

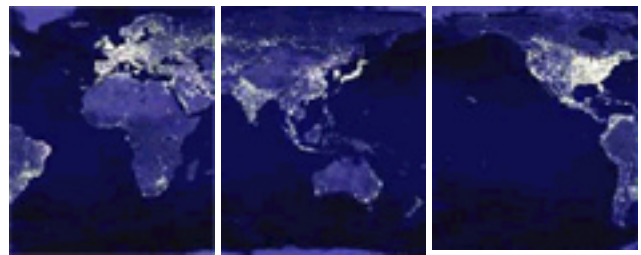
Sydney Globalizing: A World City in National, Pacific Asian and International Context¹

1. Introduction

The study presents an overview of contemporary metropolitan development in Australia, with special reference to Sydney, considering the globalization of economic activities, liberalization of financial markets, deregulation of labor markets and the increased use of information and communication technologies (ICT) in production technologies and consumption goods. These trends put individuals, firms, regions, and nation states under stronger and new forms of competitive pressure. Comparative advantages based on natural resources lose importance to competitive advantages, which are socially created. Since these are based on learning, knowledge and innovation, they are all dependent on highly developed institutional frameworks - private, public and intermediate. In spite of the globalization of economic activities, many places, cities or regions, remain agglomerations of extremely centralized and intense economic exchange, where spatial and socio-cultural proximity between economic agents is an essential ingredient for viability and competitiveness in world markets (Storper 1997). Some examples of such high localization are 'industrial districts' formed for the most part by specialized small and medium firms, exporting design-intensive high quality goods, high technology regions or central business districts of metropolitan regions.

In Australia globalization, deregulation and liberalization reinforced structural changes in the composition of industries and occupations. With the large and populous 'neighboring' countries of Southeast Asia showing rather continuous population and

economic growth, Australia felt the pressures of globalization particularly strongly, since both low labor cost and technological advances in these countries



challenged the viability of Australian manufacturing industries.

2. The rise of Pacific Asia and new forms of urbanization

The rise of first Japan to an economic superpower within a couple of decades, and then the rapid catching up of the Asian 'tiger states' Hong Kong, Singapore, Taiwan, South Korea as industrialized countries, followed by another round of industrialization in ASEAN countries like Thailand or Malaysia, turned Pacific Asia into the world's fastest growing macro-region. In recent years China also has embarked on a rather stable path of economic development, giving the region yet another durable growth impulse. With this strong economic growth, which is combined in most countries with population growth, new phenomena of urbanization came into existence (Douglass 2000, Yeung 2000). The highly urbanized coastal regions of Pacific Asia are progressively more inter-

¹ This text contains the summary and conclusions, selected figures and references of a report commissioned by the Bauhaus Kolleg (No. III: Serve City), Bauhaus Dessau Foundation. The numbering in the current text largely coincides with the systematic of that report. For complete information (incl. sources, data, definitions etc.) see the full version of the study at <http://www.bauhaus-dessau.de/kolleg/servecity/download.php>.

linked by economic and infrastructural ties, forming a gigantic *megaurban corridor*. A number of subsystems, smaller sized megaurban corridors, or growth triangles, can be differentiated within this system of populous and dense agglomerations. Some of the mega cities of these corridors have developed into *megaurban regions*, where dense metropolitan centers

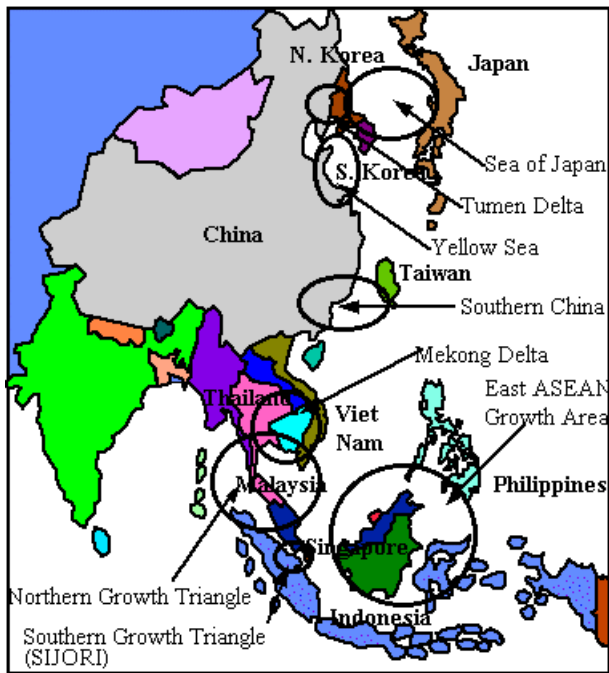


Fig. 1

are ever more interconnected to far outlying former rural areas. Among those megaurban regions several approach the twenty million inhabitants threshold, e.g. those of Jakarta or Manila. A number already exceed that level by far like Beijing or Hong Kong-Guangzhou. And the largest ones, Tokyo and Shanghai, now accommodate close to 40 million inhabitants.

