

# Mobility, Modernity, Development

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**Abstract:** The idea of *development* has been crucial in focussing attention and targeting resources on excluded and marginal individuals and communities around the world. This paper argues however that this is a dangerously simplistic notion and has been born out of a modernist world-view imposed on societies now characterised by increasing mobility and postmodernity. Near-universal access to and ownership of a multitude of personal connected mobile devices, systems and technologies are gradually but unmistakably transforming our societies, transforming our ideas about identity, discourse, community, technology, knowledge, space and time. The paper introduces some of the ideas and issues.

## 1. Introduction

This paper grows out of the author's over-riding concern with mobility. It also grows out of his involvement in development projects using mobile devices in Sub Saharan Africa (Traxler, 2007) and in the definition and development of mobile learning globally since its inception (Kukulkska-Hulme & Traxler, 2005; Traxler, 2008a), specifically in the mobile learning research communities of South Africa, North America and Western Europe (Kukulkska-Hulme & Traxler, 2007).

These mobile learning research communities have had notable successes in establishing that mobile devices can take learning to people, communities and countries previously remote, geographically, socially or economically, from the usual agencies, organisations and institutions of learning. It has also established that learning itself can be enriched, enhanced and extended by the development of systems that deliver contextual, authentic, situated and personalised learning (see for example Lonsdale *et al* 2004).

The author has however been concerned that these research communities, composed of educationalists and technologists, have been pre-occupied with their own discourses and failed to recognise adequately the significance of the enormous social changes that have accompanied the increasingly pervasive and ubiquitous mobile devices, technologies and systems in their societies. He has argued that much of the thinking in these communities, for example around methodology, has been rooted in modernism and that this accounts for some of the shortcomings, for example in developing appropriate and credible evaluation (Traxler, 2008b).

He has since also argued that the rhetoric of e-learning, specifically the concept of the *digital divide*, is a modernist concept and thus increasingly unhelpful where the impact of mobile devices, systems and technologies is accompanied by a transformation of many societies to a potentially and at least partially postmodern state (Traxler, 2008c). This current paper tentatively extends this line of argument and asks similarly whether *development* is also a modernist concept and thus increasingly inappropriate as mobile devices, systems and technologies become ubiquitous and universal. It may now be inappropriate in the North once characterised as *modern*; it may be inappropriate in the South only ever characterised as partially *modern*.

## 2. Is Development Modern?

*Development* is not a straightforward concept. It contains a complex mix of teleology, objectivity and causality and these themes hint at an essentially modernist perspective (Butler, 2002). At a recent e-learning conference in Africa, there was much talk of 'unexpected consequences', of 'objectively verifiable indicators', of 'leap-frogging', of 'multi-causality' and much else that revealed a modernist mindset.

Development has been characterised by a succession of dichotomies, initially underdeveloped / developed then developing/developed, followed by non-industrialised / industrialised, traditional / modern, poor / rich and most recently South / North (see Sundén & Wicander, 2006 for a lengthier explanation). Hoping to understand the world in this way is another modernist trait.

Some of the literature treats development as an artefact of the relationships between society and technology. This might be manifest in the 'diffusion of innovations' (Rogers, 2003) literature in which lack of development is merely the outcome of some innovation not having yet 'trickled down'; other approaches see lack of development as a purely technical problem, perhaps the outcome of defects in the supply chain, needing a merely technical (or management) fix. This tendency to analyse from a technical perspective, to take the approach that things are improving and that knowledge, science and technology will be instrumental in progress is also modernist.

It has philosophical foundations that include logical positivism, empiricism and rationality. These are held together by overarching beliefs that enquiry will reveal the essence of the natural, physical and social worlds and this essence can be described objectively by sets of symbols, ideally mathematics but perhaps by language. As Mitchell points out:

Modern technological innovations, such as the steam engine, the railroad, electricity, and medicine, fostered in Western secular thought a strong sense of optimism. "Much of the extravagant hope generated by the Enlightenment project derived from a trust in the virtually limitless expansion of new knowledge of – and thus enhanced power over – nature" (Marx, 1994, p. 239). Driving this sense of confidence in technology were the mounting breakthroughs in knowledge and discoveries. "The expected result was to be a steady, continuous, cumulative improvement in all conditions of life".

As modern perspectives gave way to postmodern perspectives, optimism for technology faded as well.

Late in the twentieth century, attitudes toward technology had changed considerably.

