metaphor, they are a series of power inscriptions that do their effective work without being read. They belong, in effect to a political rhetoric that is implicit in society's spatial practices, as part of its "ground plan," which situates the sets of eligible speaker/actors who can produce meaningful and effective policy utterances and actions. 5 And, in general, they contextualize and render coherent the discourses that bestow meaning and value on things, actions, and relationships. The shape of a society's spaces-leisure space, work space, public space, military space, and so forth -tends to remain largely implicit for a variety of reasons. One is of course that the shaping of such spaces takes place so slowly that few can perceive a process of actual boundary establishment or movement. However, part of the inattention to spatial predicates of policy discourse is positively administered. Dominant forms of social theory, for example both liberal and Marxist, fail, with some exceptions, to encode the spatial dimensions of human association.6 For the dominant tendencies in both these theoretical traditions, space is either natural or neutral; it is either the empty arena within which political association and contention develop or it is the sanctified, historically destined places whose boundaries should remain inviolable. Yet there are good reasons to resist this naturalizing of space. At a minimum, careful attention to the irredeemably contextual contribution of a speaker's or writer's situation to the meaning of utterances should provide a clue. The meaning and value that statements confer are inseparable from the mapping of persons within which the statements are deposited. Intelligibility is intimately connected to standing, to the sites and locations from which meanings are shaped. And the spaces from which discourse is produced are just as much constituted as sets of practices as the discourses themselves. Social relations thus form a complex in which spatial and discursive practices are inseparable. 7 Those who use a discourse -an institutionalized practice through which meaning and value is imposed, reaffirmed, and exchanged-generally fail to discern the historically developed, presupposed practices, spatial among others, that ventriloquate themselves through the discourse. This is the case, in part, because, as Jacques Derrida has pointed out, our utterances seem to be wholly present to us: "The subject can hear or speak to himself and be affected by the signifier he produces without passing through an external detour, the world, the sphere of what is not 'his own'." Nevertheless, the rhetorical contributions of space can be registered. At least their in- direct culects are available to the gaze. What is often required is that one manage to suspend the usual aggressive practices through which everyday life is constructed.

#### Impact and policy assessment can’t be separated from how we imagine space. The infrastructural construction of space establishes the grounds for the good life.

Manderscheid 9 [Kate, Master's degree in sociology, politics and scientific innovators and contemporary history at the Albert-Ludwigs-University Freiburg Ph.D. in 2004 with a space for sociological work Tubingen South Development also attended the University of Freiburg; “Integrating Space and Mobilities into the Analysis of Social Inequality”; Distinktion No. 18 · 2009: 7–27; Ebsco; Boyce]

Along with the resources available at a certain positionality10 public infrastructures supplied by the state, sub- or supranational political bodies may influence significantly the degree of polarization within the social field. Their existence represents also a preliminary and contested result of power struggles within the social space. In the space of education, infrastructures like a well financed educational system aiming at assisting individuals from educationally less rich backgrounds may lessen the influence of one’s social background. In the case of geographic space, public transportation aiming to connect remote geographic places to the more central ones may extenuate the effect of one’s geographic origin (Cass, Shove and Urry, 2003; Graham and Marvin, 2001; Manderscheid and Bergman, 2008). Interestingly and not accidentally, both of these social spaces, the space of education and geographic space, are currently undergoing a restructuring concerning the publicly provided infrastructures. Whereas both spaces used to be characterised by the so called ‘infrastructural ideal’ (Graham and Marvin, 2001), more recently education and transportation infrastructure are being more and more commodified. In geographic space, this favours already more connected places compared to more remote ones and produces growing inequalities between connected and unconnected positionalities, as richly shown by Graham and Marvin (2001). In educational space, on the other hand, this favours the already privileged educational elites compared to less privileged social groups. Still, the actual impact on realized practices at the different socio-spatial positionalities is not deducible from the material resources or infrastructures accessible from a location, but refers also to other resources, including the socio-cultural foundation as well as personal capacities. Thus, the last addition I want to make to the concepts of inequality research is the consideration of movement as enacting spatial relations or spatial practices (Lefèbvre, 1991) which constitute socio-spatial inequalities. Although the relational character of the social is often stated in sociology, little emphasis is placed on the constitution of these relations. As Bourdieu (2000), for example, has argued, the concept of the ‘good life’ or legitimate lifestyle cannot be determined by ‘objective’ personal needs but it is relationally defined within the social world, thereby creating socio-spatial proximities and distances. This applies also to geographic space, as approaches mainly from geography have shown. But what exactly these relations11 consist of, how they emerge or are being cut,12 remains very vague in these sociological and geographical approaches. Referring to the relational character of social spaces, Bourdieu (1989: 16–17) notes that ‘objective relations between positions occupied within the distributions of the resources’ are ‘irreducible to the interactions by which they manifest’ themselves. In a very general sense, relations mean a ‘reference back to something’ (Strathern, 1995: 9), or, in a holographic sense, the concept of relations means ‘being an example of the field it occupies, every part containing information about the whole and information about the whole being enfolded in each part’ (Strathern, 1995: 17–18). This means that relations imply some sort of connection and transmission of information or even communication in a broader sense13 between different positionalities within social spaces, or, in other words, the existence of relations implies space and the bridging of distances. Correspondingly, space-transcending technologies, such as communication and transportation, are one material precondition for these relations. A further element concerning the nature of relations is their notion ‘as embedded practices’ (Massey, 2005: 10), meaning that space is ‘the product of social relations, and those relations are real material practices, and always ongoing’ (Massey, 2005: 95). Similarly, Gillian Rose refers to space ‘as practised, a matrix of play, dynamic and iterative, its forms and shapes produced through the citational performance of self-other relations’ (Rose, 1999: 248). This means that the relational practice constituting spaces involves movement. This has been pointed to by Sheller and Urry, arguing in favour of a mobilities paradigm as crucial for an adequate understanding of the socio-spatial world: Although it began to be recognised that spatiality mattered in the 1980s (Soja 1989), there is now a growing interest in the ways in which material ‘stuff’ makes up places, and such stuff is always in motion, being assembled and reassembled in changing configurations […] A more relational approach to the classic problem of agency and structure brings to the fore the movements implicit in identifications, grammars, economies, intensities, and orientations; as people, capital, and things move they form and reform space itself. (Sheller and Urry, 2006: 216) In this context, mobilities and movements are understood in a wider sense, where five highly interdependent ‘mobilities’ or rather modes of movements can be separated: 1. corporeal travel of people for work, leisure, family life, pleasure, migration, and escape; 2. physical movement of objects delivered to producers, consumers, and retailers; 3. imaginative travel elsewhere through images of places and peoples on television; 4. virtual travel often in real time on the Internet, so transcending geographical and social distance; 5. communicative travel through person-to-person messages via letters, telephone, fax and mobile phone. (Urry, 2004: 28) So, it seems as if this element of movement or the practice of mobilities encompasses to a large extent what is referred to as socio-spatial relations (Sheller and Urry, 2006: 208; Massey, 2005: 118). Therefore, in order to understand social spaces as consisting of relations one has to explore these relations and their ever-changing quality, as has been done for urban spatial infrastructure, connecting or disconnecting people from relevant resources (Graham and Marvin, 2001), and for the networked space of flows (Castells, 2002). This kind of works also points out that the ‘space-performing’ mobilities rest on very specific materialities, as Castells (2002) has demonstrated by outlin-ing the network technologies and nodes within the networked space of flows (see also Graham and Marvin, 2001). Thus, if social relations constituting social spaces and defining positionality within these spatialities rest largely on mobilities, the ability to be mobile appears to be a very crucial force of stratification.

#### Spatial knowledge/power relations are co-productive. We should account for the networks of authority that make the aff appear desirable.

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Too often, treatments of the materialities of infrastructure and technology remain marginal within critical urban and social science. Most usually, they are simply ignored altogether. Even when they are addressed, treatments are often trapped within the simplistic language and ‘impact’ metaphors of prevailing technological determinism. They are implicitly steeped in assumptions of the political and technological rationality of urban engineering and ‘public works’. Or they are reified as simple progenitors of the urban and social forms functionally necessary to the particular urban ‘age’ in question: the ‘steam’ age, the ‘auto’ age, the ‘electricity’ age, the ‘information’ age and so on. In short, infrastructure, technology and mobility are cast not as necessary or legitimate concerns of critical urban research but as purely technical, and rather dull and banal installations which deserve scrutiny only when they fail or collapse. As Coutard has argued elsewhere, ‘because these systems include complex technological artefacts, they are often viewed as ‘engineers stuff’, not worth the interest of the social sciences’ (Coutard, 1999: 1). In adopting such positions, however implicitly, critical urbanists — especially Anglo-Saxon ones — have unintentionally helped to obscure the dynamic relationships between the technological materialities of the urban, the various flows that this sustains, and the exercising of social and political power (see Urry, 2000). The ironic result is that contemporary urban research, whilst now heavily influenced by notions of flow and network mediation such as Manuel Castells’ (1996) concepts of the ‘network society’ and the ‘space of flows’, tends still to dramatically underestimate the critical importance of technological mobilities, and the hard, real, material infrastructures that make them possible, to the modern city. It neglects the ways in which the changing material basis of cities and infrastructure — as evidenced by the tantalizing views into the muddy urban underground revealed by utility cuts and by the exposed palimpsest of networks revealed in the World Trade Center attacks — is both supporting and responding to globalization, deregulation, socio-economic restructuring and the changing symbolic, discursive and legal practices that come together in the production of urban space (although see Gandy, 2002, this issue). In short, the failure to develop a critical and cross-cutting tradition for analysing the relations between technology, infrastructure and the restructuring of urban space is both a symptom and a cause of the prevailing technical ideology of the networked city so long promulgated by discourses of urban engineers, from Haussmann on. It is in this context that ‘Constructing Premium Network Spaces’ and Splintering urbanism seek to build on the relational, socio-technical and critical analyses that have emerged (most notably in Coutard’s home nation, France). They are efforts to try and construct cross-cutting, interdisciplinary and international analyses of the changing relationships between technology, mobility and urban space on our urbanizing planet.

#### **Infrastructure is a key site for analyzing the construction of space.**

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

**DIALECTICS OF INVISIBILITY AND MONUMENTALISM** Third, the hidden nature of much of the contemporary physical fabric of infrastructure in many cities has also contributed to their 'Cinderella' status (see Latour and Hermand, 1998). Many urban networks in the contemporary city remain 'largely opaque, invisible, disappearing underground, locked into pipes, cables, conduits, tubes, passages and electronic waves' (Kaika and Swyngedouw, 2000, 2). They seem 'by definition [to be] invisible, part of the background for other kinds of work' (Star, 1999, 380). This invisibility has allowed the subterranean guide to emerge as a sub-genre of urban guide and photographic books, allowing those who want to look beyond the urban myths and legends that tend to surround the underground of cities to explore the full depth, complexity and history of a city's 'root system' (see, for example, Granick, 1947; Trench and Hillman, 1984; Greenberg, 1998). Such books help us to visualise the hidden background of urban networked infrastructures. Consider, for example, Robert Sullivan's introduction to Harry Granick's classic book *Underneath New York (1947):* Imagine grabbing Manhattan by the Empire State Building and pulling the entire island up by its roots. Imagine shaking it. Imagine millions of wires and hundreds of thousands of cables freeing themselves from the great hunks of rock and tons of musty and polluted dirt. Imagine a sewer system and a set of water lines three times as long as the Hudson River. Picture mysterious little vaults just beneath the crust of the sidewalk, a sweaty grid of steam pipes 103 miles long, a turn-of-the-eighteeenth-century merchant ship bureau under Front Street, rusty old gas lines that could be wrapped twenty-three times around Manhattan, and huge, bomb-proof concrete tubes that descend almost eighty storeys into the ground. (iv) The tendency to obscure the management and development of infrastructures within highly technical and technocratic institutions, driven by the supposedly depoliticised, instrumental rationalities of engineering cultures, has served further to obfuscate the worlds of networked urban infrastructure. Transport, for example, is 'usually confined to a separate, substantive treatment which tends to leave to the transport experts the physical definition of its function and its location in specialized zones' (Sola-Morales, 1996, 14). Very often, infrastructure networks remain politically contained by the widespread and powerful assumption that state or private monopolies will simply provide services when, and where, they are needed, as public or quasi-public services to sustain urban life. Reflecting this, the whole of infrastructure is sometimes captured within catch-all terms like 'public works'. However, it is important to note that a reverse tendency to infrastructural invisibility and political obfuscation does periodically emerge. Rather than being hidden, here infrastructure networks are revealed, celebrated and constructed as iconic urban landmarks, as embodiments of the 'phantasmagoria' of particular urban times and places (Kaika and Swyngedouw, 2000). Such is the case, for example, with contemporary satellite ground stations (Rio, Cologne, Tokyo, London Docklands, Roubaix, Bangalore), international airports (Hong Kong, Osaka, Denver and many others), high-tech bridges (Boston, Newcastle, Istanbul), private highways studded with 'public art' (Melbourne), fast train networks and stations (Europe's TGVs) , and telecommunications towers (Barcelona). Such constructions are part of what Castells calls 'a new monumentality [which is] able to provide symbolic meaning to spatial forms' in times of unprecedented metropolitan fluidity, sprawl and the spread of relatively similar and indistinguishable 'generic' urban landscapes (1999c). Many such projects continue to embody national and local 'symbols of modernity and arrival' (Vale, 1999, 391). In the last two centuries the construction of infrastructure as symbolic marker characterised the modernist highway networks of the post-World War II period, and the water towers, dams, power stations, reservoirs and water treatment stations of nineteenth century West European cities (see, for example, Trench and Hillman, 1984). In a curious process of recycling, many of the latter are now being reconstructed as art galleries and leisure centres, celebrating postmodern urban consumption whilst inadvertently also symbolising the metaphorical and physical shift of much of the industrial and productive fabric of the networked city beneath the urban scene (see Kaika and Swyngedouw, 2000). London's Tate Modern - an old electricity generating station - is a classic example. [19-20]

### Aff Evidence Suspect

#### Claims to expert knowledge and neutrality conceal the ethical and political choices made in transportation planning.

