

COMPACT CITY POLICY: HOW EUROPE REDISCOVERED ITS HISTORY AND MET RESISTANCE

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Reurbanization and the pursuit of more compact settlement structures only just starting to become mainstream vocabulary in the USA and Australia during the 1990s, and may initially have been driven by market mechanisms rather than a rigorously promoted planning paradigm. In Europe, the situation is starkly different. Similar to their New World counterparts, many European cities experienced rapid suburban expansion at the expense of the functional integrity of their established urbanized areas during the 1950s to 1970s, assisted by the need to overcome severe housing shortages following wartime destruction and/or disinvestment. However, perspectives changed profoundly when the post-war economic boom faded during the 1970s and many metropolitan areas experienced stagnation, if not decline in population. A simultaneous reinvigoration of interest in urban centers resulted from the transition to a post-industrial economy and the emergence of social groups more attracted to inner urban, rather than suburban, amenities.

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Planners responded early to these trends and by the 1980s, cities across the continent were full of advocates for 'growth within' and the 'critical reconstruction' of traditional, compact and multifunctional urban fabric that once again became seen as Europe's most genuine contribution to the global history of city-building. Later, numerous analysts described this urban form as an ideal response to sustainability challenges. In this context, the compact city is associated to:

- an assumed capacity to relieve cities' surrounds from demand for more settlements (a far more pressing issue in densely-populated Europe than it is in the New World);
- the promotion of social interaction in public spaces that had been so crucial to the evolution of European culture;
- and most significantly, the claim that compact urban structures do indeed save on transportation needs. Nowhere is this more implicit than in the much-quoted vision of the short-trips city (*'Stadt der kurzen Wege'*), a concept whose emergence we will try to explore in more detail below.

There is, of course, a rich planning history of urban compactness, translating into a multitude of reasons why the compact city gained momentum during the late 1970s and early 1980s as a planning paradigm. The debate can be traced back much further, to the seminal works of Jane Jacobs (1961) and Alexander Mitscherlich (1965), who were among the first to present a fundamental critique of functionalist urban development. An even earlier precursor is Ebenezer Howard's Garden City model which, while strongly advocating regional decentralization and much lower densities than were common in urban areas at the time, promoted a degree of functional integration at the settlement level that nowadays serves as a model for the urban village concept (see Breheny 1996, Hall and Ward 1998). In the context of this history, recent compact city paradigms can be seen as results of a strong backlash against post-war urban development - both of the dispersed kind envisioned by Frank Lloyd Wright in 'Broadacre City' (1945) and the urban surgery approach of Le Corbusier's 'Ville Radieuse' (1933).^{*} The practice of modernist urban reconstruction following such models had fallen from grace with the general public and left a generation of planners substantially disillusioned, not only because their economic, social and environmental damage had become obvious, but equally because the very essence of urbanity and its role in the history of civilization appeared under threat.

The dispersed expansion of settlement areas (particularly at the fringes of urban regions) and the ever more pronounced segregation of different land uses not only threatens open space, increases social costs for urbanisation and transport, leads to growing energy consumption, air and noise pollution, but generally endangers European urban culture and the associated capabilities and achievements of social and cultural integration, of tolerance and responsibility for the common good (Apel et al. 1998, p. 455).

In this context, it is in particular the synergies of traditional urbanism that have gradually been sacrificed in the modern city. Historically, the small-scale integration of urban activities within a compact district, a street, even an individual building not only served to facilitate productive exchange between interdependent trades, but self-constructed a public realm that formed the

* A discussion of these models in the light of current planning paradigms can be found in Fishman (1994), Breheny (1996) and Sieverts (1997).

base of a city's informal, social and cultural exchange (Engwicht 1992, 1999). During the 20th century, there was a prevailing trend to fragment urban complexity and to try and optimize each individual element within its individual spatial allocation. In the words of Feldtkeller, a long-term practitioner of sensitive urban renewal in Germany:

No longer is the spatial context of things important - residence, employment, urban culture - but the perfection of the singular in a retreat from the context (Feldtkeller 1994, p22).

Thus the urban district becomes mono-functional, either accommodating residential or commercial or industrial or recreational uses but seldom a mix of more than one. The streetscape is determined by the function of movement while its historic role as a meeting place is pushed aside (Gehl and Gemzøe 2000, Gehl et al 2006). The building, formerly designed with versatility in mind to facilitate changes in usage over time, is now perfected to fit its original purpose but often poorly equipped to accommodate another should future necessities demand this (Bentley et al 1985, Barton et al 2003).