With the rapid urbanization in Asia Pacific, many countries and cities experienced a significant change in their economic structure. The two city states, Hong Kong and Singapore, are the most compelling examples of that restructuring (Chiu et al. 1997). Both, being former colonies of Britain, departed on policies to industrialize in the 1960s when their former roles as entrepôt trading and military bases were no longer sufficient to secure economic prosperity. Still under British rule, Hong Kong received a forceful economic and population boost by immigration from China and developed a strong industrial base in the 1970s with broad participation of indigenous capital and talent. Singapore, becoming an independent nation in 1965, followed on a similar

growth path slightly later and with a stronger dependency on foreign investment (Perry et al. 1997). Both city states turned into highly urbanized and industrialized regions being closely integrated into the worldwide division of labor, performing large scale, standardized production at the lower end of the value chain. However, over time there was a gradual upgrading of their economic structure towards high value production and different kinds of services like finance, trade, management and producer services. Within only a twenty year period from 1980, both Hong Kong and Singapore have by now reached per capita income levels of highly developed countries.

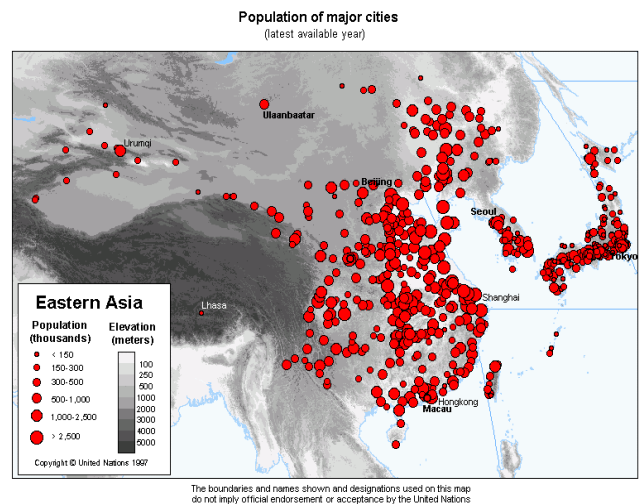


Fig. 2

The economic restructuring was accompanied by a spatial restructuring, the metropolitan centers of the city states developed into concentrations of knowledge-intensive activities, business and financial services. Standardized manufacturing and other space intensive production has been relocated into neighboring regions or states or even into the (currently) 'newly' industrializing ASEAN countries or China. In the case of Singapore, it is locations in the state of Johor (Malaysia) where manufacturing is increasingly performed, and locations in Batam (Indonesia) where leisure and agricultural activities related to Singapore expand quickly. For metropolitan Hong Kong, it is in mainland China where large scale, space intensive and low cost production finds optimal locations. These locations may be as close as in the Special Economic Zone of Shenzhen, right on the border, that virtually exploded from economic and population growth in the past years, or in the heavily populated Pearl river delta, with its center Guangzhou, about 150 km northwest from Hong Kong (Yeung 2000). Hong

Kong, which is now a Special Administrative Region in China and except for certain foreign and military matters largely autonomous, has thus developed into a world or global city. It is specialized in information-based economic activities that link the local and regional resources of labor, knowledge and capital into the global flows. This applies similarly to Singapore, though, with its much smaller size, a strictly authoritarian state and a slower restructuring, these processes are not as pronounced. In the occupational structure of both cities, finance, management, trade and producer services gain ever higher shares.