Langmyhr 00 [Tore Langmyhr, SINTEF Civil and Environmental Engineering, Department of Transport Engineering, N-7034 Trondheim, Norway; “Teh rhetorical side of transport planning”; European Planning Studies, 8.5, October 2000 pages 669-684; Proquest; Boyce]

Blaming a planner for using rhetoric is like blaming a zebra for wearing stripes. Still, it seems appropriate to blame many transport planners (at all levels of the planning hierarchy) for not admitting the rhetorical element of their work. Planners often fall away from accepting the important limitations to 'neutral' expert planning. "First, in democratic societies there is a tradition of a true public forum for debate about decisions and policy; and, second, in planning arguments, unlike scientific arguments, claims are based upon normative premises in addition to empirical premises" (Goldstein, 1984, p. 302). Embracing 'neutrality' is tempting because value laden conflicts with colleagues and powerful planning interests may be avoided, or ascribed to 'politics'. This psychological aspect helps explain the persistence of the synoptic Planning paradigm (Baum, 1996), although primarily as an 'espoused theory' (Argyris & Scon 1978, p. 11), while the 'theory-in-use', the theory actually governing planning practice, involves persuasion strategies and techniques. Unawareness of this rhetorical element may render much planning effort ignored, inappropriate, irrelevant or unethical. Of course, there is no easy way out of a wicked planning problem, or out of the 'rhetorical challenge'. In the context of a post-modem pluralistic society, a normative planning ideal may still prove relevant and inspiring. One possible line of development has attracted attention in planning theory over the last decade or so. In communicative planning theory, the rhetorical content of planning is fully acknowledged. Here, I will focus on the normative content of this approach, particularly utilizing the work of John Forester (1980, 1989). In discussing how to argue and communicate, we need some measure of what good communication actually implies. Obviously, mere persuasiveness is no sufficient quality mark, as this might sanction manipulation and lies. Forester's `critical pragmatism' draws on Habermas' (1984, 1987) concept of communicative rationality to formulate four criteria for planning communication and information: Comprehensibility, sincerity, legitimacy, and truth. Mutual understanding depends on the satisfaction of these four criteria: comprehensibility, sincerity, legitimacy, and accuracy or truth. Without comprehensibility in interaction, we have not meaning but confusion. Without a measure of sincerity, we have manipulation or deceit rather than trust. When a speaker's claims are illegitimately made, we have the abuse rather than the exercise of authority. And when we cannot gauge the truth of what is claimed, we will be unable to tell the difference between reality and propaganda, fact and fantasy. (Forester, 1989, p. 144) The Habermasian notion of dialogue, in which parties meet to sort out the best arguments unhindered by power relations, represents a yardstick for handling conflicts in planning. As an ideal, the distortion-free information is as unreachable as the synoptic Utopia of exploring and assessing all available means and consequences. Furthermore, it is not obvious that Habermasian dialogue is desirable in all types of decision-making processes (Rorty, 1989). Another point is maintained by discourse analysts in the tradition of Foucault (cf. Hajer, 1995; Richardson, 1996; Flyvbjerg, 1998): The communicative approach often fails to investigate manifestations of power in policy-making, and, consequently may fail in presenting a proper counter-hegemonic planning strategy. However, information is a very important source of power in planning, and Forester's analytical framework seems useful in analysing the use and abuse of information power. Displaying archetypes of communicative distortions may help actors recognize similar instances in a range of situations (Senge, 1990). Thus, the quality criteria may serve as diagnostic instruments helping to sharpen our attention in concrete planning processes. Table 2 exemplifies communicative distortions caused by planners in the Nordtangenten and the Trondheim toll ring cases. (Naturally, similar distortions may be found in arguments maintained by opponents to the projects.)

### Produces Policy Failure

#### Failure to consider the spatial and temporal discourses that ground transportation policy reproduces inequality and infrastructure problems.

Hannam et al 6 [KEVIN HANNAM\*, MIMI SHELLER\*\* & JOHN URRY\*\*\* \*School of Arts, Design, Media and Culture, University of Sunderland, UK, \*\*Department of Sociology and Anthropology, Swarthmore College, Swarthmore, Pennsylvania, USA, \*\*\*Department of Sociology, Lancaster University, Lancaster, UK; “Editorial: Mobilities, Immobilities and Moorings”; Mobilities Vol. 1, No. 1, 1–22, March 2006; Boyce]

The impact of Hurricane Katrina on the US Gulf Coast in September 2005 brought another major American metropolitan area to the point of chaos and total systems failure. The dysfunctional evacuation of New Orleans left the poor and the infirm in harm’s way, many without cars and without an adequate public transportation system to leave the city. Once the storm hit and flooded out bridges, roads and the power grid, government coordination and civil order collapsed along with the communications systems. After the storm, the inability of the Federal Emergency Management Agency, FEMA, to bring aid quickly into the region, along with the unavailability of the many National Guard troops deployed to Iraq, left the storm’s victims largely cut off from the outside world and from would-be rescuers. The ensuing media mobilization of reporters, cameras and satellite-broadcast images revealed to the world thousands of people trapped in a submerged city and facing the collapse of all provisioning systems, power, food, water, baby formula, diapers and medical supplies. The crisis underlined the total dependence of the urban US on complex and tightly interlocking systems of mobility, transportation and communication to sustain contemporary urban life. These complex systems have become especially vulnerable to what Perrow terms ‘normal accidents’ that are almost built in, almost certain to occur from time to time given the tightly locked-in nature of such systems (Perrow, 1999; Law, 2006). Indeed, catastrophes such as 9/11, SARS, multiple suicide bombings of transport networks, hurricanes and tsunamis not only strike at mobility systems but also engender their own unique mobilities as people seek to flee the onset of an impending disaster, as poignantly seen in the evacuation, communication and relief disasters following the hurricanes on the Gulf Coast.4 While these may be ‘natural disasters’ (although attributed in part to rising sea levels, warmer water, increased storm surges through global warming) it is their wider knock-on effects upon transportation, communications and tourism that hurt above and beyond the immediate storm damage, bad though that was. Both major hurricanes triggered spikes in oil and gas prices throughout the US, as the oil-drilling, refining and distribution infrastructures of the Gulf were closed down. National transportation infrastructures were also crippled by the closures of Mississippi river navigation, crucial to agricultural transport, and of the Gulf fisheries, where fishing fleets, oyster beds and shrimp processing plants were destroyed.5 New Orleans is also a significant tourism and conference destination, and the storm had a deep impact on travel to the region, which may last for some time, since the cultural foundations, musicians, restaurants, carnival crews, and so on as well as the party image of ‘the Big Easy’ will be difficult to rebuild (see Tzanelli in this issue, on the disruption of Western fantasies of tourism in Thailand; and Hannam, 2004b on responses to such crises). It was also an area that employed many non-citizens, including undocumented immigrants from Central America and Caribbean workers on temporary hotel and service industry visas, whose plight has been less visible in the context of a ‘national’ disaster.6 These disasters elicited a US-wide resurgence of debate over the oil-based economy and the war in Iraq, global warming and the culture of automobility, the failure to invest in public transport and poor land-use planning in both urban and coastal areas, and the ‘shame’ of continuing urban poverty and racial segregation within major American cities. All of these are issues of mobility and moorings: how to move and how to settle, what is up for grabs and what is locked in, who is able to move and who is trapped. In the aftermath of these hurricanes further mobility systems failures were compounded. FEMA efforts to re-house the displaced population in ‘mobile homes’ made little progress since not enough sites could be found to park these homes (see Hagman, in this issue, on the significance of parking), and other water-weary evacuees refused cruise ship accommodation that was on offer. Hundreds of thousands of dollars were also spent by the federal government to purchase ice and have it trucked in, most of which was sent on epic weeks-long journeys around the country in refrigerated rigs that never reached their intended destinations due to an apparent inability to solve the logistics of distribution in places with no power. Here again, it is sometimes the inability to stop mobility once it is in progress that needs attention (see Hagman, Cohen, both in this issue). Further problems arose with the breakdown of waste-removal systems, as putrefying bodies, rotting food, moulding furniture, and the detritus of destroyed buildings, cars and homes piled up in the streets along with the ‘toxic soup’ of contaminated floodwaters (see Marvin & Medd, 2006).

Technical solvency claims are a rigged game – we must analyze the ethical and social commitments of transportation.

Khisty 5 [C. Jotin Khisty, , Turan Arslan Department of Civil Engineering at the Illinois Institute of Technology; “Possibilities of steering the transportation planning process in the face of bounded rationality and unbounded uncertainty”; Volume 13, Issue 2, April 2005, Pages 77–92 Handling Uncertainty in the Analysis of Traffic and Transportation Systems (Bari, Italy, June 10–13 2002); Elsevier; Boyce]

Solving purely technical (quantitative) problems is comparatively simple, compared to tackling problems encountered in transportation engineering and planning which are associated with social, economic, environmental, cultural, and ethical concerns, requiring subjective interpretations, vis-a-vis rational and objective answers (Khisty, 2001). In addition, most planning problems are poorly structured, defying straightforward analysis and are thus basically unbounded. For example, a technical problem of traffic engineering could be closely linked to a land-use problem, with social, economic, environmental, ethical, and political implications. Naturally, there is no clear-cut boundary, and the tame “technical” problem we thought we originally faced is now transformed into a cluster of problems, often called a “problematique”, because it has properties that none of its parts have (Ackoff, 1999; Banathy, 1996). Bounded rationality refers to the concept that human problem-solvers are rarely able to identify all possible solutions to a problem at hand and, therefore, settle for choices that seem to satisfy the required solution properties of a problem. Generally, they make decisions that might otherwise be considered as suboptimal, or as Simon (1957) put it, “the behavior of human beings who ‘satisfice’ because they do not have the wits to maximize”. Another theme that has haunted planners in almost every sector of planning is the problem of uncertainty. Nothing is more certain than the prevalence of uncertainty about consequences of even the simplest decisions. Uncertainty arises whenever a decision leads to more than one possible consequence. First, there is the uncertainty that stems from a lack of knowledge about the causal relations of the world and the consequent inability to predict the outcome of possible actions. Second, there is the uncertainty arising from an inability to comprehend present and future preference orderings among possible outcomes for a city. And thirdly, there is the nagging doubt that tastes and desires of the community will change over time, and so will the goals that were originally set (O’Sullivan, 1980).

### Policy Failure (Time)

Obsession with speed results in a gridlock that stagnates political action and causes economic crises.

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Pervasive speed acts as a kind of opiate, a social economic and cultural addiction that it is difficult to break. Through the conjunction of neoliberalism and ICTs, acceleration now deeply enmeshes with our evolVing social, economic and political structures. The important point to make here is that there are no objective limits to how fast we can continue to accelerate, and virtually no one in industry or in politics thinks about the consequences of this. We are driven by an open-ended continuum of speed where the point at which processes start to seriously break down are not known and hardly considered. Paul Virilio has considered where this speed dependency will take us-indeed is taking us today-which is in many instances to a slow and grinding stop. In his book Open Sky Virilio formulates what he terms the dromological law that states that increase in speed is also an increase in the potential for gridlock (1997). Thus, for example, while automobiles, trains and aircraft have become faster and faster, the times spent in transit have not been compressed at a corresponding rate. Airports and train stations are points where increasingly fast technologies propel bodies through space. But they are also characterized by slow- moving queues and delays. Similarly with the Internet, that so-called 'information superhighway' where information, bits and bytes, images nd data, travel at lightning-fast baud rates down fiber-optic cables or through the radio waves in the ether, gridlock is an everyday feature. Computers 'freeze', the network goes 'down' and 'traffic density' can maddeningly slow the rate at which you send and receive information. On a systemic level speed creates so much information in our network society that the result is what David Shenk (1997) calls 'data smog'- an information gridlock that can hold people in its grip just as effectively as being stuck in a traffic jam, or being at the mercy of a delayed con- nection at an airport or train station. And, finally, at an acute empirical level, Virilio's dromological law was evident in the so-called 'credit crunch' that hit in 2008. Since the process of deregulation of the US banking system began in the early 1980s, individual banks were freed to pursue profits in increasingly innovative ways, through a broad process of what is termed 'financialisation', where the role of market-driven finance capital began to dominate all other forms of capital formation, i.e., industrial, manu- facturing, R&D, etc. So intense has inter-bank competition (together with large financial institutions) become, that sort-term profit-seeking through increasingly complex lending 'products' were being offered to institutions and individuals with little or no concern regarding the ability of the lender to repay the loan. Since 2000, mortgages have been sold and resold and restructured in a growing whirligig of money-go- round, that as John Lanchester argues, has reached the point where no one any longer knows who is at risk and who is not (2008). This uncertainty eventually triggered an immense crisis of confidence across the whole financial system in the US in 2008 and this spread across the free-market world, which has also been deeply implicated in the process of seeking quick profits through speed with little concern for the medium- to long-term. Ex-Federal reserve chairman Alan Greenspan (and architect of much of this system whilst in office) unconsciously utilized Virilio's dromological law in a quote in February 2008, when, observing the general meltdown of the US financial system, he said that 'As of right now U.S. economic growth is zero. We are at stall speed' (Reuters, 2008).

### Turns Case – Economy

#### **Hiearchical models of growth are culturally unsustainable – hierarchical mobility collapses in on itself.**

Kirkman 4 [Robert Kirkman, Associate Professor of at the School of Public Policy, The Georgia Institute of Technology, B.A, Miami University, Philosophy and History Ph.D., State University of New York at Stony Brook, Philosophy ; PHILOSOPHY & GEOGRAPHY, VOL. 7, N O. 2, AUGUST 2004; Boyce]

Perhaps the most pressing matter of justice in the Atlanta region is a pattern that has typified the process of suburbanization in the United States: exclusion. Exclusionary zoning and the shortage of affordable housing are persistent problems in the Atlanta region, and "affordable housing" here includes housing for many people who are considered middle class. Much of this exclusion can be accounted for in terms of socio-economic status, but race remains an important factor as well. While legalized racial segregation faded in the 1960s, de facto racial segregation persists in the Atlanta region. The black middle class remains strong, and many inner-ring suburbs are becoming more diverse, but there is a pronounced dividing line that runs from west to east through the metropolitan area: whites have tended to move north, taking much of the impetus for development with them, while blacks have tended to move south and west, where economic development continues to lag. The result of all forms of exclusion and segregation is often a spatial mismatch between affordable housing and access to the various opportunities of civic life, including employment, education, and culture. Even if a pattern of development fosters ways of living that are good and just, the question still remains: How long can the dynamics of this place last? This is the concern of sustainability. It may seem that this is not an ethical matter in the strict sense, but I would argue that it is certainly a relevant consideration in ethical decision making. If a pattern of development sets up a dynamic that could undermine the continuation of a good and just way of living in the short term, then it is clearly a good idea to understand that djmamic and do something to change it. Indeed, it might even be argued that we have an indirect obligation to make the built environment sustainable, if only as a matter of fairness to future generations. To the extent that we have obligations to future generations, we may also be obligated to change patterns of development and ways of living that would undermine our descendents' opportunity to live a good and just life. The idea of ecological sustainability is familiar enough, and the meaning of economic sustainability is not hard to grasp as an extension of this: in effect, households and municipalities alike may find that they can no longer afford to continue on their present course. Cultural sustainability, which concerns the continuity of cultural values and patterns over time, is less likely to be familiar. The choice of where and how to live is complex, informed by a host of cultural images and ideals. In some cases, however, it seems that the very act of reaching for an ideal pushes it further out of reach. The paradigm case is the family that moves to the suburbs to get away from the city into a tranquil, pastoral landscape, only to find that the landscape becomes less tranquil and less pastoral with each passing year. More residents arrive, followed by commerce and industry, and with them come traffic congestion, noise, and light pollution. As one interviewee put it, "the feathers come with the chicken." As growth moves on to other areas, it leaves behind abandoned buildings, underpopulated schools, and the first inklings of urban decay. In this respect, at least, suburbanization as currently practiced is a self-defeating project, and so may be characterized as culturally unsustainable.