The ongoing deconstruction of urban complexity has, over the course of the past century, fundamentally altered the image of the city as an incubator of civilization, as a medium of human values which have been a remarkably persistent feature of European urban history over the past 2000 years. It is to the credit of compact city analysts like Feldtkeller to view the radical reinterpretation of the urban realm in relation to society during the past 100 years from the perspective of this historic continuum spanning a multitude of eras - and to conclude that the 20th century city does indeed prove a short-term and largely untested deviation in comparison, dubious in almost any measure of success.

One is tempted to ask, however, whether the primarily philosophical abstraction from historic urban systems as a focus of what may be desirable in contemporary urbanism, continues to have relevance in an era when the practice of city building has departed significantly from those traditions and taken society along in the process. We will revisit this debate further below. But let us first shed some light on attempts to learn from cities which have, for various reasons, retained many of their characteristics of compactness and integration and upheld them as a planning paradigm for much contemporary development. Do these places still exhibit specific qualities that set them apart from the mainstream of city building at the beginning of the 21st century?

Evidence in Favour of the Compact City

In an extensive analysis of several existing urban areas of different sizes in various European countries - Amsterdam, Delft, Bern, Halle and Oxford, and Portland in the US - that have pursued policies of urban containment and concentration for some time, Dieter Apel et al (1998) were able to gauge the extent of success and failure in attempting to encourage compactness in urban development. As crucial criteria for compact city policy, they identify the following components:

- **Minimum densities** that guarantee the viability of user-friendly (i.e. frequent and accessible) public transit and of neighbourhood retail and services within walking distance. These are set at 40 residential units per net hectare, equivalent to a settlement pattern of two-storey, garden-oriented terraced houses, but are recommended to rise to

about 80 units per net hectare - read as three- to four-storey perimeter development with a variety of apartment types - in urban areas.

- **Multi-functionality through integration of land uses.** This is regarded as crucial to generate both pedestrian and stationary activities in the streets, contributing to a sense of publicness, social cohesion and the replacement of vehicular trips.
- **Concentration of development in nodes.** The compact city structure is ideally envisioned as hierarchical - monocentric (star-shaped) up to a metropolitan area population of about 200,000 - 500,000, polycentric (net-shaped) if larger - with each node attempting to strike a balance of housing, employment and subsidiary functions to maximise the share of activities that can be pursued locally.
- **Transformation of urban mobility.** It is recognised that urban compactness that translates into higher liveability cannot physically be achieved with current levels of car ownership and use, since the severance of highly trafficked roads and the spatial demand of parked vehicles would work to its detriment. Guided by the experience of low motorisation in existing high-density, mixed-use districts in European cities, it is recommended that traffic be calmed by both speed and volume and parking provision be considerably reduced. This will deliver attractive street environments that encourage non-motorised mobility and preserve green spaces even at relatively high densities.
- **Congruence of spatial-functional structure and public transit system.** This implies a more pronounced orientation of future urban development around existing transport routes as well as their extension to cater for presently under-served nodes and travel relations.
- **Station areas as catalysts for development.** Nodes around rail stations are a viable model towards sustainable settlements even for smaller communities in the wider metropolitan region. They can enhance self-containment at a local scale and provide intermodal links, both of which feeds back into the viability of the rail system at large.

Like Newman and Kenworthy (1999) in an Australian context, Apel et al highlight the importance of revitalizing the existing inner cities as an essential first step towards a compact and sustainable city. They argue that the residential component in particular needs to be strengthened in the CBDs, which have commonly tended towards retail- and office-dominated monocultures during the modernist era - a view they share with Sieverts (1997), who otherwise debunks the compact city - and on inner city Brownfield sites. But even older residential neighborhoods in the inner districts can often accommodate further densification if this is done in a sensible manner and fosters lifestyles with low impacts of car ownership and use, thus not exacerbating already existing congestion and pollution problems. On the other hand, a further agglomeration of office development in CBDs or CBD fringes is not supported since the job-housing balance there is already too lopsided (see also Sander 1998). The authors recommend to locate such uses at easily accessible interchanges of radial and orbital public transit routes, much in the spirit of Amsterdam's successful circumferential corridor of road and rail, which is examined in more detail further below. This decentralized concentration of tertiary uses furthermore offers an opportunity to functionally enrich the monofunctional housing developments of the post-war period, which are frequently situated in the vicinity of such growth nodes. Single-family housing districts, however, are regarded as less suitable for large-scale

transformation, particularly due to their fine-grained ownership structures and prevalence of owner-occupation with a strong interest in maintaining the status quo.*