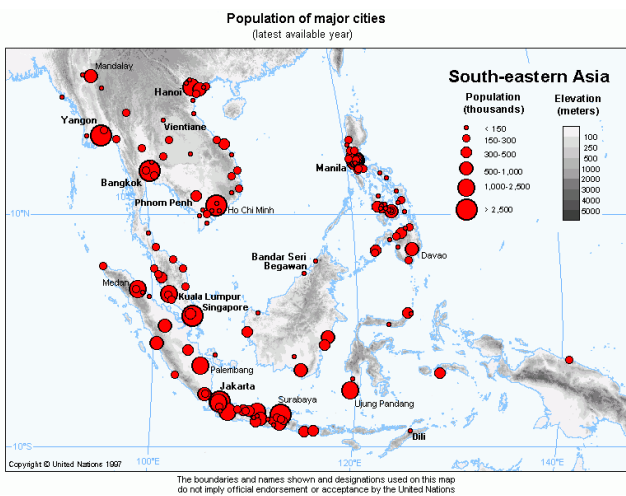


Fig. 3

Simultaneously Hong Kong and Singapore fervidly pursue policies to upgrade their basis in high technology manufacturing and services associated with ICT (Jessop/Sum 2000). In Singapore for example a true nationwide broadband network is being implemented to offer each citizen all technologically available modern applications of the information age for work, leisure and administrative issues. Two 'technology corridors' are being planned to combine top level public and private research institutions, national and international high technology firms with high standard housing and living environments into a 'multimedia utopia'. In Hong Kong concerns that the 'hollowing out' from manufacturing needs to be counterbalanced by innovative, high technology production and ICT related services have also lead to public and private initiatives to forward these modern sectors. The 'cyberport' designated to offer jobs to 12,000 professionals is scheduled to be completed by 2007, a 'cyperincubator' project is in process aimed at fostering the growth of new, innovative firms, and a huge project termed 'silicon harbor' intended to be a world center

for the production of next generation microchips is under discussion. Similar undertakings are planned or in realization in other Pacific Asian countries with the 'Multimedia Super Corridor' in Malaysia probably being the most prominent one (Corey 2000). Equipped with up-to-date electronic and physical infrastructure, it is designated to house two newly designed 'intelligent' cities, offering knowledge-intensive jobs to more than 100,000 employees in science, research, modern industries and services. These mega-projects in Pacific Asia stand for what Graham (2000) labels the 'constructing of premium network spaces' now found across the globe. The standardized, ubiquitous 'fordist' type of infrastructure is receding as hegemonic form and being replaced by place-specific new, customized high performance ICT infrastructure creating highly uneven spatial patterns of growth.

3. Australia globalizing: population, economy, and politics

The rise of Pacific Asia accelerated structural changes, as in all Western countries, so in Australia where the composition of industries and occupations changed rapidly. The main feature of change in the structure of industries is that manufacturing employment in Australia shrank rapidly and producer services' jobs increased. Taken together *property and business services* and *finance and insurance services* now employ almost as many people as the single largest subsector *retail trade*. As concerns occupational categories: the number of symbolic analysts increased stronger than the number of in-person service workers while routine production employment declined.

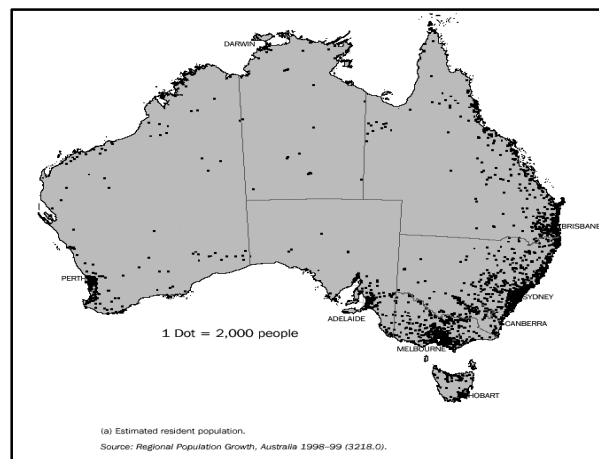


Fig. 4: Spatial distribution of population

The major political forces in Australia supported restructuring, liberalization and deregulation. In Australia, where employment relations were once extremely regulated and centralized, and tariff protection one of the highest in the industrial world, deregulation towards decentralized workplace-based bargaining was implemented (Lambert 2000), tariffs were cut down to OECD average and free trade is targeted. Most control and protection measures of the financial system were removed (Bora/Lewis 1977). With these changes in political regulation, social inequality increased in Australia through the late eighties and early nineties, though not to the extreme levels of other Anglo-Saxon countries (Scharpf 1999).