### Turns Case – Environment

#### Criticism of the dominant economic ends of transportation is a pre-requisite for sustainability.

Hall and Sussman 4 [RP Hall is an Assistant Professor, School of Public and International Affairs, Virginia Tech and Joseph M. Sussman JR East Professor Professor of Civil and Environmental Engineering and Engineering Systems Interim Director, Engineering Systems Division; SUSTAINABLE TRANSPORTATION—A STRATEGY FOR SYSTEM CHANGE – MIT Engineering Systems Division Working Paper Series; October 2004; <http://esd.mit.edu/staging/wps/esd-wp-2004-02.pdf>; Boyce]

Imagine that you are responsible for the design and implementation of the next generation of transportation infrastructure to transport freight between and within nations in a more efficient and effective manner. Under this design paradigm, it is clear that the volume and rates at which goods are transported should be maximized – i.e. more should be transported, more quickly, using less energy and at a lower cost. Hence, your policies/strategies are likely to focus on improving vehicle, aircraft, train, and ship technology, and on improving network operations to reduce transportation energy requirements and the total amount of mobile emissions. In effect, your approach is likely to focus on system and societal efficiency. The former aims to reduce the overall cost of transportation and the latter aims to link the benefits/costs of transportation to the economy, the environment, and to society. Two fundamental problems arise from this hypothetical solution. First, there is currently no incentive for you (as a transportation professional) to consider the implications that enhanced mobility brings, since managing the rates at which goods are transported is likely to be outside of your authority and is, in general, left to the market. Second, a reliance on the market is likely to result in over-consumption due to inadequate consumer information. The problem with poor consumer information is addressed by Manno (2002), who states that the present industrial capitalist system of incentives and disincentives - what we consider progress - is invariably directed toward increasing levels of consumption, which in turn increases the level of freight transportation. The environmental problems associated with increasing freight transportation are further compounded by the fact that as commodity chains grow in length, become more complex, and more international, the spatial and social distance between production and consumption is widened (Princen, 2002; Conca 2002). The result of this distancing effect is that consumers lack the information and incentives to behave in a more sustainable manner even if they wished to do so. Therefore, if made aware of the potential implications that your new conveyance system might have on the sustainability of natural and physical systems, how then would you address these issues under the current governmental structure? Is there any way you could have resolved these potential problems in the design of the transportation system? A more fundamental question might be whether you believe it to be your responsibility to address these issues in the first place. The matter of social responsibility – as opposed to an institutional mission [10] – unleashes a flood of interesting arguments. Designers of artillery do not question whether their product will be used in an unsustainable manner, since it is their responsibility to create weapons which deliver the highest explosive capability at the point of detonation. Likewise, in the above scenario, you are not likely to question whether the new transportation system will be used in a manner that reinforces unsustainable growth, since you have a responsibility to deliver a highly efficient and effective freight conveyance system - which does in of itself contribute to sustainability. It might be argued that these two examples are similar; the rationale is that it is not the designer’s responsibility to control or manage how his/her product is used. It is the authors’ belief, however, that these two examples are fundamentally different. Designers of artillery undertake their work with a full appreciation of the consequences (both positive and negative) of their actions, and it is this fact which delineates the two examples. Before exploring this position further, it is important to state that the moral and ethical standards of artillery and transportation system designers are not being brought into question. Therefore, if the moral standards of the individual are not the core issue, where should the social responsibility lie?

The desire to maximize speed justifies our destruction of the environment for the sake of profit.

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Where time is equated with money, speed becomes an important economic value, since the faster a product can be produced, the less money-time is tied up in the process in the form of machinery, interest payments and labour costs. Speed increases profit and shows up positively in a country's Gross National Product (GNP). Here, the time =money intersects with the nature=money conception. In an economic context in which nature is external to the calculus of costs, gains and profits, the energy use associated with speed tends to be external to that calculation as well. The fact that speed is proportionally related to energy use is therefore kept out of the economic balancing act. When it is incorporated as an integral part of costing, however, a very different picture emerges: the faster something moves, the higher its use of energy, the higher the costs involved to both producer and environment. Instead of profit, the speed =energy equation features as a negative entry on the balance sheet. The importance of speed in a context of time =money, however, relates not only to the process of production but also to speed of communication and the speed of innovation. Thus, with respect to the former, the British telephone company Mercury has used a big bill-board advertisement announcing that 'speed kills the competition'. The message is clear: you have to be faster than your rival to survive; even the gap (meaning disadvantage) of a few seconds can make a crucial difference to securing or losing a deal, be this in business or financial services. Nowhere is the importance of the speed of communication more evident than on the stock-market. Speed of communication, furthermore, is intimately tied to the changing fashions in organising the interface between products and consumers. Thus, for example, 'lean production' and 'just-in-time' manufacturing are means to reduce the time between manufacture of products and their delivery to the consumer, with the result that ever-growing numbers of half-empty vans and lorries criss-cross the country thus further increasing the environmental damage wrought by road transport and haulage. Equally consequential to the competitive climate of business is the speed of innovation: whoever brings a new product to the market first has a clear advantage over others who are in the process of developing goods and services along similar lines. With huge sums of money tied up in research and development, earliest possible production is crucial. I will return to this point in later chapters. With speed so tightly linked to efficiency and a competitive edge, however, we place a multiple interrelated burden on the environment: first with respect to a rise in energy use, second with the production of pollution, and third with reference to increased production of waste, all of which, in turn, add to an overall escalation of environmental degradation. A third pressure on the environment arises when, due to the economic valorisation of speed, corners are being cut in relation to safety and sustainability. Finally, an important indirect effect is created through the ever decreasing time for reflection, contemplation and deliberation on the processes and their effects.

#### Accelerating transportation produces ecological collapse.

**Bergmann & Sager, ‘08** – Sigurd, 9 Ph. D Doctoral Theses, Fellow at the Carson institute, Professor for Religious studies in the Department of Archaeology and Religious Studies at the Norwegian University of Science and Technology, Thore Sager, Professor in the Department of Civil and Transport Engineering at the Norwegian University of Science and Technology, ‘The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment’, pgs 220-221 // JK

Instantaneity also breeds accidents. Accidents and speed are so closely related that it is impossible to speak of those who die on the roads as having died 'accidentally' for road deaths are a direct consequence of the extensive use of hard metal machines as transportation devices at speeds which, on impact, are detrimental to soft-bodied mammals. This is a manifestation of a larger problem with the speed of modern life which has precipitated such a large array of humanly caused accidents that death and suffering from such accidents exceeded death and suffering from natural disasters in the present decade according to the large re-insurance company Swiss­Re.21 In this sense **climate change may also be considered an inevitable accident, and part of a larger inevitability of ecological collapse necessitated by the speed of the capitalistic transformation of the earth**. The modern obsession with mechanically derived speed is such that eviscerates moral deliberation over its ecological or human costs. Speed produces an altered state of consciousness, ‘a delirium broken only by the crash’ (Balwin, 2002). As Milan Kundera puts it ‘speed is the form of ecstasy the technological revolution has bestowed on man.’ This form of ecstasy generates detachment from the violent effects of the ownership and use of devices which confer speed on the millions who have been killed and seriously injured by them, and from their systemic effects on the ecology of the earth. Something more than distancing is involved here. Speed involves a kind of moral perversion which is indicated in the extent to which danger to life and limb form fast cars forms part of the appeal of cars and other such devices to some of those who use them. In an ethnographic study of Norwegian young people Pauline Garvey found that they regularly used fast or even intentionally dangerous driving as a device for the expression of angry emotions or to provoke pedestrians and other road users:

The aff solvency is based on the illusion of controlling time and space. Acceleration and expanding scale produce an unsustainable form of life.

ADAM 03 Barbara Adam, Emerita Professor of the Social Sciences at Cardiff University, founder-editor of the international journal Time & Society, Ph.D. in Sociology and DsCEcon from Cardiff University. (Barbara Adam: “Reflexive Modernization Temporalized”, in *Theory, Culture & Society* Vol. 20 No. 2, April 2003, p. 69-70, http://tcs.sagepub.com/content/20/2/59.full.pdf)

The mastery of time and the control of rhythms, as Castells (1996) points out, restructure temporality and, in the process, usher in contradictory logics: time is both compressed and denied. When we re-visit the temporal innovations associated with Virilio’s three Ts (transport, trans- mission and transplantation) we can see how the intensification of the temporal logic (time = money, speed = profit, increased speed = unmitigated good thing) has paradoxical consequences. The increase in mastery is accompanied by a decrease in control. First, with mass public transport and private (and corporate) car ownership, the speed afforded by that mode of transportation has become an expectation, elevated almost to the status of a human right. When it became apparent that there are socio-environmental costs attached to this speed of movement, the deeply held beliefs and expectations made it extremely difficult to mitigate some of those effects. Both the underlying belief that time is money, and the association of speed with individual rights, wealth and power, work energetically against any political control and efforts to alleviate associated socio-environmental problems. Second, with regard to late 20th-century transmission, the movement of information has not just been decontextualized but de-materialized, with the result that the power of the non-material and the virtual is on the ascent, which means that events in one part of the world can have almost instantaneous effects on the other side of the globe and send ripples through the entire network. Structural relations and processes that arise from the control of time tend to be beyond the control of those involved, since the combination of instantaneity of communication with simultaneity of networked relations no longer functions according to the principles of clock time and mechanical interaction. ‘The new level of interconnectivity’, Mark Poster (1990: 3) proposes, ‘heightens the fragility of social networks.’ The enormous speed coupled with multiple, simultaneous, reflexive connections, moreover, poses problems at the level of perception, understanding, expectation and action: it constitutes, at all these levels, an unconquered reality. Social scientists have an important role to play here: elaborating the time connections, showing how the control of time can lead to loss of control and identifying access points for alternative action. Two further examples of increased mastery and loss of control will serve to illustrate how the pursuit of the Enlightenment logic has consequences that begin to erode it from within, the key process of reflexive modernization first identified by Beck in his seminal Risk Society (1992/1986).

### Impact Ext.

#### Unequal mobility produces ecological collapse and ever-acclerating exploitation of human and non-human others.

**Bergmann & Sager, ‘08** – Sigurd, 9 Ph. D Doctoral Theses, Fellow at the Carson institute, Professor for Religious studies in the Department of Archaeology and Religious Studies at the Norwegian University of Science and Technology, Thore Sager, Professor in the Department of Civil and Transport Engineering at the Norwegian University of Science and Technology, ‘The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment’, pgs 216-219 // JK

The unequal distribution of access to road transport, and the even more unequal distribution of traffic accidents, are both powerful examples of the way which, as Ivan IlIich and Paul Virilio suggest, speed creates a hierarchy which privileges an elite who enjoy the power it confers at the expense of others who live life in the 'slow lane'.4 Speed depends upon the harnessing of biological power concentrated by an extractive economy which draws resources from a range of spaces including those regions where coal and oil are extracted, often with deleterious consequences for local Inhabitants. Speed involves the servitude of others who labour to railroads and highways, and to manufacture, maintain and repair the devices which confer speed and the infrastructure they require. Speed also requires sacrifices in the wellbeing of those -human and nonhuman beings -whose places are deracinated and polluted by the pathways of speed devices. Concentrated material power is morally ambiguous because its necessitates the imposition of a range of ecological and human harms which include growth in extreme weather events associated with human induced climate change as well as more localized harms. Those regions and communities of being, human and nonhuman, where these harms are visited are often are from the corporations and bureaucrats who impose them and so the true costs of speed are politically obscure.6 And because of the global scale of the decision making chains involved the ecological footprints of the technologies of speed imposed without proper moral and political deliberation on indigenous peoples who are thus rendered even more powerless.7 In Columbia and the Niger Delta indigenous groups vigorously protest the ecological and social problems that oil extraction visits on their lands and communities. This resistance to the extractive economy of energy is a significant exemplar of what Martinez-Allier calls the ‘environmentalism of the poor’. The ecological ill effects and social injustices associated with the manufacture of speed – wildernesses despoiled and ecosystems threatened by oil wells and highways, the location of lower income housing adjacent to motorways or heavily trafficked urban roads, the disproportionate number of children from poorer households killed or injured on such roads – are then connected with the material base of speed as concentrated fossil fuel power. And these injustices are not confined to present generations. Future generations will be significantly disadvantaged by the dramatic and irreversible changes to the climate system created by the continuing growth in the use of fossil fuels required by the growing speed of movement of persons and goods in the global industrial economy. If present levels of greenhouse gas emission growth are sustained the Intergovernmental Panel on Climate Change predict a temperature rise of up to 6 degrees centigrade by the end of the present century, a rise which will make large parts of the planet uninhabitable. Transport is responsible for one third of carbon emissions, and 60 percent of oil consumption. Energy use in the sector will contribute 50 percent to the projected annual growth in greenhouse gas consumption in the next 30 years. 11 Aircraft emissions alone on present rates of growth in air travel will reach 1 billion tonnes of carbon by 2050, which is one seventh of present total world production of carbon.'2 The total emissions of transportation devices rises even further if a full accounting is performed of the energy used in their manufacture and the infrastructure they require for their propulsion, parking and maintenance.