Apel et al point to some necessary changes in the planning system as well as policy context particularly in the field of transport that are crucial to fulfill their visions in a market environment. Self-evidently, there must be powerful controls to protect undeveloped land in the metropolitan region and steer growth into the core locations and transit corridors where it is desired. Taxation and housing subsidies should be altered to reflect this political preference by rewarding compact development and penalizing dispersion. Elected metropolitan-regional governments with planning competence could put an end to the often ruinous competition between individual councils for urban development. Federal/national funding for new roads in already developed regions should be phased out. Subdivisions in urban areas are recommended to become more fine-grained, as this is seen to favor individual owner-developers more susceptible to goals of flexibility and mix of land uses.

This last point is a strong reference to the work of Dieter Hoffmann-Axthelm (1993, 1996) who emphasizes the role of the individual plot of land (or 'parcel') as an agent to promote subsidiarity in decision making. Urban sustainability, according to Hoffmann-Axthelm, can only benefit from the expertise of user-occupiers to determine their real needs and be in a position to implement them on the ground. This is in marked contrast to the prevalence of corporate concentration and/or socialisation of land ownership that has disenfranchised this historic principle of organisation in city building during much of the 20th century, and has, rather unsurprisingly, had a devastating effect on the integrity of public space.

Hoffmann-Axthelm defines the specific virtues of the European city as a conundrum of the four elements publicness, variety, local identity and self-governance. While 20th century urban history has contributed to the relativity and deconstruction of each of these characteristics as well as threatened their essential congruence, all remain discernible today and may still serve as a basis for a paradigm change that the author describes. The clear-cut differentiation of public and private realm - streets and building plots - that characterizes European urban history, continues to survive relatively unscathed, despite the onslaught of corporate attempts for commercially motivated control of the *res publica*. Similarly, history has largely failed the socialist appropriation of developed land into public ownership. Where it occurs, however, destruction of publicness is nearly always eventuated in tandem with functional segregation, which, as is elaborated, invariably incurs social segregation. Yet, the more extreme developments of physical seclusion observable in US cities or in the developing world have remained largely absent in Europe as well as Australia, possibly for their obvious social costs and the continuing interdependence of social and economic actors (see also Gleeson 2006). Identity, nowadays transported via a locality's specific and unique history rather than the globally leveled physical uniformity of contemporary urban development, remains a persistent feature in the psychology of urban life and decision making (see also Landry 2006). Self-governance, while degenerated into a web of top-down regulations presiding over what is experienced as 'urban chaos', nowadays breeds an emerging subculture of bottom-up autonomous order as a counter-movement. Hoffmann-Axthelm argues in favor of converging these fragile regeneration trends in support of the specific strengths of European urbanity into a

* Venturi (1998) contests this view, pointing to the notion that many post-war single-family housing districts in European cities are approaching the end of their first owners' lifespan and are thus likely to face a surge of ownership changes in the near future. Since the socio-economic conditions prevalent when those districts were built are now partly obsolete, this situation may provide an opportunity for a thorough adaptation and redevelopment program to contemporary urban requirements, profoundly changing the face of urban peripheries in the process.

new set of societal contracts, to become a new foundation treaty ('*Gründungsvertrag*') for the European city of the future.

Feldtkeller stops short of such overarching visions, but offers a catalogue of orientations to describe what is essential and non-changing in the European urban tradition - all revolving around the importance of public space which he regards as the principal medium to carry a sense of civility, of mutual acceptance, and a social behavior code that was once galvanized in the term 'urbanity'. Paradoxically, this cultural function appears to thrive in a rather anarchic absence of top-down regulation:

Traditionally, public space was an area divorced from concrete, predetermined uses - and thus a prerequisite for the evolution of urban life as such. Concerned uninvolved mutual interaction, confidence in anonymity, participation without accountability for one's presence - all these are outcomes of this achievement (Feldtkeller 1994, p.42-43).