Mitchell (2003:240)

Modernism is being described here as giving way, in the North at least, to postmodernism. This is not an easy concept to define competently, not least because its many manifestations may only be linked as reactions to modernism, and to a range of cultural and intellectual movements growing out of a century of global warfare and the perceived inadequacy of the dominant *isms* of the preceding two centuries. Butler (2002) gives some insight into the problem of definition, saying of postmodernists, "They have a distinct way of seeing the world as a whole, and use a set of philosophical ideas that not only support an aesthetic but also analyse a 'late capitalist' cultural condition of 'postmodernity'. This condition is supposed to affect us all at a more fundamental level, through the influence of that huge growth in media communications by electronic means ... And yet, ... most information is to be mistrusted, as being more of a contribution to the manipulative image-making of those in power than to the advancement of knowledge. The postmodernist attitude is therefore one of suspicion ....." (2002:3) and later, "one central theme is ... 'realism lost' " (2002:110). The suspicion and the loss are about a faith that words, words such as *development*, really do describe (rather than construct) reality.

### 3. Mobility and Modernity

This paper takes up these themes by asserting that mobility, the social changes associated with personal mobile devices becoming ubiquitous, pervasive and universal, accompanies changes taking societies from possible and partial modernity to postmodernity where the language of *development* is too naïve, too simple. The second part of this paper argues that this universal access to and ownership of mobile devices, systems and technologies are progressively but unmistakably transforming our societies. They are transforming our ideas about identity, discourse, community, technology, knowledge, space and time, in ways that suggest a transition to postmodernity, where conceptualising progress, exclusion and disadvantage around binary divisions and linear purposive trajectories is no longer adequate or helpful.

The ownership of mobile devices is nearly universal in many of the world's societies. In the North, we see the relentless marketing and take-up of each new gadget, network, system and connectivity. We hear statistics of music CDs dying out in the face of mp3 downloads; of cameras outnumbered by camera-phones, of nations where mobile phone ownership exceeds saturation and carries on growing and of nations sending a billion SMS texts in any normal week. The ITU says, "the greatest impact of mobile communications on access to communication services - in other words, increasing the number of people who are in reach of a telephone connection of any kind - can be seen in developing countries" (200: 4). This means that mobile devices will not merely replicate or reproduce existing inequalities, for example, geographical or social inequalities; they will transform the South too but in equally complex but different ways. Much of the literature of mobilities comes of course from the North and explores the minutiae of social interactions within small homogeneous group. Some authors however take a more global and inclusive perspective (Donner, 2008; Plant, 2000).

Further analysis suggests that these technologies have led in under a decade to new forms of commerce, employment, crime, artistic expression, political organisation and to new artefacts, commodities, resources and economic assets that did not previously exist, forms with no recognisable antecedents before perhaps the 1990s. It is possible to catalogue examples of each of these categories but our point here is that mobile devices characterise societies now in motion (not just literally).

These societies are changing profoundly; they are in fact becoming partially but recognisably postmodern societies. Evidence of this emergent postmodernity includes the following observations.

Mobile devices and technologies are eroding established notions of time as a common structure. These seem to be largely European notions. Kathryn Banks (2006) for example says, "... second half of the sixteenth century in Geneva, there arose a new Protestant apprehension of time, which was encapsulated in the valorization of punctuality" whilst time zones grew out of the need to timetable the Victorian British railway system. Now in their place, we see the 'approx-meeting' and the 'multi-meeting' (Plant, 2000), 'socially negotiated time' (Sørensen *et al.*, 2002) and the 'microcoordination of everyday life' alongside the 'softening of schedules' (Ling, 2004) afforded by mobile devices.

These devices are also eroding physical place as a predominant attribute of space. It is being diluted by "absent presence" (Gergen, 2002), the phenomenon of physically co-located groups all connected online elsewhere and "simultaneity of place" (Plant, 2002) created by mobile phones, a physical space and a virtual space of conversational interaction, and an extension of physical space, through the creation and juxtaposition of a mobile "social space".