The disordering of human as well as ecological relations by the compression of time and space which modern speed produces is indicated by the intentional lack of speed with which the nation state responds to certain humanly caused disasters, such as the Chernobyl nuclear accident, or the failure of the complex levee of New Orleans during the sustained landfall of Hurricane Katrina in 2005. It was not until the Swedish authorities noted the radioactivity of rain over Sweden a week after the nuclear explosion at the Chernobyl nuclear reactor in Ukraine that the Soviet authorities began to even contemplate evacuating the human population proximate to the burning and irradiated power station. Similarly it was not until the bloated bodies of black and poor Americans were filmed floating in the floodwaters of New Orleans that the Federal Government ordered troops and supplies to be flown into the stricken city; by contrast in 1906 at the time of the great San Francisco earthquake the House of Congress met through the night and ordered immediate relief supplies and military assistance to be sent to the stricken city by rail. As Matthew Tiessen suggests, where the nation state would rather ignore the accidents technology makes possible, or where responding to such accidents threatens vested interest, then there is no desire for speed. Hence the time-space compression which speed makes possible exists only within a space wherein that speed is desired and applied to accommodate particular interests. Whereas the resources of the Federal Government had made possible the invasion and ‘conquest’ of Iraq at unprecedented speed in 2003, that same commitment of resources necessitated the withdrawal of resources elsewhere from disaster prevention – fortifying the levees which were known to be inadequate would have saved New Orleans from the Katrina disaster, and from disaster relief – there were so few reservists in the Southern States at the time Katrina hit because most of them were serving in Afghanistan and Iraq. Again the inverse relations of the power of speed and the practice of justice are revealed in these acknowledged interconnections. There is another aspect to the spiritual pathology of concentrated power of kind speed machines make available that is connected to their phenomenological effect on human consciousness of relation to the earth. **The speed machine - whether a high speed train**, plane or car -confers on the driver or passenger as of mastery of the landscape, or in the case of a plane, of the spherical globe as curved horizons rapidly shrink through the speed of the modern jet. In moving at great speed through or over a landscape the human being loses bodily and sensual connection with the organic rhythms of life on earth. This loss is important in construction of the modern imaginary of conquest over, and independence from, the forces of nature. John Urry suggests that the car in particular is a crucial to the specific pattern of domination over nature, which Martin Heidegger described as a vital component of the modern technological condition. The one who is master of devices which confer power and speed is likely to set reliance upon the sense of mastery such machines confer over trust in the life sustaining properties of the more than human world.

#### Spiltering space is structurally violent towards disconnected classes.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

To understand the social importance of parallel trends towards splintered urbanism and unbundled infrastructure we need to stress three supporting trends. The first is the broader shift towards social and geographical polarization within decentralizing and polycentric urban landscapes across the world. Robinson and Harris argue that roughly 30--40 per cent of the population in 'core' developed nations, and rather less in developed countries, are now effectively 'tenured' within the global economy, with jobs that ofter livable incomes, some degree of security and opportunities to maintain or expand consumption (2000, 50). In a second 'tier' some 30 per cent in the core and 20-30 per cent in the global periphery form a growing army of 'casualised' workers facing chronic insecurity and the absence of social or health benefits. And in the third 'tier' - representing some 30 per cent in the core and 50 per cent on the periphery - people are structurally excluded from productive activity and 'completely unprotected from dismantling welfare and developmentalist states'. Robinson and Harris define these people as the 'superfluous' population of global capitalism (ibid.). The United Nations reported in 1999 that, between 1995 and 1999, the world's 200 richest people doubled their wealth to more than US$l,OOO billion. At the same time 1.3 billion people continued to live on less than a dollar a day. In 1983 the resource disparity between the world's richest fifth and the world's poorest fifth stood at 30: 1; by 1990 this had shifted to 60 : 1; by 1999 it was 74 : 1 and the picture was continuing to worsen (Denny and Brittain, 1999). The new socioeconomies of all cities thus seem to be characterized by increasing rewards for socioeconomic elites and affluent professional classes but increasing impoverishment for social and geographical groups unable to qualify as the so-called 'symbolic analysts' of changing urban socioeconomies (Reich, 1992). The inevitable diagnosis, according to David Massey (1996), is that we live in an urban 'age of extremes'. The withdrawal of wholesale social redistribution, especially in Western nations, is combining with polarising urban labour markets, 'ushering in a new era in which the privileges of the rich and the disadvantages of the poor are compounded increasingly through geographic means'. Such trends are not at all surprising when they are placed against the backcloth of urban economic restructuring and the emergence of new, intensified patterns of urban poverty and social polarization (see O'Loughlin and Friedrichs, 1996; Castells, 1998; Sassen, 2000b). Across the cities of the developed world, for example, Enzo Mingione notes a 'growing conflict between new urban poverty and the system of citizenship and social inclusion' (1995, 196). Whilst there remains considerable variety of experience between nations and cities, dual labour markets have, in many cases, combined with welfare restructuring to undermine the fragile webs of more inclusionary urban development built up during the postwar boom and the elaboration ofwelfare states and public housing (Musterd and Ostendorf, 1998). At the same time, real incomes have often dropped for the poorest communities reliant on poorquality, part-time service jobs and public or social housing (Sassen, 2000b). Not surprisingly, this 'age of extremes' is being etched into social landscapes, both between and within nations and cities, especially as urban populations grow across the world (UNDP, 1999, 36). The result, in cities in virtually all areas of the world (developed, developing, newly industrializing and post-communist), seems to be an increasingly 'acute sense of relative deprivation among the poor and heightened fears among the rich' (Massey, 1996, 395). Doel and Clarke (1998) call this the pervasive 'ambient fear' of the postmodern city, a feature related also to the international migration and mixing of wide ranges of ethnic and cultural groups in the city. Such fears and practices threaten to support the separation of the socioeconomic circuits of the rich and the poor in the metropolis. 'In the social ecology now being created around the globe,' predicts Massey, 'affluent people increasingly will live and interact with other affiuent people, while the poor increasingly will live and interact with other poor people. The social worlds of the rich and poor will diverge' (1996,409). Shifts towards liberalized housing markets seem likely to encourage further such polarization by pricing lower-income groups out of higher demand and higher-valued spaces whilst, at the same time, large-scale redistributive and social housing programmes are undermined or withdrawn in many countries (O'Loughlin and Friedrichs, 1996).

#### Acceleration of transportation divorces us from reality -- causing ecological disaster, collapse of democracy, and economic unsustainability.

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Acceleration and the increase of speed also characterise agents on the financial markets, who need to accumulate capital quickly in order not to lose it. It also affects family relations, which change in a series of accelerating marriages and divorces. Acceleration is linked to technical modes of mobility, which both shrink the space-distance and widen space in a way that challenges the feeling of belonging to a place and the ability 'to make oneself at home' (German 'Beheimatung'). Furthermore, it is linked to the flows of ideas, values and cultural practices. While modernity earlier has produced the fear of being excluded (in a spatial sense), acceleration now provokes the fear of being taken down and being outdistanced (in time and speed).5 We can observe an exciting and challenging paradox in the diverse phenomena of modern acceleration: what was earlier experienced as the broadening of opportunities for developing business and life projects has nowadays become just the opposite. The processes of acceleration can reach their limits, and sometimes they result in explosive risks that turn the whole vehicle of modernity into an accident, which evokes Hanna Hoch's collage. Hypermobility threatens social systems of planning and democracy. The increasing acceleration of financial speculation threatens the general usefulness of monetarism. Technical and social processes of acceleration become more and more insensitive and therefore destructive of ecological processes, where the speed of biological life cycles and development do not follow the principle of constant acceleration. Global climate change and energy consumption particularly reveal the completely unsustainable nature of our contemporary modes of transport. Globalisation does in fact not represent 'the end of geography' (P. Virilio), but the beginning of a new geography, where 'moving' represents a foundational category for the emergence of sacred and non-sacred spaces and places. The modern acceleration and the acceleration of modernity itself have come to a point where acceleration threatens itself. **This process violates the simple insight that every child must learn as he or she starts walking and running: If you run too fast you might fall**! This trend has led to the emergence in recent years of strong social movements critical of the acceleration of the modern world. Environmental movements argue for 'de-acceleration' (Entschleunigung); bioregionalists argue for smaller scales of transport, markets and exchanges. The World Council of Churches (WCC) and the Conference of the Christian Churches in Europe (CEC) criticise motorised mobility's environmental impact on climate change.6 New religious movements as well as established religious traditions reconstruct the practices and beliefs of pilgrimage spirituality. Walking, powered only by one's own feet, has led to the rediscovery of an intrinsic value in alternative life style projects, and is historically embedded in the European citizens' movement, where the people walk in public places in order to express their political demands for freedom, equality and solidarity.7 Walking, however, offers a fundamental dimension of human existence and human ecology, expressed in Castro Pechora’s exciting mural painting in Yucatan, which portrays the Mayan campesino's walk between the home and the 'milpa' in the bush. My second point is that the theme of our discussions is located in a broader discourse about the acceleration of modernity. How are mobilities in transit related to the late modern dialectics of acceleration and de-acceleration? What kind of speed and acceleration benefits the good life for all? How can we negotiate about the ethical criteria for evaluating mobility systems in general and increasing or decreasing speeds in particular? The acceleration of modernity, furthermore, is founded on a specific understanding of history that emerged in the early enlightenment. Since then, individuals and communities no longer move in a closed time and a closed space but rather re-imagine their reality as an open future in an open space. The future is no longer a given entity, but emerges as a consequence of one's actions. The meaning of life is understood as something in front of us rather than something that comes from our ancestor's past to our present.

### Impact – War

#### Acceleration of technology causes hyperviolence and is the root cause of war .

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Writing in the midst of the Second World War Lewis reads the rise of totalitarianism as closely connected with the disordering of ethical and political life which is on this account a central feature of the technological condition. Analogously Paul Virilio argues that **there is a close connection between speed and the disordering violence of war**. He reads the movement of Western history from feudalism to capitalism as having been directed by the growing mechanical power of military technology, and the increasing speed of armies and the machines of war. He also suggests that an obsession with immediate and quantifiable results measured by mechanical timeis in part **responsible for war itself**. He observes that the First World War was triggered not so much by the assassination of Archduke Ferdinand as by the fact that the Serbs were given only 48 hours to explain what had happened. Similarly the invasion of Iraq in 2003 was in part precipitated by the unwillingness of President George W. Bush and Prime Minister Tony Blair to await the outcomes of the necessarily lengthy investigation of United Nations weapons inspectors. To search a vast country for the remaining 4 percent of potential WMD materials that earlier reports had indicated might still remain in Iraq would have taken more time than Bush and Blair were prepared to countenance. On this account instantaneity, **the time space compression involved in what Virilio calls ‘real time’, is now the principal cause of global war.**

### Capitalism Internal Links

**Mobility hierarchies formed by the compression of time strengthen capitalism and further weaken those who are unable to move themselves.**

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This is, in other words, a highly complex social differentiation. There is the dimension of the degree of movement and communication, but also the dimensions of control and of initiation. The ways in which people are inserted into and placed within ‘time-space compression’ are highly complicated and extremely varied. It is necessary to think through with a hit more conceptual depth, a bit more analytical rigour, quite how these positions are differentiated. Moreover, recognition of this complexity raises the important issue of which condition of postmodernity we are talking about - whose condition of postmodernity? More immediately, two points arise from these considerations. The first raises more directly questions of politics. If time-space compression can be imagined in that more socially formed, socially evaluative and differentiated way, then there may be the possibility of developing a politics of mobility and access. For it does seem that mobility and control over mobility both reflect and reinforce power. It is not simply a question of unequal distribution, that some people move more than others, some have more control than others. It is that the mobility and control of some groups can actively weaken other people. Differential mobility can weaken the leverage of the already weak. The time-space compression of some groups can undermine the power of others. This is well established and often noted in the relationship between capital and labour. Capital’s ability to roam the world further strengthens it in relation to relatively immobile workers, enables it to play off the plant at Genk against the plant at Halewood. It also strengthens its hand against struggling local economies the world over as they compete for the favour of some investment. But also, every time someone uses a car, and thereby increases their personal mobility, they reduce both the social rationale and the financial viability of the public transport system and thereby also potentially reduce the mobility of those who rely on that system. Every time you drive to that out- of-town shopping centre you contribute to the rising prices, even hasten the demise, of the corner shop. And the ‘time-space compression’ which is involved in producing and reproducing the daily lives of the comfortably- off in first-world societies-not iust their own travel but the resources they draw on, from all over the world, to feed their lives-may entail environmental consequences, or hit constraints, that will limit the lives of others before their own. We need to ask, in other words, whether our relative mobility and power over mobility and communication entrenches the spatial imprisonment of other groups. A politics of mobility might range over issues as broad as wheelchair access, reclaiming the night and the streets of cities for women and for older people, through issues of international migration, to the whole gamut of transport policy itself. Conceptualizing space, mobility and access in a more socially imaginative way, and abandoning easy and excited notions of generalized and undifferentiated time-space compression, might enable us to confront some of these issues rather more inventively.

#### Infrastructure is a key strategic site for consolidating the power of capital.

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Capitalism as a mode of production has necessarily targeted the breaking down of spatial barriers and the acceleration of the turnover time as fundamental to its agenda of relentless capital accumulation. (Harvey, 1996) Our third perspective revolves around analyses of the geographical or spatial political economies of contemporary capitalism. The starting point of this perspective is that the ability to transcend space and time constraints selectively, by building or using transport, telecommunications, energy and water infrastructures, is central to the economic and geographical development of modern capitalism. The production of infrastructure networks, and the financial, engineering and governance practices that support them, are therefore necessarily embedded within the broader power relations of global capitalism. 'Infrastructure networks of all types are deeply embedded and implicated in the process of production, reproduction, and legitimation in a functioning capitalist economy' (Hodge, 1990, 87). Taking this idea as his starting point, Eric Swyngedouw goes one step further. He suggests that 'changes in mobility and communication infrastructure and patterns are not neutral processes in the light of given or changing technological-logistical conditions and capabilities. Rather, they are necessary elements in the struggle for maintaining, changing or consolidating social power' (1993, 305). Mobility, he continues, is 'one of the arenas in which the struggle for control and power is fought'. An important strategic weapon of the powerful in this struggle 'is the ideology of progress and the legitimising scientific discourse of scientists and engineers' that so dominated the construction of the modern urban infrastructural ideal discussed in Chapter 2 (Swyngedouw, 1993, 324).