Transcending the obvious language barrier, the parallels between Feldtkeller's constructive elements of urban space and the key principles of responsive design and New Urbanist theory (Bentley et al 1985, Murrain 1993) become strikingly obvious:

- **Mix of uses** - it is emphasised that the level of public life that is seen as the lifeblood of any urban environment requires the overlay of multiple urban functions within a scarce spatial arrangement. This brings about the synergy of constant human presence and interaction in public spaces without the purpose of this presence being immediately obvious, and corresponds to the New Urbanist principle of *variety*.
- **Eyes on the street** - a concept first coined and promoted by Jane Jacobs (1961), this element recognises the relations between public and private spheres and the significance of their spatial arrangement to facilitate interaction. This is a fundamental prerequisite for the functioning of the urbanity-related behaviour code mentioned earlier and has been strongly linked to the mitigation of street crime. In New Urbanist terminology, this principle is referred to as *passive surveillance*.
- **Enclosed streetscapes** - what is essential here is that public spaces have clearly visible boundaries with adjacent private uses, which in turn, as discussed, are oriented to the street. It is also paramount that each public space thus enclosed has more than one exit and connects well to other streets and squares - a concept known in New Urbanism as *permeability*.
- **Street windows** - this refers to the core architectural interface between public and private sphere, which are the windows overlooking the street or square and without which the above three principles would be obsolete. Another aspect in this context is the application of building aesthetics to clearly indicate its use and function in the urban context, or *legibility* to New Urbanism.

The fundamental differences between the European compact city pioneers and the New Urbanists, then, once again revolve largely around traffic management. North American and Australian theorists are clearly devoted to strike a better balance between transport modes than is currently the case in most conventional suburban development, and envision dramatically improved conditions for walking and cycling and the concentration of uses around public transit. But they nevertheless accept the dominance of auto mobility in the travel market, the high level

of car ownership and the need to cater for it in residential development, and the notion that mixed uses will malfunction unless providing for convenient vehicle access - to the point that a number of existing pedestrian malls have been reopened to motorised traffic under the banner of New Urbanism. European practice, in contrast, consistently shows an ambition - if to varying degrees - to substantially reduce automobile space on streets, constrain car ownership by factoring in cost externalities or other disincentives, and aim for a dramatic decrease in traffic volume.

There is no way to avoid facing the real battle line: that there is simply too much traffic. Mobility has fulfilled the emancipation task it had to offer, there is no further step. We have now reached the point when mobility itself must be attacked - not prohibited or impeded, but addressed and slowed down across the entire spectre of cultural and spiritual attachments (Hoffmann-Axthelm 1996, p.148-149)

There is no shortage of warnings to all those harbouring the illusion that current levels of automobility can somehow be brought in harmony with urban sustainability in European cities rediscovering their historic virtues - and a tentatively optimistic observation that the message is beginning to be understood:

A compact, urban, ecological city and high motorisation rates pose incompatible individual demands. Within the densely developed older districts at least, sustainable development is not possible without reducing parking areas and car ownership. A lifestyle without a car is already a reality for a remarkable share of households in the inner suburbs of large cities (Apel et al 1998).

Are we not all silently convinced that our transport behaviour bears the character of a transitory phenomenon? That automobile traffic in cities needs to be rigorously managed in the very near future, i.e. rolled back drastically to a tolerable level by legislative means, in the interest of the cities and the environment - in other words, of the people? (Feldtkeller 1994, p183)

Compact City Policies in Practice: Urban Development in Amsterdam, Copenhagen and Hamburg

On the ground, the dilemma between urban form and transport impact lies unresolved, even in those cities that have pioneered both urban compactness and travel demand management, and notwithstanding some remarkable successes in both fields. There are, of course, enormous differences among European cities regarding both their predisposition and their responses to current trends. I will, in the following, focus on Amsterdam because it was something as a forerunner of compact city models spurred by strong public policy, while simultaneously illustrating the limits to urban containment increasingly apparent in the 1990s with their open borders and economic integration. I will also refer to Copenhagen and Hamburg, both of which benefited strongly from post-1989 political and economic changes, but are located at some distance from the European heartland and display the influence of contemporary socioeconomic changes under more average-paced, controlled conditions.