They are reconfiguring the relationships between spaces, public ones and private ones, and the ways in which these are penetrated by mobile virtual spaces. This is documented in the literature of mobilities (for example Katz & Aakhus, 2002; Ling, 2004; and Brown *et al.*, 2004). This is accompanied by what goes on in those spaces. Cooper (2002) says that the private "is no longer conceivable as what goes on, discreetly, in the life of the individual

away from the public domain, or as subsequently represented in individual consciousness”, Sheller and Urry (2003) argue “that massive changes are occurring in the nature of both public and private life and especially of the relations between them.” and Bull (2005) says “The use of these mobile sound technologies informs us about how users attempt to ‘inhabit’ the spaces within which they move. The use of these technologies appears to bind the disparate threads of much urban movement together, both ‘filling’ the spaces ‘in-between’ communication or meetings and structuring the spaces thus occupied.” Earlier work came to similar conclusions, “the Walkman disturbed the boundaries between the public and private worlds” (Du Gay *et al.*, 1997: 115).

This is accompanied by a growing dislocation of time and place, in which “everything arrives without any need to depart” (Virilio, 2000:20). “Closer to what is far away than to what is just beside us, we are becoming progressively detached from ourselves” (Virilio, 2000:83). Owing to “the tendency to previsit locations, through one medium or another; to actually arrive somewhere is no longer surprising in the way that it was ...it is becoming replaced by prevision. Thus according to this logic, the mobile would be one more technique by which the world became unsurprising.” (Cooper, 2002:26)

These technologies are redefining discourse and conversation. Goffman (1971), for example, noted the phenomenon of ‘civil inattention’, where in certain situations it is customary not only to not speak to others but to avoid looking directly at others. This management of gaze is a way in which the boundary between public and private is negotiated and is now often a characteristic of creating a private space for mobile phone conversations in public settings. ‘Enforced eavesdropping’ is the corollary. A similar concept is the ‘tie-sign’, keeping a face-to-face encounter live and ‘in play’ whilst servicing an interruption caused by a mobile phone call. The recipient of the call is obliged to “play out collusive gestures of impatience, derogation, and exasperation” according to Goffman. Murtagh (2002) describes a wide set of non-verbal actions and interactions with the mobile phone in public, and these are part of a wider transformation of discourse and social interaction as society engages with mobile technologies. ‘Missed calls’ (Donner, 2007) are a global phenomenon.

Mobile devices are creating communities and groupings, sometimes transient and virtual ones, arguably at the expense of existing and traditional ones (captured in Howard Rheingold’s (2003) defining book). With these groupings come new norms, expectations, ethics and etiquettes (see Ling (1997, 2004) for one discussion of ethics in a mobile context) and shifting ideas about the self and identity. Geser (2004:11) points out that, “the cell phone helps to stay permanently within the closed social field of familiar others: thus reinforcing a unified, coherent individual identity.”

Mobile devices, as the media and containers of knowledge and information, are creating new and highly individualised ontologies, ‘just-in-time/just-for-me’ – consumer choice turned into a ‘neo-liberal nightmare’, and fragmented users in a ‘fragmented society’ (to use Bauman’s (2001) phrase in an accurate but narrower sense than he intended).

In areas of the North with better connectivity, mobile technologies are converging with social software, accelerating the growth of user-generated content and decentralising and fracturing the production, storage, consumption and control of ideas and information. The growth of citizen-journalism (Owen, 2005) is one global example, the recent migration of Wikipedia, Google and YouTube into mobile devices being others. Mobile technologies facilitate the generation of new knowledge, intruding a new dimension into the debate and dichotomy between utilitarian and liberal views of education, fragmenting or challenging the modernist notion of education as a grand narrative. Postmodernism’s ‘incredulity at meta [grand] narratives’ (Lyotard, 1999) is important here in challenging this idea of a widely, if not universally, accepted canon that is education.

Mobile technologies deliver knowledge and information in ways that challenge formal learning, its institutions and its professionals, specifically in their hegemonic roles as gatekeepers to disadvantaged individuals and communities to learning and technology

Mobile technologies provide increased levels of surveillance and oversight, even in the course of delivering and supporting communication and connectivity. Many of the authors above cite Lyons (2001) and Foucauld (1977) in this respect, giving substance to the postmodern suspicion and mistrust.

These are examples of a widespread and far-reaching change taking place slowly but not imperceptibly across our societies. They undermine the old certainties of knowledge, thought and language that have underpinned the ideas and practices of *development* emanating from the North.

#### 4. What Next?

The idea of development has constructed a world understood in terms of polarities and of opposites, of purpose, causality and teleology whilst mobile devices are associated with societies each adapting and adopting their own languages and discourse, rather more fragmented and rather more complex. We feel that these ideas deserve greater exploration in the context of development.