Still, in spite of radical restructuring, Australia's performance in international competition is subject to concern. In international comparisons of knowledge intensive economies, Australia holds leading positions only for infrastructure related indicators. For important technology and human capital indicators Australian values are below OECD averages. And, looking at Australian exports, although the share of 'elaborately transformed manufactures' has been increasing over recent years, resource based goods from agriculture and mining still comprise the largest share up to now. Imports, on the other hand, mainly consist of goods with high technological intensity, computers, ICT equipment, pharmaceuticals etc. In trade with services a similar structure exists. Australia's service exports are dominated by transport and travel (tourist) services, mainly for Asian consumers (O'Connor/Daniels 2000). Only a small share of service exports can be considered as producer services, and these are traded primarily with other Anglo-Saxon countries. Overall, there is a substantial deficit in producer services trade, which is rather untypical for an advanced country. A further element of imbalanced foreign relationships is revealed by the disproportion in direct foreign investment flows (cf. Miyake/Thomson 2001). The net sum of cumulated outflows and inflows over the past ten years reveals a huge deficit, contributing significantly to Australia's chronic current account deficit and leading to a large transfer of capital income to foreign countries.

4. Capital cities compared: economic restructuring and globalization

The inflow of foreign capital and the financial liberalization spurred the development of new markets, institutions and firms in Australia, which concentrated in Sydney (O'Connor et al. 2001). In *finance and insurance* services, a subsector of producer services according to the categorization by the Australian Bureau of Statistics, Sydney's leading position among Australian capital cities is most pronounced. Sydney has the highest numbers of employees in absolute terms and also in relation to population. In *property and business services*, the second subsector of producer services, Sydney also clearly leads before the other larger capital cities.



Fig. 5

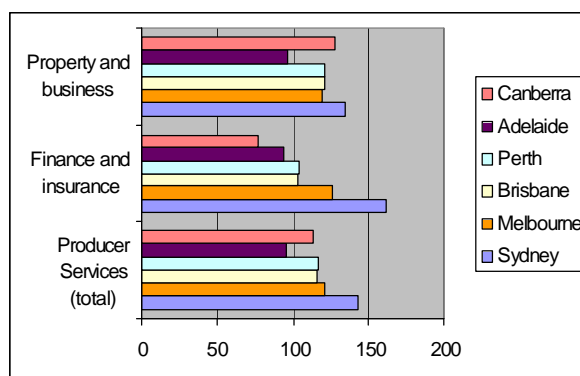


Fig.6: Index for number of service workers per 1,000 residents, Australia=100

The city's outstanding role as Australia's center of the financial sector is demonstrated even more compelling when the locations of bank head offices and foreign banks are compared; they overwhelmingly concentrate in Sydney. Together with the publicly controlled institutions like the Reserve Bank, Stock and Futures Exchange and a large array of smaller enterprises ancillary to the financial sector, such as rating and

counseling agencies, these firms constitute a prosperous economic cluster of firms involved in frequent, non-standardized and often face-to-face economic relationships. Higher level corporate functions of other sectors are also overly represented in Sydney, though, to a lower degree. Sydney is home to the majority of headquarter locations of the top 100 Australian firms and in addition to almost two thirds of the regional headquarters of foreign multinational companies.

Further impulses driving Sydney, and the whole metropolitan area, towards a knowledge-based regional economy come from the large magnitude of research and development expenditure and resulting R&D activities. Expenditure from the business sector, definitely the most important source of total R&D expenditure, is largest in NSW, second largest in Victoria. And the Sydney region in addition retains the largest number of locations of Cooperative Research Centers (CRCs), intended to serve as major nodes of cooperation between public and private institutions developing innovative products and services.