The Netherlands and the Compact City

Like most European cities, Amsterdam followed an urban expansion strategy well into the 1970s. With the objective of 'decongesting' the historic city which was seen under increasing pressure from traffic growth, demand of highly profitable land uses like office development and a shortage of housing that met modern standards, a number of new towns were developed throughout the Netherlands that would meet these needs. The location of these growth poles or satellites would be well outside the established urban areas but with good connections to them by both road and rail. It was envisioned that the new towns should be relatively self-contained in employment, to enable short commutes and relieve the transport networks. While some examples of growth poles proved successful in this regard, others didn't, as described by Hugo Priemus (1999a):

We may conclude that the growth centres did in fact help reduce the housing shortage. But we must also acknowledge that in many growth centres, neither employment nor economic activity got off the ground. And it is abundantly clear that the mobility effects and environmental impacts were unfavourable (ibid., p. 3).

This latter observation implies that many satellites became giant dormitory towns at rather inconvenient locations with regard to accessibility of jobs, education, leisure and other facilities. They now display the longest commuting distances of any settlement type in the country (ibid). In Amsterdam, decentralization of housing and economic activity must also be seen in the context of urban renewal policies which during the 1970s still aimed at large-scale clearance projects in favor of new infrastructure and commercial centers. Ironically though, it was not a road but a metro project that instigated a shift in policy, following a heated debate accompanied by massive and occasionally violent community opposition against the extensive demolition of existing housing stock above the route within the historic centre. At a time when fringe groups that later would become urban innovators rediscovered the inner city as a highly appropriate place to live and work, a government policy that sought to relocate inner city dwellers and businesses to comparatively sterile new towns at or beyond the urban periphery met predictable resistance. An increasingly vocal inner-city populace was determined to defend what they perceived as attractive urban structures, allowing inexpensive housing and small business, a diverse local community, adaptable buildings and open spaces, cultural freedom and the opportunity to experiment with new lifestyles. All of this was rather inconceivable in the new suburban apartment blocks in growth pole locations. The new liberties experienced in the older districts, however, were partly a result of the decentralization policies themselves, which had weakened the historic centre's economic position and done little to instigate much-needed investment in the renovation of its deteriorating building stock.

When the new metro was opened in 1980, there had already been a political decision not to pursue any further underground rail projects (a policy that was, again ironically, reversed in the early 2000s – if by using tunneling techniques of considerably lower impact). In addition, Amsterdam's city council had shifted away from decentralization and was ready to focus on gentle urban renewal (i.e. largely preserving the old buildings, or where this was not viable, at least the historic urban pattern) and the redevelopment of central locations, particularly derelict industrial sites and docklands, for urban, high-density housing. The potential of older areas to play a vital role in boosting Amsterdam's position in a globalizing world economy was recognized by the authorities, as was the need to cater for differentiated target groups in the housing market (Rosemann 1998). It is this period which made Amsterdam a pioneer in compact city policies, resulting in a reversal of the declining population trend - after having fallen

from over 850.000 to under 700.000 between 1965 and 1985, the number of inhabitants has steadily recovered and now stands at nearly 750,000 (DRO Amsterdam 1994). While growth in residential development continues with the reclamation of land from the sea for a whole new district for up to 100.000 inhabitants east of the city, most large-scale office development is located along an orbital corridor of both regional and urban rail and a circumferential freeway some 6 km from the centre, and the radial corridor towards the airport. The historic city has, unlike in most other large European cities, maintained much of its original fine-grained fabric and multi-functionality and accommodates approximately equal numbers - 80,000 each - of residents and jobs (Apel et al 1997).

The compact city was elevated to a national planning strategy in the Netherlands in 1988. The objective was to protect valuable open space in the existing cities' surrounds and locate new development to minimize transport needs, that is as urban infill or, where Greenfield urbanization was necessary, immediately adjacent to existing settlement areas. The policy was supported by an ambitious regime to regulate and coordinate the location of employment with transport corridors. Three main types of commercial/institutional uses are identified: those with high numbers of employees and/or visitor flow, but low need for vehicle access (A-locations), those with low turnover of people but high transportation demand (C-locations) and those that need to be accessible for both visitors/employees and road transport (B-locations). Amsterdam's historic centre and some surrounding sites along radial rail routes are A-locations, the orbital multi-modal transport corridor and other suburban nodes of rail and road (including the airport) are B-locations, and sites within the port and some industrial districts are C-locations. It is important that retail, offices, public administration, educational and health facilities are all restricted to either A or B-locations, practically ensuring superior public transit access to each of these uses, and have statutory maximum parking standards that are quite low by international comparison (Apel et al 1997, Priemus 1999b).