#### Infrastructural development consolidates capitalist social control.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Our third perspective, that of spatial political economy, takes such analyses of the power relationship surrounding infrastructural development further still. Analysts here offer a powerful, integrated view of how the production and reconfiguration of infrastructure networks is intimately bound up with the production and reconfiguration of cities and capitalist urban landscapes. Once again, this allows us to overcome overly separated and deterministic notions of technology and space. Instead, we see both as being intrinsically produced together within the dynamic political economies of contemporary capitalism. 'Technology' or 'infrastructure' thus become much more than materially impacting 'things'. They emerge, rather, as embedded instruments of power, dominance and (attempted) social control. They are intrinsically geopolitical and social phenomena that are 'sunk' into certain spaces and not others. Cities, moreover, emerge as contested terrains for capitalist political economy. They are dynamic spaces that are always in a state of uneasy tension with the infrastructure networks that fill and crosscut them. The traditional view of cities as bounded spatial 'containers' is thus in perpetual dynamic tension with the varying ability of infrastructure networks to crosscut and unevenly compress space and time barriers - as in the current period of 'time-space compression'. Urban spaces, and the geopolitical corridors between them, are thus full of struggles and contests over the highly uneven ability to overcome space-time constraints. Moreover, with the arguments of Castells, Brenner, Swyngedouw, Gillespie and others, we can clearly begin to see how the changing political economies of urban and infrastructural development is supporting development logics based on the parallel unbundling of infrastructure networks and the fragmentation of cities. Castells's 'variable geometry' and Brenner's 'glocal scalar fixes' are based, at least in part, on restructuring the monopolistic, integrative infrastructures inherited from the modern ideal. Replacing them, using the power of new technologies to break down 'natural monopolies' in the process, are a widening array of customised, tailored, unbundled infrastructure networks targeted largely at highly valued economic and social spaces within and between cities. Such valued spaces and users increasingly integrate into 'hub' and 'spoke' networks, through the 'tunnel effects' and 'global scalar fixes' of global airline, optic fibre, satellite, rail, road, sea and, increasingly, energy and water networks. All types of city demonstrate that the logic also supports the dislocation and distancing of non-valued spaces and users from networks. Here, again, we come across the relational perspective of time and space that demonstrates how physical proximity can be combined with relational severing, and how geographical distance can be combined with relational intensity (through the 'tunnel effects' of high capability infrastructures that operate on the principle of'glocal bypass'). As a last point, spatial political economy perspectives usefully allow us to collapse dualist distinctions of local and global. They suggest that we are moving from a period when an infrastructure network was considered conterminously with a Cartesian space or territory to one where infrastructure hubs, spokes and tunnel effects will increasingly characterize the links between infrastructure and territory on all spatial scales, from global airline and optic fibre grid systems to local highway and utility grids. Certainly it is becoming increasingly difficult to assume that infrastructure networks are coterminous with any particular bounded definition ofterritory (be it neighbourhood, city, district, nation or whatever).

### Biopolitics

#### Infrastructure networks subject the population to the reason of state.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

From the eighteenth century on, every discussion of politics as the art of government of men *[*sicJ] necessarily involved a chapter or a series of chapters on urbanism, on collective facilities, on hygiene, and on private architecture. (Foucault, 1984,240) The final 'pillar' supporting the construction and elaboration of the modern urban infrastructural ideal was provided by efforts by governments and states to support the shift to regulated, near universal access to infrastructure networks across cities, regions and nations. Reviewing the development of infrastructure networks, it is clear that broad agreement was reached between the end of the nineteenth century and the late 1960s, especially across the Western world, about the need to roll out rapidly a relatively standardized set of technologies to the city and the wider, urbanizing nation. The general view was that infrastructure networks needed to be delivered by social institutions based on private or public monopoly control (McGowan, 1999). Roads, utilities, water systems and telephony were generally seen to connect and mediate all aspects of modern production, distribution and consumption. Without public control of these grids, local operators would, as the National Civic Federation of US Utilities argued in 1907, 'be left to do as they please' (Simon, 1993, 35). From the initial private and public local utilities in the late eighteenth century, in fact, many efforts had been made by municipalities and states in the United States to fight against the vested interests of private capital in developing the single integrated public water, sewer and later energy systems for cities that were able to match the enormous pace of urbanisation at the time (Tarr, 1984). In France the agents of the nation state ultimately began to consider the country's 'territory on the model of the city' - a space to be ordered, regulated and configured through managing the interplay of territory and infrastructure networks (Foucault, 1984,241). The essential idea was that 'a state will be well organized when a system of policing as tight and efficient as that of the cities extends over the entire territory ... What was discovered at that time was the idea of society' (ibid., 241-2, original emphasis). [73]

### Enframing

#### Speed and efficiency enframe the world as standing-reserve.

Bissell 7 [DAVID BISSELL Department of Geography, Durham University, UK; “Animating Suspension: Waiting for Mobilities”; Mobilities Vol. 2, No. 2, 277–298, July 2007; Boyce]

Attention to the complexity of relative mobilities must be met with a similar sensitivity to the kaleidoscopic nature of subjectivities, the nature of human experience, folded through and enmeshed within these various mobilities. Much work focusing on the relative dialectics of mobility and immobility have often and rather uncritically served to reproduce a productivist and rather inert model of subjectivity, as something that can somehow be read-off from the relative (and usually physical) speed of the subject. It is such a productivist rendering of im(mobilities), in the sense that the economic rationale of the event is primatised, which this paper aims to chart a path away from. Writing from a more phenomenologist perspective together with recent insights from performativity and thinking affectively (see Whatmore, 2002; Thrift & Dewsbury, 2000), I want to think through the event of waiting from the perspective of embodied corporeal experience. I enact this through a reconsideration of bodily practice so that the event of waiting is not viewed from the angle of im(mobilities), but instead from the perspective of activity/inactivity. This enables a more non-linear consideration of the various modalities of what it is to wait: from active waiting of an intense pressing and beinginthe-world, to a more stilled sense of waiting that falls outside of the impulse to view subjectivity as auto-affective activity. This paper provides a timely and much needed intervention by considering how waiting-as-event is a specific kind of relation-to-the-world that transcends and folds through this relational dialecticism of (im)mobility.

#### Hypermobility turns the human body into a disposable container for economic value.

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Mobilities in transit offer a broad field to be explored by different disciplines in all faculties, in addition to the humanities. In spite of increasing acceleration, for example in travelling through geographical or virtual space, **our body becomes more and more a passive non-moving container, which is transported by artifacts or loaded up with inner feelings of being mobile in the so-called information society**. **Technical mobilities turn human beings into some kind of terminal creatures**, who spend most of their time at rest and who need to participate in sports in order to balance their ~ailY disproportion of motion and rest. Have we come closer to Aristotle's image of God as the immobile mover, when elites exercise their power to move money, things and people, while they themselves do not need to move at all? Others, **at the bottom of this power, are victims of mobility-structured social exclusion.** They cannot decide how and where to move, but are just moved around or locked out or even locked in without either the right to move or the right to stay.12

### Colonialism

#### The aff engages in temporal colonialism. Increasing time compression is considered the standard for civilization and progress. This marginalizes alternative temporalities.

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Time has been a most effective colonizing tool. That which has become taken for granted is an ideal vehicle for imperialist purposes since it is no longer discussed and no longer visible. When standard time and world time were established at the beginning of the last century, this significant change engendered impassioned debate and resistance. When today the values associated with this artefactual, commodified time are imposed as norm on societies who organize their lives according to different temporal principles, attempts at discussion about its merits are greeted with incredulity. Furthermore, resistance is met with incomprehension since clock time and commodified time have become an unquestioned and inescapable fact of the industrial way of life. Any group or society that deviates from this 'norm' or endeavours to question its wisdom, value and desirability is considered backward, lazy, uncivilized. There are two sides to the colonization of time: the global imposition of a particular kind of time which is colonization with time, and the social incursion into time - past and future, night-time and seasons, for example - which is the colonization of time. Colonization with time therefore refers to the export of clock and commodified time as unquestioned and unquestionable standard, colonization of time to the scientific, technological and economic reach into time - most usually of distant others who have no say in the matter. Colonization with time has been achieved with the aid of standard time, time zones and world time, on the one hand, and with the globalization of industrial time and its associated economic values as common-sense norm, on the other. In the latter case it is the time values and the social relations of industrial time that are being adopted as well as imposed on a worldwide basis. As I indicated in the previous chapter, Japan and Russia proceeded to 'Westernize' their social relations of time, thus accepting the Western convention as norm and as a value to be embraced and emulated. The political leaders of both societies considered this to be a precondition for becoming a fully fledged industrial nation, which was equated with being 'modern', 'progressive', even 'civilized'. They also realized that there was a heavy economic and political price to pay for any deviance from the industrial norm. In most cases of third world 'development', however, clock time is imposed as norm irrespective of its suitability, and whether or not the recipients consider it desirable.35 This industrial norm, as I suggested above, is fundamentally rooted in clock time and underpinned by naturalized assumptions about not just the capacity but also the need to commodify, compress and control time. The elements of this package of industrial time are both cumulative and mutually supporting and form a coherent, integrated dis/continuous whole. As long as the underpinning assumptions remain naturalized, taken for granted and unquestioned, unwilling recipients will find it difficult if not impossible to make their protests heard and understood, let alone accepted as meaningful and legitimate. Only when fault lines in the logic become exposed and irresolvable contradictions begin to destroy the system from within can alternative visions take hold and openings for change be operationalized

### Militarism

#### Infrastructural speed-elitism militarizes social and political life.

**Hoofd, ‘07**– Ingrid M. Hoofd, Ph.D University of Singapore, Assistant Professor in the Department of Communications and New Media at the National University of Singapore, ‘Critical Literacy: Theories and Practices’, Volume 1:2, The Neoliberal Consolidation of Play and Speed: Ethical Issues in Serious Gaming, http://www.criticalliteracyjournal.org/cljournalissue2volume1.pdf#page=6 // JK

This element of militarisation partly informs my concept of ‘speed-elitism.’ I extrapolate the idea of ‘speed-elitism’ largely from the works of John Armitage on the discursive and technocratic machinery underlying current neo-liberal capitalism. In “Dromoeconomics: Towards a Political Economy of Speed,” Armitage and Phil Graham suggest that due to the capitalist need for the production of excess, there is a strong relationship between the forces of exchange and production, and the logic of speed. In line with Virilio’s argument in Speed and Politics, they argue that various formerly the less connected social areas of war, communication, entertainment, and trade, are now intimately though obliquely connected. This is because all these forces mutually enforce one another through the technological usurpation and control of space (and territory), and through the compression and regulation of time. Eventually, Armitage and Graham suggest that “circulation has become an essential process of capitalism, an end in itself” (118) and therefore any form of cultural production increasingly finds itself tied-up in this logic. So neo-liberal capitalism is a system within which the most intimate and fundamental aspects of human social life – in particular, forms of communication and play – get to be formally subsumed under capital. In “Resisting the Neoliberal Discourse of Technology,” Armitage elaborates on this theme of circulation by pointing out that **the current mode of late-capitalism relies on the continuous extension and validation of the infrastructure and the neutral or optimistic discourses of the new information technologies**. Discourses that typically get repeated – like in the policy papers – in favour of the emerging speed-elite are those of connection, empowerment and progress, which often go hand in hand with the celebration of highly mediated spaces for action and communication. Such discourses however suppress the violent colonial and patriarchal history of those technological spaces and the subsequent unevenness brought about by and occurring within these spaces. I would claim that Armitage’s assessment of accelerated circulation, and the way new technologies make play complicit in the techno-utopian endeavour of speed, is crucial for understanding the larger ethical issues surrounding serious games. It is helpful at this point to look at Paul Virilio’s and Jacques Derrida’s work because this helps us understand the complicity of the aesthetics of interactive and visually oriented gaming technologies in speed-elitism. In “Cyberwar, God, and Television,” Paul Virilio talks about the simulation industry’s function of “exposing [one] to the accident in order not to be exposed to it” (322). What is according to him ‘accidented’ through the virtualisation of accidents and violence, for instance in video-games, is reality itself. This ‘accident of reality’ that virtuality brings about, argues Virilio, is due to the fact that simulation technologies fragment space through their property of instantaneous connection with previously far-away places. The hallmark of this fragmentation is therefore that it brings about an intensification of forms of in- and exclusion through actual disconnection. Eventually, there will be “two realities: the actual and the virtual” (323), and I would claim that consequently **the privileged speed-elite will be able to live in the illusion of engaging with social reality that the virtual grants, at the cost of the (s)lower classes who will suffer the social and ecological effects of the accidents of virtualisation**. The illusion of mastery for Virilio consists in the sense of the “incorporation of the world within oneself” that “real time technologies permit” (328) due to their militaristic compulsion that seeks to “reduce the world to the point where one could possess it” (329). I maintain that these statements spell out exactly the function and logic of serious gaming.

### Existentialism

#### Intensifying speed and connection obliterates meaningful social connection and experience.

**Nielsen & Jespersen, ‘07** – Lise Neilsen, Ph. D Roskilde University, Professor of Economics at the Department of Environment, Social and Spatial change, Per Homann Jespersen, Associate Professor at Roskilde, ‘Time and Space in Freight Transport’, http://www.trg.dk/transportraadet/pup/NT/NT-01-03.pdf#page=63 // JK

The development of movement is to distinguish from the third concept, speed. Speed has increased. The French philosopher of speed (Virilio 1986) finds the reason for that in technological development; the plane and the car have increased speed, but of latest the internet has set new conditions of speed. We can reach longer in a shorter time. We demand that activities take place at an increased pace. Goods have to be produced and delivered to the customers within tighter and tighter schedules. Twenty years ago the normal time for freight to reach central Europe might be two or three days. It is not uncommon that time limits now are 12 to 16 hours. **With speed also its contrast appears - Virilio argues that speed brings around boredom**. When everything is so fast we are saturated with volatile and superficial events, advancing boredom. We react, not with reflection but with reflex. And here we are at the fourth dimension of mobility, time. Time has - in the words of the English Sociologist John Urry - moved from clock time to instantaneous time. Clock time was typical of periods when railway prevailed. Timetables had to be followed precisely. With instantaneous time we have to react instantly. We want to move immediately and for this purpose the car is perfect - automobility is the mobility of the car. Some think we are too busy in this age of automobility that we rush around between activities and places in order to do everything. Others think we use time in the wrong way, and others again that **we should stop and develop a slower society**. Slowness could mean greater contemplation; with Kunderas (1995) words: The degree of slowness is proportional to the intensity of the memory; **the degree of speed is proportional to the intensity of oblivion.**

### AT: Util

#### Utilitarian calculus occurs at a speed and scale that is dehumanizing – in our race to determine consequences we count out unproductive slower communities.

