
‘Premium Network Spaces’: A Comment

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Premium network spaces: Stephen Graham’s argument

In a recent issue of this journal, Stephen Graham (2000) offers an exciting analysis of the emergence of what he calls ‘premium networked spaces: new or retrofitted transport, telecommunications, power or water infrastructures that are customized precisely to the needs of powerful users and spaces, whilst bypassing less powerful users and spaces’ (*ibid.*: 185). He contrasts premium network spaces with the traditional ‘normalized and standardized infrastructure’ networks (*ibid.*: 190) or, more cautiously, with ‘assumptions of immanent, ubiquitous and standardized infrastructure networks’ (*ibid.*: 184).

Summarizing Graham’s argument is not easy. For one thing, his analysis extends to a wide range of urban and social contexts: ‘the ‘developed’, ‘developing’, ‘newly-industrialized’ and ‘post-communist’ worlds’ (*ibid.*: 185); wealthy, less well-off, and very poor spaces and social groups; economic spaces (e.g. foreign direct investment enclaves or business improvement districts), residential spaces (e.g. gated communities) and social life spaces (such as commercial malls and theme parks etc.). In addition, Graham insists that the significance and novelty of premium network spaces should not be overemphasized.

Nevertheless, the central argument developed in the paper can, I believe, be summarized as follows:

- First, the emergence of premium network spaces is a widespread trend supported by ‘four processes of sociotechnical and political economic change ... the ‘unbundling’ of urban infrastructure provision; the erosion of comprehensive urban planning and the construction of new consumption spaces; the emergence of infrastructural consumerism; and the widespread shift towards extended and automobilized cityscapes’ (*ibid.*: 186).
- Second, although there are many historical precedents to it, the current trend contributes more than these precedents did to the increase of social and economic disparities between, especially, intra-urban spaces. Processes of construction of premium network spaces, Graham claims, ‘represent a renewal of old and established practices ... They simply do this with renewed degrees of intensity and global reach and, often, without the pretence of eventually moving toward universal access’ (*ibid.*: 197). Liberalization (i.e. the introduction of regulated competition in the provision of infrastructure networks), for example, can ‘mean a loss of the redistributive, social role implied by public infrastructure monopolies’, Graham argues (*ibid.*: 187), quoting Little (1995: 9).
- Third, this trend is contrary to the public good and social justice; this is why these ‘secessionary tendencies’ may give rise to ‘democratic resistance and social mobilization [that can] serve to balance [them] with more redistributive design, development, regulation and governance strategies’ (*ibid.*: 186).

Overall, the picture he draws identifies the ‘uneven emergence’ of premium network spaces worldwide as a clearly negative process as well as a major issue of social justice — or, more accurately, of spatial justice.

In this comment, I would like to present a different view. I will in particular challenge three of Graham’s assumptions or arguments:

- That infrastructure networks in the post-monopolistic era are, in general, worse than networks in the monopolistic era in terms of disparities in social/spatial accessibility;
- That the contemporary development of networks generally leads to socially undesirable economic polarization, especially through the fiscal secession of ‘business enclaves’;
- That premium social/economic spaces can generally be described as deliberately designed premium network spaces.

Note that my intention is not to provide a comprehensive analysis of this question, but rather to discuss cases in a variety of urban and national contexts that appear to stand in contrast with Graham’s narrative.

Access to basic network infrastructures

As Graham rightly points out, when discussing issues of ‘universal service’ or ‘public utilities’, we need to be cautious about the possible gap between rhetoric and fact: during the public-utility-monopolies’ golden age (say, from the 1930s to the 1970s), when equal or universal access to basic network infrastructures was the official *doxa*, ‘variations in the quality and degree of social and geographical access to networked infrastructures remained stark’ (*ibid.*: 185).