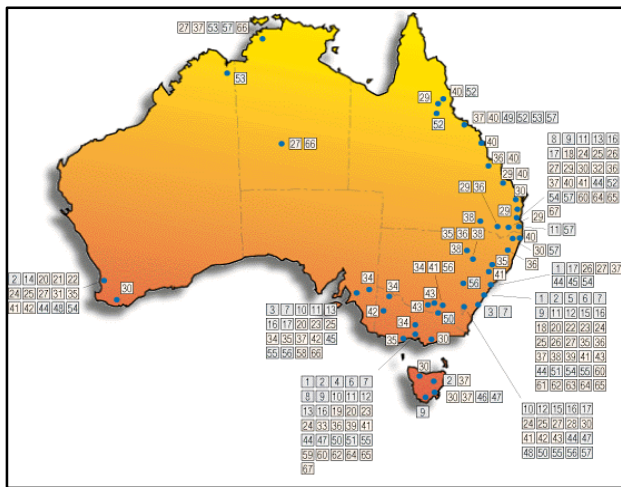


Fig. 7: Locations of Cooperative Research Centers

In R&D activities predominantly related to natural sciences and engineering and performed by a highly skilled and specialized workforce, the other capital city regions, in particular Melbourne, also contribute important shares to total Australian employment and output. Even the middle sized capital city regions of Perth, Adelaide and Canberra are locations of a sizeable numbers of CRCs. And when measured by their share of national income in consultant engineering services, for example, the state of Victoria and hence the Melbourne region, even outpaces NSW, that is basically the Sydney region.

A view cutting across traditional notions of sector limits or the goods and services dichotomy is proposed by theorists referring to the culture industries, which are often seen as paradigmatic for the emerging post-fordist organizational and locational structures. Though data limitations do not allow a comprehensive assessment of their importance or a comparison with other metropolitan regions, culture industries provide decisive additional strength to Sydney's economic base and reinforce the city's prime role. It can be shown, for instance, that Sydney's share of the total national employment in the *media and publishing* industry is above one third, which is two times as high as Melbourne's, and four times that of Brisbane (O'Connor et al. 2001). Major Australian firms in the media and entertainment business are located in Sydney and, in particular, many firms performing film and television program production now agglomerate in the region, in part performing specialized and post-production tasks for domestic and overseas producers. Although the digitalization of production in this sector opens new chances for international collaboration, limits to the development of indigenous firms are to be seen in the lack of inter firm networking and in the insufficient access to and relatively high cost of high bandwidth telecommunication capacity.

On the whole, the Sydney region appears to have profited from cumulative growth effects over the past decades. In some sectors, in particular finance and insurance and media and publishing, growth mechanisms seem to have developed, where increasing regional output of goods and services leads to increasing specialization and productivity, which in turn attracts new capital and labor, further contributing to output growth. As yet, these growth processes appear to continue, not fundamentally restricted by congestion factors or environmental limitations. Favorable locational factors persist, attracting new investment and inhabitants. Population growth for the Sydney statistical division is above the national average, with some inner city suburbs experiencing remarkable increases in population. The ethnic composition of the regions' population has become ever more cosmopolitan. If first and second generation immigrants are taken together, their share is around 60% of the population.

5. Sydney, Hong Kong, Singapore: competing world cities of Asia Pacific

While Sydney's predominance is, at least in many economic segments, rather obvious and unrivaled in the national Australian context, its position in the global system of world cities is far less clear and, moreover, challenged by other metropolises in Asia Pacific. Besides Tokyo occupying a prime position as a world city, primarily Hong Kong and Singapore compete with Sydney in the attraction of talent and international investment, such as the location of regional headquarters of multinationals. Data from the early 1990s, frequently quoted, suggest that Sydney was the location of over one third of such regional headquarters of producer service firms, Hong Kong accordingly was home to a little less than one third, other Australian cities and Singapore had far smaller shares. Recent data, covering a far larger data set of corporations and including regional headquarters and regional offices, however, indicate rather the opposite. Over one third of these locations are to be found in Hong Kong, a little less than one third in Singapore, and only 5% in Sydney.

Apart from such partial comparative results, research about global urban hierarchies has in recent years been founded on extensive theoretical and empirical work, allowing rather comprehensive comparisons and rankings of cities (Knox/Taylor 1995, Beaverstock et al. 1999). While much earlier work, like the writings of John Friedmann (1982, 1986) or Saskia Sassen (1991, 1994), concentrated on the theoretical foundations of world city research and roles of single, leading cities highlighting the interdependence of globalization and the emergence of world cities, much recent research has tried to remedy the severe data deficit that long hampered empirical substantiation of many claims in world city research. The GaWC Study Group and Network at the University of Loughborough (www.lboro.ac.uk/gawc) emerged as a focus of these endeavors publishing numerous contributions, which allow the position of single cities in global urban hierarchies or their role in global flows of information to be assessed.