**Bergmann & Sager, ‘08** – Sigurd, 9 Ph. D Doctoral Theses, Fellow at the Carson institute, Professor for Religious studies in the Department of Archaeology and Religious Studies at the Norwegian University of Science and Technology, Thore Sager, Professor in the Department of Civil and Transport Engineering at the Norwegian University of Science and Technology, ‘The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment’, pgs 222-223 // JK

The desire for speed is pathological in part because it curtails moral deliberation on the effects of speed. The evidence lack of deliberation over the immoral consequences of speed is part of a larger ‘loss of orientation’ which both physical and virtual speed visit on the individual, and this loss of an orienting sense of place has moral consequences. As Virilio suggests, ‘to exist is to exist in situ, here and now, hic et nunc’ (Virilio, 1995). The ability to experience the moral claims of others, and the restraint such claims properly represent to the expression of individual desire, arises in part from the location of individuals in communities of place such as are constituted by families and place-based communities. The erosion of a sense of being in place is consequently intertwined with a lack of moral deliberation over the sacrifices of human, as well as planetary, wellbeing, that excessive speed involves. In this climate the victims of speed become statistical persons, or statistical beings in the case of ‘road kill’, in the larger utilitarian calculus of the corporation and the nation state. An analogous moral loss occurs for citizens whose communities are disturbed and deracinated by new roads and the speeding cards that use them.

### Alternative Ext. (Space)

#### A new spatial imaginary unravels the oppression of difference – instead of building premium networked spaces we should turn to networks of difference that support less stratified forms of connection.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

In this context it is clear that our new spatial imaginaries must stress the critical importance of the constitution - geographically, sociotechnically, politically, culturally and legally \_ of urban spheres of heterogeneous interaction and continued mixing - the very essence of the city. The dangers of the untrammelled commodification of networked spaces of mobility, of the on-going reconstruction of urban landscapes as closed, premium spaces which attempt to withdraw against the 'other' spaces of immobility and fear, must be recognized. The close connection between changing urban landscapes and global shifts towards neoliberalism and consumerism needs to be stressed. And all the associated financial and social costs, likely to stem from rising fear of crime, social unrest, polarization and spiraling securitization and fortification, must be underlined. Rather, the new urban political imaginary must engage with, and actively support, the piecing together of the 'thousand tiny empowerments' offered through network spaces of resurgent citizenship (Sandercock, 1998a, 129) - from organised grass-roots mobilisations, through local exchange and trading systems (LETS) to a whole range of everyday practices that resist the simple secession of sociotechnical, commodified spaces from the wider metropolitan landscape (Cooper, 1998; see Fincher and Jacobs, 1998). Such democratization, following Iris Marion Young (1990), must rest first on 'the possibility of expressing difference and "otherness" in unoppressive ways' (Swyngedouw, 1998, 120). To do this it will need to recognize and support the parallel construction of networked infrastructures and urban spaces that more sensitively support the many dimensions of the 'cultural politics of difference' thrown up by contemporary urbanisation, social and cultural change and migration: gender, age, ethnicity and 'race', (dis )ability, sexual preference and spirituality (Sandercock, 1998 a, b). Clearly, the growth offragmented spaces of expression mediated by the Internet and other infrastructure networks will not suffice here. Successfully supporting an urban politics of difference will continue to require embodied and situated presence, proximity and contact what (some) urban streets and spaces in certain cities have come to stand for and sustain. It will therefore need to work to overcome the widespread construction of premium network spaces - consumerised streetscapes, gated enclaves, electronically controlled highways, 'virtual' spaces - with their characteristic efforts at social, cultural or economic purification and controlled withdrawal from difference (Robins, 1999,51). 'What is fundamental to urbanity,' writes Kevin Robins, is 'embodied presence and encounter. It is a question of ... both the "individual" body and the "collective" body of the city' (1999, 52). Following some of the arguments of Richard Sennett (1970), Robins urges us to 'put a value on exposure [to difference] and its discomforts' (ibid., 54). Along the same lines, Jeremy Seabrook argues that 'security, if it arises anywhere, must arise from the tenderness and vigilance of people committed to the daily protection of one another' (1993, 12).

#### Cross the borders enforced by the dominant infrastructural imaginary. Multiplying ways of being and occupying space overcomes spatial control.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin]

Third, the sheer diversity of identities, social worlds and political pressures in contemporary cities can quickly swamp crude efforts to impose simplistic notions of exclusion and purified urban order. Contemporary cities remain as sites of jumbled, superimposed and contested orderings and meanings; they are 'points of interconnection, not hermetically sealed objects' (Thrift, 1997a, 143). Multiple 'spillovers' can easily saturate and overwhelm simple attempts at establishing and maintaining 'hard' disciplinary boundaries. Virtually all boundaries remain to some extent porous. Perfect control strategies are never possible. 'Public' mixing can often still overcome strategies of separation and control. The wider social worlds of the city therefore tend to find ways of overcoming the barriers erected around the 'dominant rhythms' of global enclaves (Pryke, 1999,245). The mixing and diversity of the contemporary city tends to remain far too pervasive and powerful to be simply and starkly separated out through some simple construction of gleaming, sociotechnically 'pure' enclaves of dazzling modernity, customised connectivity and stark, secured boundaries. Very often 'the juxtapositions, combinations, and collisions of people, places, and activities' in the contemporary metropolis 'create a new condition of social fluidity that begins to break down the separate, specialized, and hierarchical structures' which dominant coalitions strive to build into city form (Crawford, 1999b, 34). Under some circumstances, such fluidity can help to encourage liberatory potential. (ibid., 34-5). We must also remember that the cost ofentorcing space-time boundaries around premium networked spaces can be hard to sustain. This was the As 'chance encounters multiply and proliferate, activities of everyday space may dissolve the predictable boundaries of race and class, revealing previously hidden social possibilities that suggest how the trivial and marginal might be transformed into a kind of micropolitics' case in 1995 when the policing cost of enforcing a ban on street traders in central Mexico City - put in place to 'sanitise' the space for international tourists -led, along with violent protests, to its removal. Instead, spaces were allocated that traders could rent at reasonable levels from the city authorities (Harrison and McVey, 1997,323). In newly industrializing, developing and some extremely dynamic Northern cities, global enclaves mllst also often contend with the overwhelming scale and chaotic logic of social and demographic shifts, with volatile economic cycles, and with spontaneous growth, all of which are part and parcel of'hyperurbanisation'. Glocal enclaves, for example, often tend to become the focus of spontaneous mass migration from among the urban millions of unemployed or underemployed seeking work. They can simply be swamped within the wider processes of informal urbanization that this triggers of I And they are vulnerable to sudden economic crises like those that afflicted many Asian cities in the late 1990s. Grundy-Warr *et ai.,* f(x example, describe how the attempts to develop sealed-off 'glocal' tourist and manufacturing enclaves in the Indonesian islands within the SiJoRi growth triangle, that we encountered in Box 7.5, have actually been overwhelmed by in-migration and the spontaneolls construction of squatter settlements (1999, 324). As they suggest, all manner of attempts at boundary control in the new cityscapes have been effectively undermined. 'As well as the on-park housing and self· contained services [of the newly built tourist and manubcturing enclaves], tight border protection was expected to prevent an influx of job seekers and associated shanty town development. Residence was intended to be restricted to employed persons' (ibid.). In this case, all manner of attempts at boundary control in the new cityscapes - erecting barriers, building walls, stipulating who has access and who does not, employing private security companies, customising premium infrastructure only to the needs of those inside the enclave - have been effectively undermined and rendered useless. Infrastructure networks have been 'illegally' accessed.

#### Every instance of rejection helps reshape the spatial and temporal coordinates of transportation.

Khisty and Zeitler 1 [C. Jotin Khisty, Department of Civil Engineering, Illinois Institute of Technology; Ulli Zeitler, Aalborg University, Strandvejen 19, DK-9000 Aalborg, Denmark.; “Is Hypermobility a Challenge for Transport Ethics and Systemicity?”; Systemic Practice and Action Research, Vol. 14, No. 5, October 2001; Boyce]

Transport problems, in terms of sustainability, need to come to terms with such concepts as space, time, freedom, and justice. In general, when we look for alternative interpretations of what transport engineers and planners present to the public, we are not looking for totally new concepts and understandings as much as we are seeking latent existential meaning that constitute our present behavior, though poorly reﬂected in our reasoning. Each act, however reﬂected in a person’s mind, has an independent meaning and signiﬁcance for the actor (or agent) himself and his relationship to other actors (or agents). Each act has an existential root. What needs to be done is to match scientiﬁc theory and political reasoning to those basic existential facts. This therapy may possibly contribute to a change in people’s behavior and bring us closer to an understanding of persistent transport dilemmas. The phenomena of time and space play a vital role in transport behavior. The deﬁnition of mobility as spatial–temporal change is the cornerstone of current transport thinking. For many, space and time are basically mathematical phenomena. If an increase in mobility is taken to be a legitimate goal, this mathematical interpretation encourages and invites increasing space consumption and time efﬁciency. The motorization of human transport has made mobility go far beyond any biological limit and space pollution (Whitelegg, 1993; Zeitler, 1997a, b).

### Alt Ext. (Time)

A critique of acceleration respects future generations and different forms of life.

CWERNER 2000 Saulo B. Cwerner, Professor of Sociology at the Department of Lancaster with a specialization in global time, migration, and diaspora, Ph.D. in Sociology from the University of Lancaster (Saulo B. Cwerner: “The Chronopolitan Ideal: time, belonging, and globalization”, in Time & Society Vol. 9 No. 2, September 2000, p. 337-338, http://tas.sagepub.com/content/9/2-3/331.full.pdf)

Chronopolitanism is concerned with temporalizing political community. It involves a radical transformation of modernity’s conception of history, which informs much of the conceptualization of time in the social sciences. Yet how do we proceed to temporalize cosmopolitanism? How to conceive of a global sense of belonging that is sensitive to time as well as space? The cosmos of the chronopolitan ideal should no longer be seen as the static world of global spatial belonging, but instead as an evolving system of changing temporalities. It presupposes the global present, but transcends it by opening up to alternative pasts and futures, and also to the diversity of intersecting rhythms of life. In this research note, I will take an analytical stance that distinguishes between three fundamental dimensions of chronopolitanism: issues related to future, past, and present generations. The chronopolitan ideal is mindful of the rights of future generations. These rights are already inscribed in the actions and thoughts of the living, in that present actions extend temporally to various times in the future. Adam (1998) has extensively analysed the temporal reach of industrial society. This is characterized by complex temporalities that arise from the interplay between the environment and modern social life, which are characterized by invisibility, latency, contingency and absence. Present actions have unintended consequences that extend well beyond the lifetime of those involved in them. There is a strong case for considering the often imponderable effects of present actions upon future generations, and enshrining the rights and responsibilities of these generations in face of such profound implications. Adam’s timescape perspective is crucial for opening up the subject matter of citizenship to the unborn citizens of the future. The future is being presently colonized by the range of technological devices and social practices that are responsible for modernity’s ways of life (Adam, 1998: 57–8). The memory of previous colonizing enterprises must be allowed to warn us about the power of present generations over defenceless and voiceless future ones. The chronopolitan ideal intends to restrain this power through articulating a set or chain of temporalized rights and responsibilities. It builds upon a notion of temporal reflexivity (Lash and Urry, 1994: 243) that follows an increasing awareness of the long-term relationship between humans and nature. This new temporal vision, however, is not restricted to a deep ecological view about the rights of unborn generations to a clean and safe environment, making sure that the debris of the modern way of life does not pile up even higher. It is also concerned with ensuring that social arrangements are made in order to avoid condemning future generations to the levels of social deprivation that beset many today. In Nowotny’s words, ‘in our still muted concern for their well-being, we find that the future intrudes into the present and that its voices demand some kind of representation now’ (Nowotny, 1989: 208). The moral concern with future generations cannot, on the other hand, be separated from the rights of the dead. Chronopolitanism also reaches out for past generations in order to welcome them into the global political community. It suggests that there are inexorable links of rights and responsibilities that connect past to present (and future) generations. The chronopolitan ideal attempts to move beyond tradition, and even beyond the ‘dwelling perspective’ in relation to landscape and nature suggested by Macnaghten and Urry (1998: 167–71), even if this takes account of a ‘glacial’ view of time. It does so by bringing past generations to bear upon the new ones through the notion of redemption.

#### **You should re-politicize temporal assumptions – a new imaginary that doesn’t take speed for granted can challenge temporal inequalities.**

ADAM 03 Barbara Adam, Emerita Professor of the Social Sciences at Cardiff University, founder-editor of the international journal Time & Society, Ph.D. in Sociology and DsCEcon from Cardiff University. (Barbara Adam: “Reflexive Modernization Temporalized”, in *Theory, Culture & Society* Vol. 20 No. 2, April 2003, p. 74-75, http://tcs.sagepub.com/content/20/2/59.full.pdf)

As social scientists we have not even begun to contemplate the implications of this double move towards temporal limits for the economy, politics and ‘glocal’ society. This is the kind of challenging context that Beck’s theory addresses and for which he insists’ (Beck, 19 the social sciences require ‘new categories, theories and methods 96: 39, 1999: 87) in order to be able to identify the access points for change in econo-political processes and structures. Interception of the politics of time, as they are played out in the political, economic and scientific institutions, requires that the social sciences first break through the shield of their own taken-for-granted temporal assumptions. Only then can the de-naturalization process of the subject matter begin, only then is there a chance to identify access points for change and follow Beck’s call to ‘reinvent our political institutions and invent new ways of conducting politics at social “sites” that were previously considered unpolitical’ (Beck, 1999: 93).In the sphere of politics, those who cannot vote have no say in the system of representative democracy. We have no institutions adequate and appropriate to our current temporal politics. To date there exist no institutional means to be accountable to those most affected by the economic and scientific construction of long-term futures. There is, in other words, no governance of time. There are no democratically elected guardians of the future. This point differs from the spatially constituted arguments that we have no global governance and it temporally extends the space-based realization that we have no institutions that monitor technological change on a global basis. Similarly, in the sphere of economics almost every principle and tool is predestined against taking responsibility for the future. Irrespective of whether this be insurance, the financial trading with time and the future, or the discounting of the future, the emphasis is on the present and what mis/fortune the future can yield for the benefit of the present. Responsibility for the future is a principle that falls outside the remit of the economic system. In the sphere of science, finally, the insistence on decontextualization and objectivity makes it difficult to entertain the idea of taking responsibility for the future created by scientific action since it separates actors from actions and their effects. The creation of hazards, dangers and perils, as Ulrich Beck rightly insists in his theory of reflexive modernization, is not an unintended consequence but an integral part of the rigorous application of the modernist logic. To take responsibility for our actions, as social scientists and as citizens, requires that we know ourselves in contexts, acknowledge our shadow, accompany our actions not just into the immediate but the very long-term future.