The market, however, responded ambiguously to the application of the ABC location policy. Most large companies and property developers were eager to maximize accessibility to employees, clients and visitors by both private and public transport modes and would thus naturally gravitate towards B-locations. Priemus (1999b) thus questions the commercial viability of A-locations which, largely unsuccessfully, attempt to capitalize solely on their superior location relative to public transport. The rationale of proximity, desirable from an environmental point of view, then takes overriding prevalence over the notion of accessibility, which is sought from an economic and social perspective. However, Bertolini and Dijst (2003) point out that the pre-industrial centre of Amsterdam, while shunned by large-scale property developers, became an extraordinarily fertile incubator for emerging small businesses in culture, entertainment and knowledge-oriented industries. The contribution of these sectors to wealth and employment creation is critical for post-industrial urban economies (Florida 2002, Landry 2006). The problem, then, is that ABC location policy has proved a viable model for some locational choices while being unsuitable for others, resulting in the unfortunate outcome that a substantial number of land uses still locate in inappropriate places with excessive travel impact.

Bertolini and Dijst (2003) further elaborate that the Dutch compact city paradigm has also suffered from its implicit assumption that urban administrative entities remain largely functionally self-contained, ie. their users would be naturally inclined to organize as many activities as possible within municipal or metropolitan limits. This notion simply does not hold water in a highly interconnected agglomeration like Holland's Randstad, where commutes and leisure trips across regional boundaries have become the norm. A 'compact' new residential district at the fringe of the urbanized area, served by a radial tram extension and conveniently accessible from the freeway network, may appear a mobility-conscious concept if the central city provides most destinations, but offers starkly inferior conditions for non-car mobility on a regional scale. This is

particularly true where, as Christiaanse (1998) laments in the face of much recent practice in the Netherlands, such city extensions remain functionally segregated, mechanically planned and unresponsive to future changes in demand.

An alternative model that gained ground in Dutch national planning policy since the late 1990s is therefore based on supporting an urban form that reinforces existing regional movement patterns and accepts their dynamic instead of prescribing them, and facilitates such movement by public transit and non-motorized modes. Bertolini and Dijst (2003) emphasize the importance of multi-modal transport nodes to become focal points or 'anchors' of social and economic activities, reconfiguring settlement areas around them in a polycentric, network-shaped manner. Thus a new balance needs to be struck between the functions of a location as a 'node' (within a transport network) and a 'place' (as a centre for activities), highlighting the importance of accessibility as a measurable property that brings land use and transport characteristics together (Bertolini 2005, Scheurer and Curtis 2007). The resulting concept for urban form can be regarded as something like a synthesis of the three preceding elements of satellite growth poles, compact infill and city extensions, and urban renewal, attempting to bring them together in a comprehensive model and 'allow a new type of urban cohesion to arise' (Priemus 1999a, p6).

Reurbanization in Copenhagen and Hamburg

The development of both Copenhagen and Hamburg differs from Amsterdam insofar as these cities suburbanized along an intentional plan of radial corridors at an earlier stage - Hamburg since the 1920s, Copenhagen since the 1940s. Conversely, Amsterdam's growth, based on Cornelis van Eesteren's 1935 general expansion plan, remained largely concentric until well into the 1960s (Rosemann 1998). Hamburg and Copenhagen's growth corridors are accessible by rapid urban rail and later by freeways or other high-capacity roads, and have enabled development of comparatively low density at a large scale - the two cities are at the bottom end of metropolitan density figures in Newman and Kenworthy's (1999) European sample. When European cities began to face the challenges of post-war reconstruction and development after 1945, they were commonly burdened with either a substantial lack of built structures, since many had been lost to wartime destruction (Hamburg), and/or a recent history of significant disinvestment in housing when economic depression and occupation hadn't allowed for sufficient action in this field for years (Copenhagen). In either case, there was an enormous demand surplus on the housing and property market which made most cities expand rapidly as soon as their economies recovered. New social and planning paradigms called for a break with the urban traditions of the past. For the following two or three decades, much of the pre-war building stock, especially in densely populated inner areas, was not regarded as a vital resource and thus left to deteriorate even further. The 'modern' post-war city was initially largely developed on vacant suburban land or reused bombsites, following the Charter of Athens principles of functional segregation and provision for increasing motorized traffic. In post-war planning logic - as briefly discussed in the context of Amsterdam - it was intended to use the advantage of central location and accessibility to attract large-scale commercial development to run-down inner city areas. This implied the existing housing stock to be seen as obsolete and to be demolished, and vehicle access to be improved. The result was a series of master plans for nodal locations aiming at clearance and redevelopment, and a network of urban freeways to connect them. These plans, though unpopular with the public and largely only carried out in fragments, had a reinforcing effect on urban decay when the present structures on the respective sites, due to their uncertain future, suffered disinvestment over many years. Some inner urban districts were subject to a downward spiral with the community gradually