At the initial methodological level, a hierarchical system of world cities is proposed. Based upon 'significant presences' of large producer services firms, this approach leads to an inventory of 55 world

cities and classifies them according to three levels (Beaverstock et al. 1999). The amount of 10 cities are rated as Alpha and also 10 as Beta world cities, 35 have Gamma world city status. The highest ranking cities, Alpha world cities, are then metropolises like London, New York and Tokyo with Hong Kong and Singapore on the same level. Sydney is considered as a Beta world city, as are places like San Francisco or Toronto.

On a deeper level of analysis each single location of 100 global producer services firms in 316 cities was judged according to its importance in the global network of that firm (Taylor/Catalano 2001). The resulting 'service values' can be aggregated for each city and define the global network connectivity of that city, which then is a quantitative measure for the strength of a city as node in the global network. London and New York's outstanding position is reaffirmed through that analysis, the two cities having by far the highest values of the connectivity index. Hong Kong's role is underscored with rank three, Singapore is placed on rank 6 and Sydney on rank 13. Since no other city in Asia Pacific except Tokyo (rank 5) is ranked as high as these three cities, these results confirm both the important roles they play in the integration of their macro-region into global markets and the differences in their hierarchical standing.

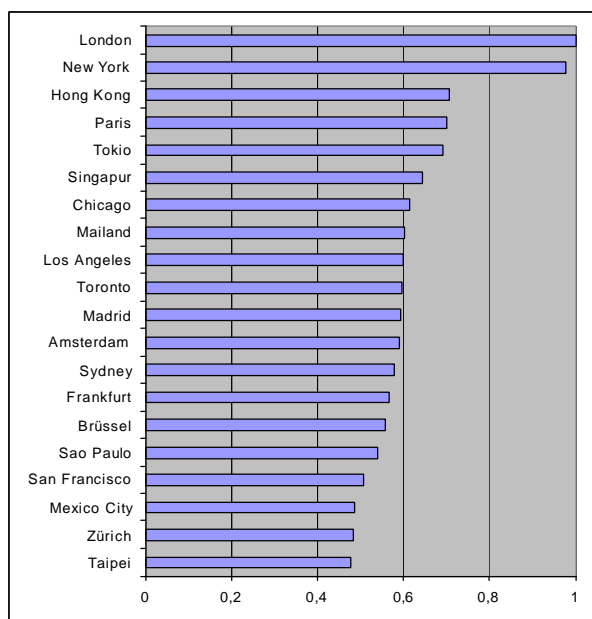


Fig. 8: Global network connectivity (London=1)

A further analysis of these differences in the hierarchical position of Hong Kong, Singapore and Sydney reveals that hierarchies of cities for single sectors of

producer services can deviate significantly from the summary index ranking. A data set for global service firms in 28 large cities along the Pacific Rim allows the role of each city to be assessed separately for the sectors accounting, advertising, banking/finance and law. While thus the role of Hong Kong and Singapore (as well as Tokyo) is unrivaled in banking/finance, Sydney leads in advertising before Singapore and Hong Kong. Melbourne and Auckland also perform here rather well. In law, conversely, American cities lead followed by Hong Kong, Sydney performs rather poorly. But in accounting Sydney's position is in the top group once again, second to Tokyo, outperforming Hong Kong and Singapore.

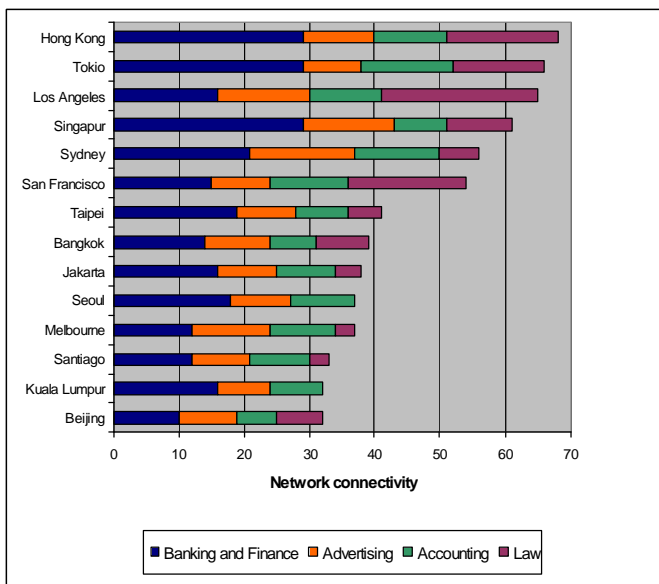


Fig. 9: Network connectivity of Pacific Rim cities

These results suggest moreover that the specific producer service sectors create different patterns of globalization, which in turn means that the detailed economic structure of world cities, beyond the significance of producer services in total and headquarter functions, can hardly be expected to be captured by a simple formula. How then can world cities be classified into groups of similar cities, and what are factors that describe their similarity or difference?