Sadly, however, these are probably the observations of a confused modernist, perhaps a troubled critical realist at best, trying in part to make sense of the experiences of working away from the structured confines of metropolitan Western Europe. They suffer from 'essentialising', that is tendency to behave as though there is some meaningful durable entity behind the terms being used, specifically 'mobile devices, systems and technologies'. They sadly suffer too from privileging a particular viewpoint, namely development conceptualised as a North/South issue, rather than for example as a young/old or urban/rural issue and from the engineering, problem-solving analysis. They also suffer from the author's residual faith and optimism in society, knowledge, technology and learning.

No doubt, there are other defects but we can still however ask whether the observations have any consequences for researchers and practitioners. There is clearly a need for a greater critical and self-critical awareness of the attitudes, expectations and world-views that underpin the concept of development and for an exploration of how these map onto societies in both the North and in the South. If an argument that links mobility and postmodernity is at least partially credible then the response must be more that revisions to techniques and methods, rather an exploration of the research practices growing out of postmodernism – see Denzin and Lincoln (2005) for one of the most authoritative accounts of these themes alongside their existing practices.

#### References

- Banks, K. (2006) L'Ordre du temps: l'invention de la ponctualité au XVIe siècle, *French Studies* 2006 LX (1):97-98.
- Bauman, Z. (2001) *The Individualized Society*, Cambridge: Polity.
- Brown, B., Green N. & Harper, R. (2002). *Wireless World – social and interactional aspects of the mobile age*. London: Springer.
- Bull, M. (2005). No Dead Air! The iPod and the Culture of Mobile Listening. *Leisure Studies* 24(4): 343-356.
- Butler, C. (2002). *Postmodernism – A Very Short Introduction*. Oxford: Oxford University Press.
- Cooper, G. (2002) The Mutable World: Social Theory in B. Brown, N. Green and R. Harper (eds.) *Wireless World: Social and Interactional Aspects of the Mobile World*. London: Springer.
- Denzin, N.K. & Lincoln, Y.S. (eds.) (2005) *The SAGE Handbook of Qualitative Research 4th Edition*. Sage, London.
- Donner, J. (2007) The rules of beeping: Exchanging messages via intentional "missed calls" on mobile phones. *Journal of Computer-Mediated Communication*, 13(1), article 1 / pp. 1-22. Available at: [jcmc.indiana.edu/vol13/issue1/donner.html](http://jcmc.indiana.edu/vol13/issue1/donner.html) & [www3.interscience.wiley.com/journal/117979365/issue](http://www3.interscience.wiley.com/journal/117979365/issue).