At the same time, though, the progressive generalization of infrastructure networks in countries of the developed world, and the massive state support (financial, political, legal) it rested upon, cannot be contested (see, e.g., Coutard, 1997, for a discussion of electrification in France and the USA). In less than a century, sometimes much less depending on the country and the sector, such networked systems as the telephone, electric light or water supply have become universal.¹ Certainly, a discussion of how universal these basic services are should include the issue of social access, the fact that there remain disparities among social groups in access to and use of these services (Graham and Marvin, 1994). But, overall, residential connection to basic network infrastructures progressively became a ‘social norm’ in those countries, and with it the notion that people should not be disconnected against their will (see Coutard, 2000, for a study of the emerging ‘right’ to networked water supply in France, the UK and Germany).

The contrast between industrialized countries and the rest of the world is sharp. In countries of the developing world, domestic access to basic utility services is a reality only for a minority of the population; even in urban areas, access is far from universal. This was the case before the recent unbundling period Graham refers to; this is still the case today. But I would argue against Graham’s view that the unbundling etc. of public utility monopolies has in general led to increased social/spatial disparities in access to network services. Based on studies of the development of water supply systems in three cities in the developing world (Windhoek, Namibia; Buenos Aires, Argentina; Delhi, India), I will argue that there are many different reasons that lead to uneven access to

1 Cf., for example, the eloquent chart ‘U.S. households with selected consumer goods 1900–1980’, in Fischer (1992: 22), which shows that all network goods and services (electricity, the telephone, the car etc.) tend to become universal during the nineteenth century. A similar chart could be drawn for all countries in the developed world.

basic utility services, and that the outsourcing or unbundling of such utility services may help rather than hamper the generalization of access to these services.

The reason for access inequalities may be political, as in the 'hydric apartheid' regime of water supply in Windhoek until the early 1990s, when the richest 20% of the population consumed 60% of the water delivered to retail customers and the poorest half only 15% of that water (Jaglin, 1997). The issue of access to water for low-income urban groups was not properly handled in the 1993 reform of the water supply regime. But, Jaglin notes, reformers did not intend to ignore or negatively affect low-income groups. Rather, three main reasons seem to explain why the reform was focused on urban/rural solidarities (and not rich/poor ones): the 'social debt' of the state to rural areas; the political power of the predominantly rural Ovambo ethnic group; and the lack of appropriate statistical instruments (Jaglin, 1997: 25; see also Jaglin, 1998).

Although certainly less dramatic, the situation in European countries presents an interesting parallel with that described by Jaglin. Consider, for example, rate averagings for electricity supply and the telephone in France. Historically, the main form of averaging implemented was between urban and rural areas. It was very redistributive socially, subsidizing the massively poor farm households. But it is currently more questionable, when the poor in France increasingly live in urban areas, while urban, ex-urban and rural areas are increasingly becoming populated with upper-middle-class households (see Coutard, 1998). Hence, given pricing rules may produce different, or even opposite, effects when the socio-economic context changes. The UK Parliament failed to acknowledge this change when it required that the just-created regulators of the water supply and other utility industries have concern for customers residing in rural areas or for customers 'of pensionable age', but not for customers on low income.

The reason for access inequalities may also be insufficient funding of the water supply system. For example, in Buenos Aires, during several decades, water was supplied by a state-owned public enterprise with low prices (flat rates, i.e. independent of volumes consumed) and high public subsidies, reflecting a hygienist-inspired policy of *canilla libre*, or 'free-access-to-tap' policy — the opposite of a liberal (post-monopolistic) policy within which one would expect water to be supplied as a commercial good, and in striking contrast with the situation in Windhoek as well. What was the outcome of this free-access-to-tap policy (see Faudry, 1999)? On the one hand, free access to tap, indeed, in the central, richer part of the urban area (six million people), with very high levels of water consumption per capita, and hence very large subsidies to those consumers. On the other hand, half a million people illegally connected to the water network and no connection at all for the rest of the area (four to five million people). And, on top of this, a very poor quality of service altogether and a very high proportion of uncollected bills. This situation may be analysed as deliberate (post) colonial policy. But there is another way to look at it: the water supply system did not spread because of insufficient funding; and the richer Buenos Aires residents settled where water supply and other services were readily available. Then, in 1993, the service was franchised to Aguas Argentinas, a commercial consortium. The contract stipulated that the new utility should, within the 30 years of the contract duration, connect the entire population of the franchise area (nine million people) to the water supply network, and at least 95% of the population to the waste-water drainage system. Thirty years certainly is a long time when you are waiting for tap water! But it is not superior to the typical time needed to universalize water utility networks in western European urban areas (not to mention rural ones). The initial contract provided that the cost of new connections should be born by newly-connected customers only (Faudry, 1999; Schneier Madanes, 2000). But this proved socially unsustainable because the connection cost was extremely high, especially for the poorer households supposed to bear it. The connection charge thus raised fierce opposition among the population to be connected; interestingly, though, the strongest (or most efficient) groups opposing the connection charge were not the poorest groups, but middle-class