### Alt – Non-economic frame

#### Refusing an economic frame for transportation policy is a pre-requisite for addressing exclusion and structural violence.

Szyliowicz 3 [Joseph S. Szyliowicz is a Professor at the Graduate School of International Studies, University of Denver and Founder of the University’s Intermodal Transportation Institute. He is the recipient of several awards for his work in transportation; “Decision-making, intermodal transportation, and sustainable mobility: towards a new paradigm”; International Social Science Journal Volume 55, Issue 176; Page 185-195; <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2451.2003.05502002.x/pdf>; Boyce]

Clearly, transportation has entered into a new era. There is now a widespread feeling that it must be viewed through a new paradigm because the narrow approach that has hitherto prevailed has created a system that is not consonant with current and future needs. Its infrastructure has been largely designed to meet economic needs, narrowly defined. The serious problems which plague the USA and many other countries cannot be resolved effectively or efficiently without new approaches that incorporate the principles outlined herein. The first step in addressing these challenges is to ensure that elites and the public recognise the shortcomings of existing practices. Whether dealing with projects or with policies, a new public consensus is required.Anew vision will not be realised until elite and public values change. There are, fortunately, many signs that such change is underway, but much remains to be done in all countries and at the international level. Of equal importance is the development of more powerful theoretical tools that will enableus to better understand and predict decision processes and be of greater utility for practitioners and decision makers. In this area, political scientists have much to contribute, although, to date, the discipline has paid relatively little attention to such topics. Continued reliance by planners and decision makers on the rational actor model will be futile, and will do little to resolve the serious problems that confront transportation or to transform the sector into one that is consonant with sustainable development. New models are required that incorporate flexibility and are more appropriate to the political and other realities of transportation planning in the modern world. Public participation is not a panacea with respect to the many difficulties confronting today’s transportation systems. There are inherent problems in any process and even a good process may not produce a good outcome. Theparticipatory tendency may well be to select high-cost projects or policies that minimise impacts upon communities or do not conform to professional analyses and judgements. And conflict is an ever-present menace lurking in the background. Indeed, the process may itself intensify and broaden the scope of conflict. Yet, despite these caveats, public participation is here to stay. People everywhere are demanding an increasing voice in projects and policies that impact their lives. Meeting such demands in a satisfactory way, given the present state of public participation, presents difficult intellectual and operational challenges. Yet, one does not need to be a naive optimist to argue that significant opportunities exist to transform the present situation and to create environments that might permit the public to make constructive contributions to the resolution of complex and controversial issues. Democracy requires no less.

#### We should reframe transportation in terms of equality of access. Social justice frames break down exclusive transportation systems.

Martens et al 12 [Karel Martens a, Aaron Golub b, Glenn Robinson c; Institute for Management Research, Radboud University Nijmegen, Nijmegen, P.O. The Netherlands b School of Geographical Sciences and Urban Planning and School of Sustainability, Arizona State University, Tempe, AZ c School of Engineering and Institute for Urban Research, Morgan State University, 1700 East Cold Spring Lane, Baltimore, MD; “A justice-theoretic approach to the distribution of transportation benefits: Implications for transportation planning practice in the United States”; Accepted 5 January 2012; Boyce]

The literature and practice on environmental justice and transport has traditionally focused on transport-related burdens and participation in decision-making processes. In this paper, we have focused specifically on the distribution of access provided by transportation investment projects. Arguably, improvement in access levels is the most important benefit conveyed through transport infrastructure and services. We have provided a philosophical argument that has identified a set of principles that, in our opinion, should guide a just distribution of transport investments and services. The criterion states that, ideally, transport investment programs should guarantee that: (1) the gap between the areas or neighborhoods with the lowest and the highest level of access should remain within a predefined range (space-related or inter-neighborhood equity), (2) the gap between car-owning and car-less households residing in the same area or neighborhood should remain within a predefined range (mode-related or intra-neighborhood equity), while (3) aiming to achieve the highest possible average access level across neighborhoods and mode-related groups. While still formulated in abstract terms, we feel that these equity principles can be used to shape the practice of transportation planning. The principles suggest, first of all, that transportation planning authorities should focus on the analysis of access levels, at least in addition to the analysis of congestion. Second, it implies that authorities should compare access levels across areas and modes and determine which population groups are worst-off and/or fall below the access level derived from the maximax principle. Third, it would require transport agencies to search for cost-effective solutions to improve the accessibility levels of the target groups (see Ferguson et al. (2012) for a methodology for planning such improvements in the public transport system). These solutions could subsequently be added to a regional investment package, together with projects that aim to reduce congestion and/or increase traffic safety. This is only a brief discussion on the possible consequences for practice of the equity framework developed here. Obviously, additional work needs to be done to develop the framework and assess the full extent of the consequences for practice. Yet, in our opinion, the application of the ‘maximax’ principle over time would result in a reduction of the existing gaps in access between various population groups, ultimately resulting in a transport system that provides a level of access that enables each member of society to fulfill his or her life opportunities. This would be a most just approach, considering the importance of access in determining life chances. None of the typical approaches to justice taken by MPOs and other transportation agencies in the United States comes close to this ideal set of principles. Most agencies all but ignore the distribution of transport-related benefits in the evaluation of plan alternatives. Only a few authorities actually measure or invoke the distribution of access. These authorities, even those with the most sophisticated analysis techniques, however, fail to define a well-founded goal against which to assess the results of the analysis. As a result, they tend to be satisfied if communities of concern, like EJ communities or low-income neighborhoods, experience some improvement in their level of access, mostly to jobs. The consequence is that even in the jurisdictions carrying out an equity analysis, transport investment programs are accepted that hardly address the existing gaps in access levels. Thus, in some cases, the gap between the least and most accessible might continue to grow, even when there is attention to equity.

#### Reframing transportation debates from economic growth to social justice changes the process and implementation of infrastructure development.

Khisty and Zeitler 1 [C. Jotin Khisty, Department of Civil Engineering, Illinois Institute of Technology; Ulli Zeitler, Aalborg University, Strandvejen 19, DK-9000 Aalborg, Denmark.; “Is Hypermobility a Challenge for Transport Ethics and Systemicity?”; Systemic Practice and Action Research, Vol. 14, No. 5, October 2001; Boyce]

The transport of people and goods is achieved through a highly complex system that has not yet been completely understood. It was only in the mid-1950s that some of the early pioneers of trafﬁc science began studying the relationship between the speed and the ﬂow of a moving stream of vehicles. In more recent years, attempts have been made to come to grips with the entities comprising transport systems. These attempts were matched by policy makers to try to move people and goods by the right mode, in the right quantity, to the right place, and at the right time. If anything, most of the policy-making was and still is, driven by such interest groups as the construction industry and the automobile manufacturers. Indeed, the automobile–industrial complex, through advertising, lobbying, and other inﬂuences on public discourse, helps to sustain an “auto culture,” cleverly masking its problematic and costly features. While the transport of goods and people is achieved through the use of at least a dozen modes, ranging from the pedestrian using his /her own motive power to the sophisticated high-speed train, the story of everyday transportation in the Western world is centered about the automobile. Considering the widespread impact of the automobile on contemporary societies, it is surpris- ing how little the owners of these vehicles know about the major contribution to environmental deterioration, social disintegration, and global polarization. Politically, this is reﬂected in the worldwide claim for sustainable mobility, and economically, in the growing literature on the externalities of automobile use. The present trafﬁc condition is a subject of an ongoing debate, frequently voiced through the media. There is no question that there is a fundamental ethical concern about transport in general and the automobile in particular.

However, the dominance of engineering and economic approaches to transport research has largely prevented qualitative and ethical research from manifesting itself as an important interpretive framework. Three problems can be identiﬁed in this regard. First, within philosophical inquiry, transport issues have been largely ignored, because it was felt that transport ethics had no scholarly traditions to lean on. Second, within the camp of transportation researchers, it is a major challenge to explain to engineers and economist the place of ethics in the overall transportation picture. And third, the general public is not interested in listening to the adverse effects of transport, because of the taken-for-granted success of the automobile. These three problems are deeply intertwined (Zeitler, 1999b). Although there are several ways of nourishing an ethical debate within the transport sector, the contributions of phenomenology can be particularly helpful. Phenomenology presupposes the normativity of reality and draws attention to the fundamental conditions of coexistence of human and nonhuman beings that are at stake with reference to mobility behavior and transport-related activities (Zeitler, 1997a, b). According to phenomenology, the ﬂux of changes in the world generate challenges for moral agents, not only individually, but also collectively. People are responsible collectively for their actions and the way in which these actions interrelate with each other. The adequacy of these actions is dependent on the kind of situation we are responding to and on the nature of interplay between them (Zeitler, 1997a). To understand mobility behavior and transport events, such as commuter choices, high-speed driving, and trafﬁc congestion, individuals and collectives who are affected have to be identiﬁed. By doing this, ethical demands naturally evolve and the ability of individuals and collectives to respond adequately is sharpened. Not merely individual, but collective responsibility will eventually lead to the normativity of dynamic social systems.

#### Reframing transportation to privilege access restores ethical respect for excluded others.

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To return to our definition of mobility, we can say that mobility is not the ability or capacity to efficiently overcome distances, but the ability or capability to respond or act or move properly within the field of interdependent and co­-originating actors, where "properly" means in recognition of the ontological fact that we never act on our own, freely and independently, but only in an interdependent and co-originating way that is sensitive to the challenges we meet. In this way, "mobility" is a moral faculty and as such it should be clearly distinguished from transportation and "Verkehrsleistung".15 When we define mobility in this rather abstract, philosophical way, we still have to relate it to the basic issues in the transport discourse, such as need satisfaction, accessibility and freedom of choice. The main idea in this presentation is that these issues can be interpreted within the terminology I introduced. For example, and briefly, need satisfaction and accessibility are realised among response-able interdependent and co-originating actors; their self-realisation mediated through the realisation of other beings. Freedom of choice is not a liberty belonging to independent actors, but the ability to make choices, which reflects proper responses to given challeneges. This last interpretation indicates that it is not a maximization strategy that is at stake - maximisation of access, for example - but rather "the opportunity and ability to perform a (necessarily) limited range of desirable and ethically acceptable actions."'6 In my dissertation I elaborated on different aspects of mobility and argued that the emphasis on speed, comfort and traffic segregation, in order to optimise mobility patterns, is highly problematic from a moral point of view and counteracts normative intentions, which give the concept of mobility its central place in the public discourse. Very briefly summarized, speed is only possible when disregarding the moral circumstances of the actor's social and natural environment. Comfort is achieved only when extemalising the "costs". Traffic segregation is both detrimental to safety and to the development of our moral judgment. In this way, our discussion will move the focus from dominant mobility and transportation issues and instead will turn attention to the concepts of interactivity and response-ability.

### Aff Inclusion

#### The narrative frame for transportation policy shapes implementation.

Timms 8 [Paul Timms, Institute for Transport Studies, University of Leeds; “Transport models, philosophy and language”; 2/22/2008; Transportation (2008) 35:395–410; Springer Link; Boyce]

This section is concerned with viewing predictive models from a narrative perspective. I define a narrative as involving three elements: a model-created story; a story-teller; and the story-teller’s interpretation of the story. Embedded in any predictive model is a story as to how the present becomes the future. In most transport modelling exercises, this is typically represented in terms of a present state which jumps (due to the effects of exogenous non-transport factors) to a future state. (However, if dynamic modelling techniques are used, the gap between the present and the future might be ‘‘filled in’’.) Due to the mathematical nature of the model, the story is generally closed: i.e. given exogenous factors and a starting point, the future is fully determined. A relaxation of this closure comes when stochastic elements are incorporated into the model, so that, for example, a probability distribution of outcomes is created by the model as opposed to a single fixed outcome. However, given a specific set of exogenous factors, such a probability distribution is also usually fully determined. Such closure is problematic for anyone who considers that the future is open (i.e. not fully determined) and that human behaviour (in this case mobility behaviour) changes over time. Clearly, any model is produced by a modeller, who, in the definition of narrative given above, is the story-teller. Typically, though, the story-teller is invisible within the model. This point was raised above in Section ‘‘Metaphors’’ in connection with the subjective modeller metaphor (which is roughly equivalent to the explicit story-teller). The story-teller’s interpretation arises from integrating the (story-teller’s understanding of the) information/knowledge inherent in the model with their previous worldview. A consequence of making this interpretation explicit is that the modelling process becomes more open (i.e. it is not restricted to the closed/deterministic process described above). To consider the relevance of the above to the planning process, we can create the following thought experiment. Imagine a planning event attended by a number of individuals, each of whom brings with them their own personal model-influenced narrative. The event consists of each individual describing their narrative, listening to the narratives of others, and discussing the implications of synthesising the narratives. As the planning event unfolds, agreement is reached as to how the group goes forward, based upon the synthesised narrative(s). Such a scenario is consistent with communicative planning theory, as described above. The main difficulty with this scenario, when applied to real-life, is that we live in an unequal conflict-ridden world, and any planning event which ignores this is liable to reinforce the inequalities between its participants. As Fainstein (2005) argues: The ideal that everyone’s opinion should be respectfully heard and that no particular group should be privileged in an interchange is an important normative argument. But it is not a sufficient one, and it does not deal adequately with the classic conundrums of democracy. These include the problems of insuring adequate representation of all interests in a large socially-divided group; of protecting against demagoguery; of achieving more than token public participation; of preventing economically or institutionally powerful interests from defining the agenda; and of maintaining minority rights (Fainstein 2005, p. 125). It follows that an important question for future research is to identify the ways in which particular models reflect the viewpoints/ideologies of particular social groups. Once this identification has been made, attempts can be made to deal with issues concerning conflict associated with the use of models in planning.

#### We should be analyzing the relationship between the plan and the advantages, not just the plan alone. *Policy stories*, like the 1ac institutionalize a particular understanding of both problems and solutions. Their advantage choices crowd out different policy practices and concepts.

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Granted that the objectification and definition of a given phenomenon is open to a variety of normative and political considerations, it becomes interesting to explore how scientific knowledge constitutes a symbolic resource used by politically motivated actors. **In order to justify** and legitimize **certain courses of action**, and to render these possible and effective, scientific knowledge forms an important component both for efforts of persuading and mobilizing different groups, and for formulating and establishing policy practices. This can he grasped through the concept of poli1y stories. A policy story can be defined as follows:

A set of factual, causal claims, normative principles and a desired objective, all of which are constructed as a more or less coherent argument a story which points to a problem to be addressed and the desirability and adequacy of adopting a specific policy approach to resolve it.