- Donner, J. (2008) Research Approaches to Mobile Use in the Developing World: A Review of the Literature. *The Information Society* 24(3), 140-159. Available online at: [www.informaworld.com/openurl?genre=article&issn=0197-2243&volume=24&issue=3&spage=140](http://www.informaworld.com/openurl?genre=article&issn=0197-2243&volume=24&issue=3&spage=140)
- Du Gay, P., Hall, S., Janes, L. & Nequs, K. (1997) *Doing cultural studies: the story of the Sony Walkman*, London: Sage.
- Foucauld, M. (1977) *Power/knowledge: selected interviews and other writings 1972 – 1977* (Gordon C. trans. ed) New York: Pantheon.
- Gergen, K. J. (2002) The challenge of absent presence. In J. E Katz & M.A. Aakhus (eds.) *Perpetual Contact. Mobile Communication, Private Talk, Public Performance*. Cambridge University Press, Cambridge, pp. 227-241
- Geser, H. (2004) *Towards a Sociological Theory of the Mobile Phone*, University of Zurich.
- Goffman, E. (1971), *Relations in Public*, Harmondsworth: Allen Lane.
- ITU (2003). *Mobile overtakes fixed: Implications for policy and regulation*. International Telecommunication Union Cited 17 September 2006. Available online at: [http://www.itu.int/osg/spu/ni/mobileovertakes/Resources/Mobileovertakes\\_Paper.pdf](http://www.itu.int/osg/spu/ni/mobileovertakes/Resources/Mobileovertakes_Paper.pdf).
- Katz, J. E., & Aakhus, M. (eds.) (2002). *Perpetual Contact - Mobile Communications, Private Talk, Public Performance*. Cambridge, UK: Cambridge University Press.
- Kukulska-Hulme, A. & Traxler, J (2005). *Mobile Learning: A Handbook for Educators and Trainers* (F. Lockwood, ed.). London: Routledge. (and in Korean).
- Kukulska-Hulme, A. & Traxler, J., (2007) Design for Mobile and Wireless Technologies in H. Beetham & R. Sharpe (eds.) (2007). *Rethinking Pedagogy for the Digital Age* London: Routledge.
- Lonsdale, P., Barber, C., Sharples, M., Byrne, W., Arvanitis, T., Brundell, P., et al. (2004). Context awareness for mobilelearn: Creating an engaging learning experience in an art museum. in E. Murelli, G. Da Bormida & C. Alborghetti (eds.), *Proceedings of MLEARN*. Odescalchi Castle, Lake Bracciano, Rome, Italy: CRATOS.
- Ling, R. (2004). *The Mobile Connection – the cell phone’s impact on society*. San Francisco, CA: Morgan Kaufmann Publishers.
- Ling, R. (1997). One can talk about mobile manners! The use of mobile telephones in appropriate situations in L. Haddon (ed) *Communications on the Move: the experience of mobile telephony in the 1990s*, COST 248 Report. Farsta: Telia.
- Lyon, D. (2001). *Surveillance Society – monitoring everyday life*. Buckingham, UK, Open University Press.
- Lyotard, J.-F. (1999) *La Condition postmoderne: Rapport sur le savoir (The Postmodern Condition: A Report on Knowledge)* Minneapolis: University of Minnesota Press & Manchester: Manchester University Press (Transl. G. Bennington and B. Massumi from *La Condition postmoderne: rapport sur le savoir*. 1979, Paris).
- Marx, L. (1994) The idea of “technology” and postmodern pessimism. In M. R. Smith & L. Marx, *Does technology drive history? The dilemma of technological determinism*. Cambridge, MA: MIT Press. pp. 237-257.
- Mitchell, M. M. (2004) *Possible, Probable and Preferable Futures of the Digital Divide*. Informing Science InSITE- “Where Parallels Intersect ” June 2003. Pp. 609-627.
- Murtagh, G. (2002) “Seeing the “Rules”: Preliminary Observations of Action, Interaction and Mobile Phone Use” In B. Brown, N. Green and R. Harper (eds.) *Wireless World: Social and Interactional Aspects of the Mobile World*. London: Springer.
- Owen, J. (2005) London bombing pictures mark new role for camera phones. *National Geographic News*. [http://news.nationalgeographic.com/news/2005/07/0711\\_050711\\_londoncell.html](http://news.nationalgeographic.com/news/2005/07/0711_050711_londoncell.html). July 11.
- Plant, S. (2000) *On the Mobile. The Effects of Mobile Telephones on Social and Individual Life*. Available online at <http://www.motorola.com/mot/documents/0,1028,333,00,pdf>
- Rheingold, H. (2003) *Smart Mobs: The Next Social Revolution* Perseus Books.
- Rogers, E. (2003) *Diffusion of Innovations*. New York, NY: Free Press.

- Sheller, M. & Urry, J. (2003) Mobile Transformations of 'Public' and 'Private' *Life, Theory, Culture & Society*, Vol. 20, pp. 107-125.
- Sørensen, C., Mathiassen, L. & Kakihara, M. (2002): Mobile Services: Functional Diversity and Overload, presented at *New Perspectives On 21st-Century Communications*, May 24-25, 2002, Budapest, Hungary.
- Sundén, S. & Wicander, G. (2006) *Information and Communication Technology Applied for Developing Countries in a Rural Context – Towards a Framework for Analysing Factors Influencing Sustainable Use*. Karlstad University Studies 2006:69, Karlstad, Sweden.
- Traxler, J. (2007) *Managed Mobile Messaging and Information for Education* in Proceedings of IST-Africa, Maputo, Mozambique, May 2007.
- Traxler, J. (2008a) Learning in a Mobile Age, *International Journal of Mobile and Blended Learning*, Vol. 1.
- Traxler, J. (2008b) Mobile Learning Evaluation: The Challenge of Mobile Societies In G. Vavoula & A. Kukulska-Hulme, *Researching Mobile Learning: Frameworks, Methods and Research Designs*, London: Peter Lang.
- Traxler, J. (2008c) *Modernity, Mobility and the Digital Divides* in M. McPherson (ed.) ALT-C Research Papers, September 2008, Leeds: Association for Learning Technology.
- Virilio, P. (2000). *Polar Inertia*. London: Sage.