suburbanites claiming they could pay but would not pay for a service they were not consulted about and for which they had an alternative (their wells) (see Schneier Madanes, 2000)! Opposition and widespread non-payments led to a renegotiation of the franchise contract in 1997. The new contract provided that the expansion of the network should be financed through a uniform universal service charge paid by all utility customers. The new scheme was clearly redistributive and socially more just. However, it involved higher water bills for already connected customers. Customer associations therefore took court action to try and avoid having to pay for the charge — a somewhat discouraging form of ‘democratic resistance’. They eventually lost to Aguas Argentinas, and the firm was subsequently able to raise the charge.

Disparities in water supply may also have technical origins. Take the example of Delhi. In 1995, 60% of the nine million people living in the Delhi region were connected to the publicly-owned water supply utility. For 95% of the 600 connected households interviewed by Zérah (1997), either water was available only part of the day, or at an inadequately low pressure, or both. Zérah interestingly shows that quality of service was primarily a function of the distance between the point of supply and the water treatment plant (the longer the distance, the poorer the quality). It secondarily depended on the floor on which the dwelling was located. But it was not significantly correlated to the revenue of the household supplied: at similar locations, richer and poorer (connected) households enjoyed a similar quality of service. Zérah further shows that all households affected by irregular (intermittent) water supply engaged in compensatory strategies: storing network-supplied water (two-thirds of interviewed households), pumping underground water (nearly 30% of households), reorganizing domestic and other activities (again, 30% of households), recycling water, collecting water outside the home, protesting, moving house (1.5% of interviewed households declared they had moved because of poor water supply). She concludes that ‘low income households pay [proportionately] more for their water due to compensatory strategies’ (1997: 6). In a follow up of Zérah’s PhD work and 1997 article, Llorente and Zérah (1998) argue for a reform of the water supply service in Delhi. In particular, they make the important, if debatable, point that individual domestic network supplies may not be the most appropriate short- and mid-term solution in many cities in developing countries. Rather, local or national authorities, they say, could improve the public good more efficiently by regulating and coordinating the increasing number of competing water suppliers (tank trucks, water jars and bottled water suppliers).

As these examples suggest, the uneven development of, or access to, basic infrastructures in cities in the developing world was in some instances the result of explicit socio-political strategies. In such cities, one can agree that ‘the partial completion of modern networked infrastructure was a very deliberate attempt to symbolize the superiority of colonial power-holders over colonized civilisations’ (Graham, 2000: 185). This was strikingly the case in apartheid and post-apartheid southern African countries and cities. However, in many instances, access disparities were the largely unintended consequence of formally redistributive rules (*cf.* Buenos Aires and Delhi).

In the three cities discussed above, the poorer part of the population, even when they are not deliberately excluded, are always hit the hardest by the heterogeneous access conditions to network-based water supply:

- Generally, the poor households are not connected at home; they must resort to more time-consuming or more costly (generally both) alternatives to cover their basic needs;
- When they *are* connected, the quality of service is often low and they must engage in compensatory strategies that raise the costs of water supply much above the official subsidized and spatially-averaged rates.

