

Communications Technologies, Mobility and Changing Ways of Living

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Structure of Presentation

1. Digital living and the growth of travel:
the example of digital ways of working
2. Mobile technologies and the re-
ordering of time
3. 'Cyber-mobility' and its implications for
transport planning

1. Digital living and the growth of travel: the example of digital ways of working

- The myth of travel substitution – digital ways of living as mobility dampening?
- “Work is speeding up and becoming more intense – employees are travelling more, going further and spending less time when they get there” (The Industrial Society, 2001)
- Why? What is driving the growth in mobility?

Drivers of mobility growth

- Globalisation
 - globalisation opens up new markets and new opportunities
 - in doing so, it may destroy distance, but enhances the need for trust
 - trust is best built and maintained through ‘co-present interaction’
 - globalisation thus generates an increased need for travel

“the communications revolution adds to, rather than replaces, co-presence, indeed requiring large numbers of people to engage in intense face-to-face interaction as a means of coordinating, interpreting, designing the information messages that the advanced technologies transmit”

(Boden and Molotch, 2002)

Drivers of mobility growth (continued)

- ‘Virtual team organisation’
 - virtual team working increasingly used by companies to combine dispersed specialist inputs
 - this type of project working uses a mixture of electronic communications and frequent meetings
 - “the most effective virtual teams meet regularly decision-making needs to occur when the teams were in face-to-face contact to make the team most effective” (Maznevski and Chudoba, 2000, *Organisation Science*)
- Demands for better work-life balance
 - demands for ‘staying put’ are (ironically) generating more travel

- Thus from far from being ‘mobility dampening’, digital ways of living are intimately associated with an increase in the spatial scale over which human interaction takes place.
- The complex interactions between electronic communications and physical travel are best understood as a form of convergence, towards a state of ‘cyber-enhanced mobility’

2. Mobile technologies and the re-ordering of time

- According to sociologist John Urry, ‘automobility’ has led to a re-ordering of time, by creating an automobilised time-space
- “automobility is a source of freedom..it is possible to leave late by car, to miss connections, to travel in a relatively time-less fashion... [but it simultaneously] forces people to orchestrate in complex and heterogenous ways their mobilities and socialities across very significant distances.”

- “The urban environment built for the convenience of the car has ‘unbundled’ those territorialities of home, work, business and leisure that were historically closely integrated...People are trapped in congestion, jams, temporal uncertainties and health-threatening city environments. At the same time automobility disables those who are not car drivers..by making their habitats dangerously non-navigable.
- Automobility thus **coerces people into an intense flexibility**. It involves an **individualistic timetabling**, forcing people into tiny fragments of time so as to deal with the temporal and spatial constraints that it itself generates. The car-driver operates in instantaneous time that contrasts with the official timetabling of mobility that accompanied the growth of the railways..**Automobility develops ‘instantaneous’ time to be juggled and managed in complex and heterogenous ways**” (John Urry, 2002). (Emphasised)

This re-ordering of time that has occurred with automobility is being greatly extended by mobile telephony

- According to Anthony Townsend, mobile phones are having profound effects upon those whose lifestyles become dependent on them:
- “time becomes a commodity that is bought, sold and traded over the phone. The old schedule of minutes, hours, days and weeks becomes shattered into a constant stream of negotiations, reconfigurations and re-scheduling.
- Individuals live in this phonespace – they can never let it go, because it is their primary link to the temporally, spatially fragmented network of friends and colleagues they have constructed for themselves”

According to Townsend, new urban lifestyles are emerging, dependent on the ability to coordinate individual actions and movements in real time

In the case of Helsinki, “ubiquitous [mobile phones] ..have transformed the way young Finns roam the city. They’ve taken a feature introduced by Nokia in 1993 – Short Message Service (SMS) – and turned it into their primary means of mobile communications. Like schools of fish, kids navigate on currents of whim – from the Modesty coffee bar to the Forum mall for a slice of pizza or a movie to a spontaneous gathering on a street corner, or to a party, where SMS messages dispatched on the phones summon other kids or send the group swimming somewhere else” (Silberman, 1999, *Wired*).

- The possibility then is of complex new networks of interaction emerging as a result of the proliferation of mobile phones
- Instantaneous feed-back – soon to be supplemented through GPS and location-based services – could result, according to Townsend, in a “dramatic increase in urban metabolism”
- The mobile phone is strengthening coordinated but *essentially decentralised* networks of individuals

Digital ways of living then are:

- Inherently highly mobile. Virtual communications are merging with physical communications to create cyber-enhanced mobility
- Increasingly fluid and flexible, thanks to the complex forms of feed-back within the decentralised networks of individuals enabled by mobile technologies

3. 'Cyber-mobility' and its implications for transport planning

- In important respects, the emerging forms of 'cyber-mobility' that I have outlined are highly compatible with the notion of Intelligent Transportation Systems (ITS) (integration of virtual and physical communication, real-time adaptability)
- ITS perhaps offers the only hope for coping with the cyber-enhanced mobility that is emerging

But what sort of ITS?

- Emergent digital lifestyles are underpinned by 'IIS' – Intelligent Interaction Systems – that are highly individualised and decentralised
- This may pose a real challenge to one of the dominant strands of ITS, which is of centralised control

Example of electronic toll highways, such as Melbourne's CityLink

- Providing motorists a new mobility which eases the conventional gridlock-freeway impasse?
- Or a worrying development of a commodified, bypass technology, designed to exacerbate existing social divisions in mobility and accessibility?
- A privatisation process, resulting in the "breaking up of the openness and fluidity of the city by highly-controlled, high speed traffic vectors which preclude spontaneous or unplanned forms of interaction" (Holmes, 1999)

Alternative visions of ITS?

- *Real* intelligence would facilitate intermodality of multiple transport and communication flows to allow various mobile publics to switch across a range of spaces and zones easily
 - Need to produce a new culture of automobility, including micro-cars and lower speed limits
 - Multi-function smart-cards
 - Transforming streetscapes through a more mixed flow of slow-moving semi-public micro-cars, bike lanes, pedestrians and improved mass transport
- (Source: *Sheller and Urry, The City and the Car, IJURR, 2000, 24, 4*)

- Perhaps then the aim of a really *intelligent* ITS, responding to the societal trends evident in digital ways of living, would be to facilitate highly flexible, highly decentralised, highly democratised forms of safe and slow mobility within cities
- And high speed public transport between cities!