
Cities as movement economies

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The physical city and the functional city

It is a truism to say that how we design cities depends on how we understand them. In the late twentieth century, this truism has a disquieting force. Cities are the largest and most complex artefacts that humankind makes. We have learned long and hard lessons about how we can damage them by insensitive interventions. But the growth of knowledge limps painfully along through a process of trial and error in which the slow timescale of our efforts, and the even slower timescale of our understanding, make it almost impossible to maintain the continuity of experience and study which we might hope, in time, would give rise to a deeper, more theoretical understanding of cities.

Even so, a deeper theoretical understanding is what we need. We are at a juncture where fundamental questions about the future of our cities – should settlements be dense or sparse, nucleated or dispersed, monocentric or polycentric, or a mix of all types? – have been raised by the issue of sustainability.¹ It is widely acknowledged that to make cities sustainable we must base decisions about them on a more secure understanding of them than we have now. What is unclear is what we mean by a better understanding. Physically, cities are stocks of buildings linked by space and infrastructure. Functionally, they support economic, social, cultural and environmental processes. In effect, they are means–ends systems in which the means are physical and the ends functional. Our most critical area of ignorance is about the relation

of means to ends, that is of the physical city to the functional city. The fact that sustainability is about ends and the controls largely about means, has exposed our ignorance in this critical area.

One reason for this ignorance is the compartmentalization that has developed over the past quarter century among the disciplines concerned with the city. There is now a deep split between those who are preoccupied with analysis and control of the social and economic processes which animate the city, and who for the most part call themselves planners, and those concerned with physical and spatial synthesis in the city, who call themselves urban designers. This split is now, in effect, a split between understanding and design, between thought and action.

From the point of view of our ability to act on the city, there are two consequences. The first is a form–function gap: those who analyse urban function cannot conceptualize design, while those who can conceptualize design guess about function. The second is a scale gap. Planning begins with the region, deals reasonably with the ‘functional city’, that is the city and its ‘dependences’ (as the French say of out-lying buildings) but barely gets to the urban area in which we live. Urban design begins with a group of buildings, gets to the urban area, but hesitates at the whole city for fear of repeating the errors of the past when whole city design meant over-orderly towns which never quite became places. Neither applies itself to our need to understand the city as a spatial and functional whole.

One effect of this disciplinary apartheid has been a complete failure to come to terms conceptually with