How are these poor households affected by the commodification/commercialization of water supply? It is important in this discussion to note that regulatory reforms affecting

basic infrastructure industries, such as the water or the electricity supply industries, in the 'developing world' do not in general consist in privatizing infrastructures or in allowing free competition (or even regulated competition) between service providers for end-of-pipe users. Alternatives to this radical scheme are generally preferred. Public authorities may reform an industry deeply and at the same time keep the historical utility as the monopolistic supplier (e.g. Windhoek). More often, though, the reform consists in franchising (outsourcing) the provision of one service over a given service area to a provider selected through a competitive bidding procedure (e.g. Buenos Aires).

The examination of reforms in three different urban contexts prompts us to be cautious about the rhetoric of network universalization. 'Cheap service for all' policies often end up as bad service for many and no service at all for many more. Standardized monopolistic networks in many instances happen to be or to evolve into the very premium networks they are supposed to stand in contrast with. In addition, in many places, as in Buenos Aires, 'democratic resistance and social mobilization' may rise to *oppose* rather than support socially equalizing schemes and universal systems. Conversely, technical or economic service differentiation may in specific contexts prove to be much fairer than standardized schemes of domestic network supplies, which at least in the short and medium term imply no supply for many. Finally, as the history of industrialized countries shows, the rise and homogenization of living conditions and purchase power is probably in the longer term the most efficient equalizer of conditions of access to water or other basic utility services. The duration of the process, however, should not be underestimated.

In this section I focused on residential access to basic network infrastructures, and I focused on water in order to keep the discussion as accurate and short as I could. Stories are likely to be different for other network services, according to their stage of development. For example, case studies on the early diffusion of Internet access, including access by low-income groups, stress the crucial role in this diffusion of non-governmental, decentralized commercial initiatives much similar to the private initiatives that supported the initial diffusion of traditional utility systems (see, e.g., Fernandez-Maldonado, 2001, on the diffusion of Internet access in Lima, Peru). At the same time, it should come as no surprise that, in most countries in the world, universal domestic access to the Internet is currently not a priority for policy-makers.

Uneven geographical development and premium network business spaces: the issue of fiscal secession

Graham's article contains striking examples of business 'enclaves'. He draws a parallel between the Singaporean-Indonesian 'Sijori growth triangle' and London's Docklands and City areas as examples of 'glocal spaces', globally connected to other similar business enclaves throughout the world, while at the same time as little connected as possible to their local environments; this is well-illustrated in the Docklands area where 'local access via roadways or footways are carefully 'filtered' through a so-called 'mini Ring of Steel' comprising 'fortress' urban design practices, cordons, access control systems, CCTV and a private police force to restrict unwanted traffic' (Graham, 2000: 189). The fiscal logic of business enclaves is clearest in Graham's discussion of business improvement districts (BIDs), 'secessionary streetscapes' supported by 'a tailor-made form of local government' which allows BID boards 'to raise property taxes, enforced by law, and use them in an excellent example of fiscal equivalence — all revenues are spent within the district. Free riders, and social or geographical cross subsidies, are thus avoided' (*ibid.*: 191). Some examples mentioned by Graham seem even more striking, such as foreign direct investment enclaves in Brazil, where 'new auto plants are being equipped, at direct municipal and Federal expense, with their own private universe of

glocal connections ... [while] at the same time, it has been demonstrated that social provision of basic services is being undermined across cities and municipalities as a whole because of the spiralling public costs of such strategies' (*ibid.*: 189–90).

I agree with Graham that the quasi-privatization of public spaces and local attempts at fiscal secession associated with business districts are important issues. But, focusing here on the fiscal secession problem, I wish to challenge Graham's suggestion that money flows generated by international capital hot spots are basically confined to the socio-spatial subsystem formed by these 'enclaves', with no 'leaks' toward their local, regional or national environments. I argue that a comprehensive mapping of money flows is a crucial element in the discussion whether business development areas are subsidized by or bringing revenue to the broader local community. I'll make two brief points. First, tax revenues represent only a limited share of the total revenue generated by business districts. A usually larger part of this revenue goes into the remuneration of the people working there, and at least a part of this money benefits the environment of the hot spots. The same holds for investments made by firms in the district, etc. Second, focusing on fiscal revenues, it must be kept in mind that not all taxes are local. Part of them are collected, and their revenue is redistributed, at a broader (especially national) level. These flows should also be integrated in the analysis. In some cases, although by no means all, it probably changes the answer to the (admittedly crude) question of who subsidizes whom.

