Dynamic economic forces for innovation and social transformation

The dual globalisation/metropolisation dynamic requires a different approach, not just to economics and regimes of technical and social innovation taken one by one, but also to the complex relationships between these three spheres themselves.

Globalisation of exchanges, knowledge and technical innovation as well as competition between different cities that extends well beyond national borders (Eckardt and Hassenpflug, 2004, Savitch and Kantor, 2002) is helping to nurture the thesis of urban convergence (Cohen, 1996). First, competitive constraints mean that institutional arrangements are now forced to draw upon sets of shared rules. Second, the increasing internationalisation of actors (investors and consulting firms) and the rapid dissemination of implementation tools (technical solutions, management system benchmarks, architectural choices, etc.) all favour "standardisation" of metropolization models. Other research criticises such "standardisation" and points up the role played by inherited cultures, institutions and autonomous spaces of central and local government (Shatkin, 2007).

Thus, historical approaches and comparisons between cultural areas are indispensable for analysing contemporary urban transformations where convergence forces meet local resistance.

Aside from their convergence/differentiation effects, these urban trajectories point up the **enduring nature of the embeddedness** (Granovetter, 1985) **of technical and economic dynamics within social forms, symbolic matrices and public policies with different change timelines** (Lepetit and Pumain, 1993). But, because most contemporary urban growth is taking place in developing or poor countries involving unprecedented growth rates and populations, the dynamics of such urbanisation in "Southern" countries strategically impacts a certain number of global imperatives whose objectives have yet to be vetted for compatibility. For example, in industrialised cities, local energy policies have increasingly become bound up with sustainable development and battling climate change, whereas in developing countries they remain primarily vectors for economic and social development.

This helps to highlight the benefits of (i) stepping up comparative approaches that will point up the diversity in the trajectories of "ordinary cities" (Robinson, 2006); (ii) setting out original and innovative solutions to the socio-technical challenges of diverse forms of urbanisation (Jaglin, 2010); (iii) analysing spatial approaches used in architectural and urban projects; (iv) analysing the threats to local housing markets from hyper-mobile financial flows (Renard, 2008); and (v) identifying appropriate regulations for dealing with the institutional bottleknecks that have resulted from enforced neo-liberal reforms (Graham and Marvin, 2001).

We encounter these clashes between multi-scalar dynamics at more micro levels when we analyse the relationship between metropolises and smaller-sized urban centres.

Moreover, such interaction between places and inter-scalar dynamics has become a research object in itself. For example, in the era of globalisation, freight transport systems are just as important for the competitiveness and global integration of major cities as for structuring links with their surrounding territories (O'Connor, 2010). Therefore, cross-analyses between

transport systems and metropolitan dynamics – including analyses over the long term - are particularly effective (Bretagnolle et al., 2008). And it is actually crucial inasmuch as these logistical flows generate major negative externalities at local level in terms of urban growth, C02 emissions, social imbalance and distortions in access to employment. Therefore, an understanding of how transport chains are currently organised on a number of levels, as well as their consequences on how cities are organised, is necessary in order to conceive of the sustainable cities of tomorrow (Dablanc, 2007).

It is the metropolization dynamic itself that actually changes inter-scalar mindsets (Ascher, 1995). We are currently witnessing **a renewed dialogue between planning and architecture** driven by large-scale (and inter-scalar) architectural programs (Sieverts, 2001). In particular, this stems from a mismatch in programming practices between large-scale transport policies and projects and approaches to building eco-neighbourhoods that are still focused very much on the housing unit and much smaller-scale development. And, somewhere in between the two, we find all manner of issues regarding urbanity, transport interchanges and inter-neighbourhood relations (Julia Sort, 2006, Secchi, 2005). These shifting approaches are also underpinned by the perception in relation to metropolitan schemes of a cleavage between the social sciences and project-specific disciplines that makes it difficult to get beyond the opposition between a retrospective and analytical approach and one that tends towards the utopian.