This conceptualization incorporates how politically motivated actors integrate scientifically produced imowledge in the form of facts, concepts or theories in order to

i) convince others that a certain phenomenon is a problem,

(ii) demonstrate that this problem is best understood in a certain way as shown by the facts presented, and

(iii) link these factual claims to normative principles giving moral force to the argument that it should be resolved.

This perspective thus subjects the factual dimensions of political processes to the interests and normative commitments of actors, in the sense that knowledge is used to justify and legitimize calls for adopting certain policies to resolve what is seen to be a problem that 'ought' to be resolved.

The formulation is partly inspired by Rein and Schuss (1991. 265), who refer to problem-setting stories that 'link causal accounts of policy problems to particular proposals for action and facilitate the normative leap from "is" to 'ought"'. We depart from Rein and Schon's conception somewhat by emphasizing more strongly the factual claims (the characteristics of a phenomenon and normative principles (the morally' grounded principles used to legitimize the policy formulation invoked by actors as they define a problem and argue for a specific policy approach. The concept of policy stories seeks to capture how actors integrate knowledge claims into their politically charged arguments so as to 'frame' the issue under discussion. Because of the interlocking of the factual and normative dimension of policy making, a policy story, can be seen to create space for political agency. That is: a policy story serves by creating an argument grounded in a body of scientifically produced knowledge, to persuade and mobilize different groups as it represents a complete package: an authoritative problem-definition and a concomitant policy solution that is legitimized in both factual and normative terms.

A policy story- that **wins acceptance at the discursive level** can be seen to **define the terms of the debate** for the establishment of policy and to **de- legitimize competing** conceptualizations and **policy approaches**. Through the political agency performed through a policy story it may come to dominate the policy field as it forms the central cognitive-normative organising device for specific formulation and establishment of policy within different organizations. In this way, the policy story' may over time attain a 'taken for granted' char- acter as it comes to structure, and reflect, policy practice. This process of stabilization is best described as a process of institutionalization. Following Scott, we can define institutionalization as a 'process by which a given set of units and a pattern of activities come so be normatively' and cognitively held in place, and practically taken for granted as lawful' Scott at al. 1994: 10). This latter feature is critical to the argument presented here. In the change from an argument for a specific policy approach to the establishment of that policy in practice, the policy story comes to define the cognitive-normative outlook of a policy regime. This can he defined as an interlock between the knowledge which underwrites the policy story, and the establishment in practice of the policy advocated in a policy story: That is: the **knowledge that once formed part of an argument for a policy** is now an **integral part** of the very rationality and identity' of the organization involved with managing this policy in practice. As such it becomes pact of the bundle of routines, rules, priorities and rationality of the organizations in the policy field see Douglas 1986; March and Olsen 1989: Scott and Meyer. 1994).

### Alt – Change Personal Mobility

#### Developing personal morally sustainable forms of mobility is a first step against the spatial and temporal inequalities of infrastructure.

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However, contrary to an approach that is critical of current mobility issues, we could pay attention to the recovery of morally sustainable mobility forms like walking, wandering, rambling – or one of the foci in this book: the pilgrimage. I think this is very important in order to pay more attention to “promoting” another understanding of mobility. Transport Planning There seems to be a big step from philosophy to transport planning. Let me in any event attempt to outline what I think could be the main implications of this relationship. We cannot determine and control transport behaviour by transport planning, but we can affect behaviour and create a framework that supports some kinds of actions and discourages others. What is important from what has been said so far is that, first, we need create a mobility structure that develops, not impairs, our moral capacity, i.e. our ability to respond properly to given challenges. This moves us into the area of philosophy of technology and **technology critique**. Analyses of technology forms are very likely to reveal the way a particular transport technology supports or impairs our moral capacity. For example, the connex between car technology and freedom of mobility is easily undermined in a qualified way, if we use the vocabulary and definition presented today. Second, we need a mobility structure that actively promotes morally sustainable mobility forms like walking, wandering, rambling, and cycling. Here we are moving into the area of environmental ethics and environmental psychology. The concept of sustainability has been widely discussed in the 1980’s and 1990’s. Although competing definitions still exist side by side, we have the vocabulary to propose a definition of sustainable mobility that is operational and allows the interpretation of mobility I have given to be applied. The challenge today is to break down the stereotypes and conditional associations between “mobility” and “high speed mobility”, between “mobility” and “hypermobility”; this means abandoning the credo of maximization, and instead starting a discourse on quality in transportation and quality of life.

### AT: Connect More People/Spaces

#### Transportation *choice* isn’t the same as access.

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People’s ability to access services and facilities depends not just on the forms of transport available but also how they are organized. Thus with regard to the car, availability rather than ownership is key. ‘Social inclusion’ often depends upon the ability to negotiate lifts with others, such as family, friends, neighbours, work colleagues, or members of other social networks. Access to the car is itself a matter of social organization (see, for example, Rajé’s work on Asian households, 2003). In this context the structuring of networks is doubly significant. A UK study of mobility, public transport and social exclusion showed, for example, that 30% of residents in a New Deal area and 50% of rural residents had at certain times of day access to a car through getting lifts from neighbours (DTLR, 2001: Appendix 4). Where people have no access to a car, then the organization of public transport is crucial. In our research people hold as important not only the proximity of a bus stop or railway station but the directions the buses travel in, their ability to reach a variety of destinations directly or indirectly, the cost of travelling by bus, the quality of the experience, the conditions of waiting and interchange locations, and above all the service’s frequency, reliability and punctuality (Cass, Shove and Urry, 2003). These organizational aspects form an inter-related complex highly relevant to assessing when and how the provision of public transport translates into inclusion. In other words, do such systems in fact allow people to be part of relevant and important networks and do they allow access a wide variety of goods, services, places and peoples? Moreover, the increased ‘privatisation’ of public transport means that capitalist commercial drives to capture profitable routes has resulted in a ‘splintering urbanism’ (Graham and Marvin, 2001). According to these authors, there is growing separation between ‘hot’ zones, in which the majority of (affluent) consumers are located and whose custom is desired and sought, and cold spaces where the opposite logic applies. With respect to bus services, there is the concentration of operating companies on major arteries or corridors where demand is high, and the neglect of peripheral or rural routes. Graham and Marvin elaborate on this splintering of the city suggesting that the travel-rich will have increasing choices of good public transport, paid for parking spaces or toll-based roads, protected cycle tracks and pedestrian walkways, and a generally ‘smart’ environment. By contrast, the travel poor and the time-dependent, may have almost no such choices as they wait in unsafe bus stops or unstaffed stations or find it too expensive to get their cars on the road or lack the smart cards necessary to enter premium places (Graham and Marvin, 2001).

#### Top-down planning destroys diverse spaces and democratic input into transportation.

Graham 01 Professor @ Newcastle University (Stephen, 2001, Splintering Urbanism)[Cepin] p. 112

Modern urban planning, it was also increasingly realised, had neglected many voices, in its 'mainstream' depiction of the modernist planner as an omniscient, The views of women, minority ethnic groups, indigenous people, disabled people, gay men and women, older people and children were largely ignored benevolent (inevitably male) 'hero', taming the wild chaos of the disorderly metropolis. (Sandercock, 1998b). Modern urban planning had often therefore ignored the essentially patriarchal, racist, disablist, socially divisive and colonialist assumptions woven into its master plans and utopian visions, being even less concerned when such assumptions were imprinted on to cities and city life (Sandercock, 1998b; Weisman, 1994). Urban highway networks, for example, which purported to deliver 'access for all' and add 'coherence' to cities, were often found to destroy communities, undermine interactions in places, and worsen social and gender unevenness in access to transport (see Box 3.3). The result of this coming together of social critiques and uncomfortable self-realisations was a widening sense of the failure of comprehensive, modern plans for cities and networked urban infrastructure. This, in turn, resulted in the growing politicisation of urban space, a consequence of the challenge that has been posed to the modernist vision (Aksoy and Robins, 1997,33). As King suggests, as the twentieth century progressed, 'modernity [increasingly] present[ ed] itself as fragmentation itself, and the nineteenth century was the age when its opposite, in the unitary dreams of the Enlightenment, finally disintegrate [ d]' (1996, 44). Very quicldy the linkage of large-scale infrastructure projects with urban 'progress' and improvement was replaced by representations that portrayed modern infrastructure grids, especially highway networks, as destroyers of valuable social and urban environments. 'Aspects of infrastructural investment which had previously been conceived as integral to urban revitalization,' suggests Gandy, 'had now become directly implicated in post-war urban decline and the destruction of city life' (1998, 13). All these intertwined realizations forced urban planning to retreat systematically from the notion of comprehensive urban and infrastructural planning, effectively ditching the idea that the development of cities could be somehow orchestrated and shaped as a whole. Virtually all planning concepts today agree, at least implicitly, that 'the primary matter of importance is no longer an integral approach, but the cheerful acceptance of regions as an archipelago of enclaves' (Bosma and Hellinga, 1998, 16). Increasingly, then, planners are forced to accept that their cities are 'collages of fragmented spaces' defined by multiple identities, aspirations, life worlds and socioeconomic and time-space circuits (Fillion, 1996, 1640). Imposing some simplistic notion of order or representation on such places is not only a power-laden act, but it is an arrogant act which privileges the 'technical' knowledge of the 'expert' over all other forms of knowledge, experience and opinion (Healey, 1997). And, suggests David Harvey, 'since the metropolis is impossible to command except in bits and pieces, urban *design* (and note that postmodernists design rather than plan) simply aims to be sensitive to vernacular traditions, local histories, particular wants, needs, and fancies' (1989, 66, original emphasis). [112]

### AT: Mobility Promotes Cosmpolitianism

#### **Cosmopolitanism is a privileged form of mobility – it presumes access as the basis for moral development.**

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Mobilities also are caught up in power geometries of everyday life (Massey, 1994). There are new places and technologies that enhance the mobility of some peoples and places even as they also heighten the immobility of others, especially as people try to cross borders (Timothy, 2001; Verstraete, 2004; Wood & Graham, 2006). ‘Differential mobility empowerments reflect structures and hierarchies of power and position by race, gender, age and class, ranging from the local to the global’ (Tesfahuney, 1998, p.501). Rights to travel, for example, are highly uneven and skewed even between a pair of countries (Timothy, 2001; Gogia, 2006). Many feminist theorists have argued that nomadic theory rests on a ‘romantic reading of mobility’, and that ‘certain ways of seeing [arise] as a result of this privileging of cosmopolitan mobility’ (Kaplan, 2006; see also Pritchard, 2000; Tsing, 2002). Ahmed, for example, critiques mobile forms of subjectivity and argues that the ‘idealisation of movement, or transformation of movement into a fetish, depends upon the exclusion of others who are already positioned as not free in the same way’ (Ahmed, 2004, p.152). Skeggs further argues that the mobility paradigm can be linked to a ‘bourgeois masculine subjectivity’ that describes itself as ‘cosmopolitan’; she points out that ‘[m]obility and control over mobility both reflect and reinforce power. Mobility is a resource to which not everyone has an equal relationship’ (Skeggs, 2004, p.49; see also Morley, 2002; Sheller & Urry, 2006b). It is not a question of privileging a ‘mobile subjectivity’, therefore, but rather of tracking the power and politics of discourses and practices of mobility in creating both movement and stasis (Cresswell, 1999; Maurer, 2002; Franklin et al., 2000).

# Aff

### Perm

#### We should invest in infrastructure to improve access – avoids their exclusion impacts.

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Overall then we have shown that there is a welcome new awareness of the spatial and mobility related aspects of citizenship or social inclusion and that this new concern is expressed, in the UK, through the discourse of access. We have argued that the concept of access is complex and should not be limited to describing the exclusion of predefined social groups from certain formal or public services. In relating notions of a networked society to an analysis of how leisure, family and work life have (on average) become more far-flung, more extended and less overlapping we identify the increased ‘mobility burden’ of society and some of the implications for the concept and discourse of ‘access’. In reflecting on the four dimensions of access, we note different routes through which local authorities might influence people’s ability to engage and participate. We argue that initiatives in transport, planning and communications should promote networking and meetingness (and minimise missingness) amongst those living, working and visiting particular places. By defining social exclusion and inclusion with reference to the networks and practices of which people want to be a part we have made two important moves. First, we avoid making specific judgements about what it is to be an active and involved member of society. Accordingly, social inclusion is about being part of the networks that matter to the persons involved. Second, we consider the relation between social exclusion, mobility and access to be a dynamic one, and one that plays out at the level of society as a whole. What counts is the texture and density of the networks of which societies are comprised for it is within and with reference to this fabric that the capacity to engage in different sorts of mobility does, or does not, matter.

#### We must work with existing infrastructure systems –technical and engineering changes address exclusion and unethical transportation decision-making.

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Finally, the whole enterprise of making ethically sound decisions about the built environment runs up against crucial limits. The key question here is: How much does ethics matter in shaping places? It is relatively easy to articulate a grand vision of the city of the future, one that is radically different from what we have today; it is not nearly so easy to get there from here. Whatever high principles we may invoke, however artfully we may strike the theoretical balance between individual well-being and the demands of justice, the real world is likely to resist, to complicate, and ultimately perhaps to frustrate our attempts to put theory into practice. Complex systems can take on a momentum oftheir own, making it very difficult to change their course and difficult to predict the consequences of any changes we might introduce.^' This is not an excuse for quietism or fatalism, however; it is simply a recognition that there may be limits to what we can hope for from ethics, and also limits to individual responsibility for choices made within the constraints of the system as it currently exists.

#### People must be mobile – we should focus on state interventions to improve access.

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Networks seem central to many aspects of social life; people have to ‘access’ networks if they are to participate in a complex, multiply networked society. Where nodes in such networks are located at geographical remove from where people live or work, access involves communications and intermittent travel. Hence social inclusion is significantly a matter of overcoming constraints of space at particular moments of time so as to gain access to the informal networks of work, leisure, friendship and family. If the forms of ‘networked society’ outlined above are indeed generalised, there is, it seems an unavoidable ‘burden of mobility’ for almost all (Shove, 2002). To return to the policy concerns with which we began, we now take stock of four different dimensions of access and of what scope local and central government might have for intervening with reference to each. In other words, we demonstrate the multi-dimensional nature of ‘access’ and consider the means by which contemporary burdens of mobility might be managed and distributed. This is important not in its own right but in order to indicate the relationship between social networks, infrastructures and patterns of inequality and power. We identify four key dimensions of ‘access’ – financial, physical, organizational, and temporal – although setting them out in this way does not imply that they are readily separable in practice (see Church, Frost and Sullivan, 2000, and Kenyon, Lyons, Rafferty, 2001, for parallel formulations).