The Ile-de-France, the French capital region, taken as a whole, is a good example. Partly due to the French Jacobinic (centralizing) tradition, the region concentrates a very high proportion (as compared to its area) of the national population, jobs, research centres, administrations etc. Advanced telecommunications infrastructures are considerably more developed (in quantity, quality and diversity) there than in any other part of France. Half of the total national telecommunications traffic is confined within the Saint-Lazare – Etoile – La Défense five-miles-long 'hot spot' district. Now, does this make the Ile-de-France as a whole a socially undesirable enclave, a premium network space misappropriating public money? The issue cannot be settled without taking into account the other side of the coin: every year, due to its high productivity, the Ile-de-France is the source of a fiscal transfer to the rest of France of approximately 150 billion francs (23 billion Euros), which represents 10% of the French national state's budget (Davezies, 1999). Hence, the rest of France to a significant extent benefits from the productivity and the competitiveness of the French capital region and its over-concentration of people, qualified jobs, private and public money, and infrastructures. Note that this transfer is not a transfer of part of the revenue of the local taxes; it is achieved through social security and income taxes (which are raised and redistributed by the national government).

Networks and the social and functional specialization of space

In his discussion of business areas, Graham also raises the issue of the privatization or semi-privatization of portions of public space. Graham denounces the deliberate design and privatization of premium network public spaces. I wish to make two objections to his argument.

First, exclusionary urban design is not always deliberate. For example, Graham attributes to 'carefully designed local disconnections' the poor accessibility to 'inward-looking' shopping malls by foot or by public transit (2000: 195). I would argue that, often, pedestrians and people travelling by public transport are neglected or even just forgotten rather than deliberately excluded. In Paris, there are many instances where access by foot to public transit stations is 'virtually impossible or extremely hazardous', even though nearly all users (clients) of the transit system are pedestrians immediately before and after they use public transport! Symmetrically, consider, for example, the Porte de Bagnolet shopping mall and car-rail hub on the eastern side of the city of Paris.

There, the most disadvantaged users are (or at least were, before improvement works were carried out) the people coming by car — by far the largest group of customers of the shopping mall. Reaching and returning to the mall's car parks from the surrounding road network was incredibly complicated and the paths between those car parks and the shopping centre and underground station were desperately ugly and dirty. But this situation was not created purposefully: rather than deliberate misconceptions, it was, simply, poor architectural design and building management (Margail *et al.*, 1996). More important, though, improving access to shopping malls by alternative travel modes, desirable as it undoubtedly is, will not solve the general issue of 'car dependence' (Dupuy, 1999), i.e. the high cost borne by non-car owners in an automobilized society, when, for example, the grocery round the corner closes because of the new shopping centre ten miles away. But on the other hand, shopping malls are accessible to the vast majority of the population in industrialized countries and they cannot be labelled 'premium' spaces in the same sense as, for example, a gated community in which only households belonging to the richest 1% of the population could afford to live.