becoming poorer, marginalized and disintegrated. The deterioration of pre-war districts reduced urban density and multifunctionality through the withdrawal of people, businesses and buildings, and subsequently, depressed local economic activity. At the same time the growth of the suburban post-war city of spatial segregation and in-built mobility needs was accelerated, as this was where people and services with the means to do so would usually relocate (Rudlin and Falk 1999).

But the socio-economic changes in the waning heyday of post-war modernism eventually launched these ailing inner-city districts into a more promising future. They proved highly attractive to the numerous cash-poor niche cultures flourishing in the 1970s, from alternative lifestyles and students to ethnic communities. Gradually, neighborhoods with quite distinctive identities emerged from the once-dilapidated urban problem zones. As mentioned above in the Amsterdam example, these new population groups often developed the capacity to build social, cultural and professional networks that proved a significant boost of vitality to these districts and became a formidable political force in lobbying for government support towards the urban renewal process. Almost invariably, however, such public investment led to commodification effects, manifest in rising land values and rents as well as the influx of groups with more money to spend (or enhanced economic prospects for the existing residents). This process of gentrification has profound impacts on the socio-cultural and economic make-up of a neighborhood and puts authorities in an ambiguous position. On one hand, local governments, not least under the pressure of community activists, seek to avoid individual hardship and maintain equal opportunities for households and businesses under threat to be 'priced out'. On the other hand, the attraction of affluent taxpayers into areas written off to decay only a decade or two earlier provides an opportunity to cities that is often considered too good to be missed. In the absence of large-scale commercial development interest, the process of gentrification works gradually and subtly over a period of many years. But where redevelopment proposals were more drastic, eruption of open confrontation between rivaling groups was not uncommon. This was repeatedly the case in many cities when bottom-up initiatives and city authorities were fighting over urban renewal hegemony in the 1970s and 1980s (the aforementioned Nieuwmarktbuurt in Amsterdam, Indre Nørrebro in Copenhagen, Hafensstraße in Hamburg are some examples among many). From those clashes and the political damage they incurred, a relative consensus appears to have materialized to allow incremental growth from the existing urban fabric rather than implement radical solutions, which threaten the integrity of a locality (see Rudlin and Falk 1999). However, urban renewal still stirs controversy like few other policy issues, and this is probably due to the nature of the process which depends on multi-tiered negotiations between an enormous diversity of stakeholders. It has become common practice to expand the traditional instrumentarium of planning tools and public participation by including 'informal' elements from both public and private developers. Among these are round tables of stakeholders, public planning workshops, professional facilitation and conflict mediation and high-profile marketing (Fassbinder 1992b).

The Compact City and the 21st Century

Even though decentralized concentration and the short-trip city are relatively recent paradigms, they contain elements from earlier urban and regional planning models and can thus, to a limited extent, be assessed to their expected efficacy when dominating planning philosophy - as is now the case on the federal level in Germany (Holz-Rau 1997a) as well as within numerous regions throughout Europe. Aring (1997) emphasizes that the most crucial component of any new planning strategy is its pathway to implementation, or its link to regional politics.

Unfortunately, elected metro-regional governments with planning and implementation authority are still the exception to the rule of municipal fragmentation, and the slow pace of institutional reform in this field does not exactly indicate a sea change. As examples, both Amsterdam's proposed metropolitan council and the amalgamation of the states of Berlin and Brandenburg were knocked back in public referenda during the late 1990s. London's reinstated metropolitan authority stands out as one of the few positive developments here.