Second, the focus in Graham's paper on micro-local spaces is partly misleading, because it seems to imply that local connections are always important economically or socially. I would argue that some local relations are not that significant in a spatial organization increasingly characterized by the social specialization of spaces (a process hampering of even the co-presence of and intercourse between diverse social, ethnic or religious groups) and the functional specialization of spaces (i.e. the splintering of space, especially at the infra-urban level, into separate work, residential, commercial and leisure spaces). Naturally one may regret this trend of social and functional specialization. One may even relate it broadly to the expansion of network infrastructures and the generalization of automobilization. But I would argue that the 'privatization' of space basically results primarily from the social and functional specialization of space, and that CCTVs or 'fortress' urban design are a consequence of, or at most a support to, these processes rather than the novel development of premium network spaces. In 'traditional' dense cityscapes, such as that of the City of London, physical enclaves are more striking because of the spatial proximity of other spaces. However, the use of space by individuals or social groups, including 'less powerful' ones, is decreasingly determined by physical distance. In this perspective, I wonder whether the physical, electronic and private police-enforced locking-up of the City which occurred over the past decade really changed the life of the residents of the neighbouring Hackney borough. Would they have gone to the City anyway?

Conclusion

A thorough discussion of the arguments developed by Stephen Graham here would call for a much longer article than this already long one. In this comment, I have discussed examples that in my view stand in contrast with his (2000) narrative of the development of 'premium network spaces'. In closing, I would like to emphasize the three main points of my argument.

- 1 The secular trend in access to basic utility services in old industrialized countries was a trend of generalization. In those countries, water, electricity and telephone networks have reached the point of universalization in the course of the twentieth century (see the current debates on 'universal services'). In developing countries, the diffusion of networks was limited to parts of urban areas, but not always for deliberate purposes of social exclusion. And available evidence suggests that regulatory reforms that have affected utility industries worldwide for the past two decades have not systematically aggravated the social disparities in access to basic network services. On the other

hand, it is true that universal domestic access to basic utility services in developing countries will not be attained in the short or medium term. Utility services are increasingly differentiated technically and economically but not always at the expense of aggravated disparities of access among social groups (including lowest income groups, although the situation of the poorest individuals and households remains in some areas a major policy issue). Of course, one should be aware that at a given point in time, patterns of access to network water supply are very different from patterns of access to the Internet.

- 2 Not all disparities among spaces are socially undesirable. At least, residential spaces should be distinguished from business spaces. Contrary to what Graham seems to imply, it is not *a priori* shocking that business districts (or 'enclaves', as he puts it) should benefit from enhanced transportation, telecommunications and other infrastructure services, compared to residential districts: the needs of firms are simply different from the needs of households. The key issue is the extent to which the economic achievements of these districts benefit the surrounding population. Social fragmentation among residential areas is more questionable, because there is an intrinsic value to the possibility of relations among diverse social groups (note, though, that co-presence does not mean intercourse). But I would argue that infrastructure fragmentation is secondary in this process: differential supply of utility services does not make secessionary spaces; rather, secessionary spaces sometimes allow for differential supply of utility services.
- 3 The notion of 'premium *network* spaces', which implies that, in general, the quality of a given space is determined by the quality of network services supplied to it, is misleading. The notion of 'premium *networked* spaces' would seem more appropriate, because it refers more explicitly to social or economic/fiscal premium spaces supplied with tailored network services. But the social and functional specialization of spaces at the infra-urban level generally results from dynamics that, I think, have little to do with premium network supplies. Thus, premium network supplies may not even be a good indicator of premium spaces, because seemingly homogeneous and standardized infrastructures can coexist with strong socio-spatial fragmentation in city areas (based on schooling or safety considerations, in particular).

Finally, I would like to point out that we should be cautious not to make final statements on processes that are clearly not stabilized. I therefore fully agree with Graham's final recommendation that we keep investigating the complex relations between networks and territories. I would emphasize four directions: (1) integrating the role of historical time (the time of cities and the time of networks) in order to distinguish between differences in *stages* and differences in *logics* of networks development; (2) differentiating between developed, newly-industrialized and other developing countries, even though some dynamics may be common to different contexts; (3) differentiating between large cities, small towns and rural areas and between dense and non-dense areas; and (4) possibly the most important, analysing the influence on network services provision of socio-political regimes. On this last point, I'm at one with Graham and Marvin (2001: 417), who stress the need to 'explore in detail the complex and diverse processes of governance that support, *and resist*, processes of splintering urbanism' (my emphasis).

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