But even in the hypothetical case of bringing the various actors in local and regional government, business and the populace in line to support compact city goals politically, physical urban structures still fulfill no more than a passive role in the sustainability transition. This is because they enable, rather than enforce, sustainable behavior patterns that can translate into lower resource use and less travel impact in cities. While - as elaborated earlier - a sizeable body of research provides evidence to the notion that users of compact urban areas produce significantly less automobile travel than those in dispersed areas at a fixed point in time, the issue becomes more complex in the context of long-term spatial development patterns which clearly move into the direction of ever increasing inter- and intra-regional interdependency. Are the traffic-saving effects of compact city planning, where taken seriously, simply to be neutralized by continuous general growth in mobility at the regional level in real life, much like it happened to improvements to vehicle emission control during the 1980s and 1990s? It is for this reason that Jessen (1997) believes the momentum a compact city paradigm may generate can only begin to be powerful enough to instigate real changes if embedded in a broader, 'holistic' policy approach:

Even the most vigorous proponents of a compact city emphasise that the path toward a short-trip city is long and arduous and can only succeed if additional strategies are pursued in parallel. To avoid traffic, to shift traffic onto more environmentally acceptable means and to make transport more responsive [to the city], in-depth rationales of the paradigm mostly demand a package of interconnected measures at both the local and the super-local level, within which spatial planning is but one, if significant, component (Jessen 1997, p.94).

Such interconnected measures include reforms of land taxes, withdrawal of subsidies to road users and peripheral homeowners, statutory planning instruments to encourage density and functional integration, municipal land banking and the aforementioned creation of metro-regional governments. However, many of these policies have been debated with considerable controversy for prolonged periods - sometimes decades - without winning the necessary majorities in the political arena or the community at large.

A possibly simultaneous political implementation of all packages of measures whose coincidence is instrumental to enable the compact transformation of the city, would equal a fundamental reorientation of spatial policy and planning regarding content, organisation and instruments; a paradigm change of a kind that has not yet occurred in the history of post-war Germany and very rarely in the history of modern urban planning. It is unimaginable that even a fraction of what experts consider imperative for the regeneration of the built environment towards transport-minimising settlement structures, can currently be implemented under the conditions of democratically legitimised policy and planning (Jessen 1997, p.95-96).

Or, in the more drastic wording of Sieverts (1997), with an implicit reference to planning policy in an authoritarian regime like Singapore:

Presently, only undemocratic societies can continue to enforce a compact city! (ibid, p141)

Is the compact city, hence, a pipe dream? A convincing and conclusive image of a better world, but unfortunately so far removed from current realities that its relevance is lost? Planners, as Jessen (1998) suggests, generally embrace the concept of the compact city, since it resonates with the sustainability agenda, promotes a culturally appealing, innovative and dynamic urban milieu, takes active measures against socio-spatial segregation and reinvigorates local self-governance. But is it possible that the model falls victim to an underestimation of the power of concurrent trends, discourses and values, missing its goals in the process? In reconciliation, handling an issue with the complexity of the conundrum of urban transport and land use ultimately turns out to be a matter of perspective. It involves the determination of the community to work towards a vision reflecting its values and imagination, even if it spans extremely long periods, and the ability of planning to reflect this incremental approach and aim for many small steps toward sustainability rather than a few big ones. In this spirit, Jessen (1998) regards the compact city paradigm as a highly suitable guiding model for the redevelopment of obsolete inner urban Brownfield sites, whose number unexpectedly surged in many European cities during the 1990s with the retreat of industrial, transport and military uses. Christian Holz-Rau reminds us of the important nexus between physical form and travel behavior, and advocates that every effort in line with a low-transport city, no matter how modest, is to be encouraged:

A multifunctional and compact settlement structure comprises an essential prerequisite for travel-efficient behaviour patterns. However, a short-trip city or region is not solely based on these structural prerequisites, but must complement them with assistance towards travel-efficient behaviour at the level of the individual. Otherwise, a multifunctional and compact short-trip city remains a city of unused travel reduction potential (Holz-Rau 2001, p. 15).

Planning and goal-oriented action in such complex situations always implies dealing with uncertainty. A more complex understanding of problems highlights this issue rather than being capable of removing this uncertainty. This is the rationale for cautious action, openness for compromise and a priority for flexible concepts. No heavy-handed planning that regulates every detail from a high position, but confidence in local inventiveness is the prerequisite (Holz-Rau 1997b, p. 68).

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