The GaWC group answered these questions by applying a factor analysis to a data set for 100 global service firms with offices in 123 cities (Taylor et al. 2001). Most of these cities can be grouped into one of five clusters of cities with very similar mixes of producer service firms and this five group pattern represents the fundamental structure of the data ma-

trix. A number of cities, however, in particular the leading ones, London and New York, remain unallocated which means that their service structure is clearly distinct from those of other cities.

The five clusters fused from similar cities are (1) United States cities, (2) Euro-German cities, (3) Old Commonwealth cities, (4) Pacific-Asian Cities and (5) Outer cities, where the latter comprise cities outside the main arenas of contemporary globalization. These classification results demonstrate the strength of geographic influences (on the structure of the cities' service mixes) combined with socio-economic and historical influences. The latter are manifested in the cluster of Old Commonwealth cities, including mainly cities that once performed important colonial functions, from Calgary in Canada down to Auckland in New Zealand.

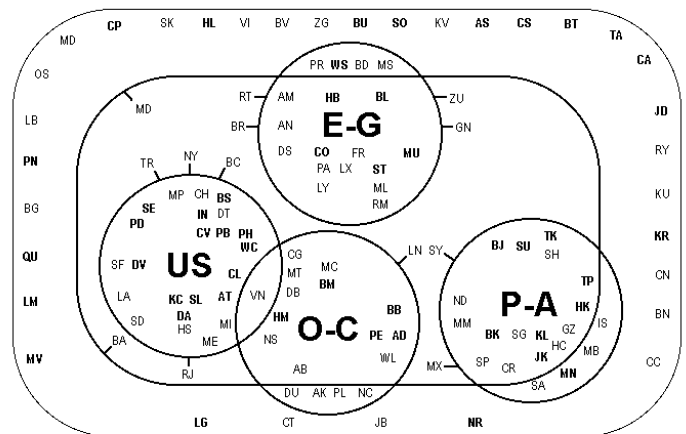


Fig. 10: Five clusters of cities with similar producer services mixes

Hong Kong and Singapore, however, are not fused with the group of Old Commonwealth cities, but show the highest correlations to the cluster of Pacific-Asian cities. They have now acquired important functions on the global level, independent from their historical heritage. Sydney plays yet another role in that analysis, it is unallocated like many other important world cities. If anything, it has certain degree of similarity with Pacific-Asian cities. Since Sydney, with its cultural and historical roots in the Commonwealth, is the only city in Australia and New Zealand displaying these characteristics, this indicates that Sydney has taken over new functions in global service activities and is moving towards a stronger integration with the rapidly developing Pacific Asian hemisphere and the wider world markets in general.

One key sector where Sydney has attracted important functions is the global culture industry. While this sector has largely been disregarded in empirical world city research, its fundamental significance for post-fordist restructuring and urban development is widely recognized. In an analysis published by the GaWC group, constructed similar to their basic inventory of world cities, a classification of 284 cities is performed with data for almost 2800 locations of 33 global media firms (Krätke 2002). Only 39 of all the cities included are then classified as ‘world media cities’ of which 7 are rated with the highest status (Alpha), 15 with medium status (Beta), and 17 with the lowest status (Gamma).

One essential finding is that the locations are strongly concentrated in the higher ranking world media cities. The other is that in this classification some cities have rankings very similar to those in the basic world city inventory, but others are very differently classified. The first applies to New York and London, which are both unmistakably again at the apex of the ranking, followed with some distance by Paris and Los Angeles. Then a large gap appears between a whole array of 18 cities and these four cities at the top. These 18 cities are the remaining Alpha and all Beta world media cities. With only two exceptions, namely Toronto and Sydney, all 18 cities are located in Europe, distributed across its space rather evenly. Sydney emerges as the clearly dominating world media city in Asia Pacific. Singapore and Hong Kong reach only Gamma status, so do Tokyo and Melbourne. In the worldwide networks of global media firms that are strongly shaped by European locations, reflecting Europe’s cultural force and diversity, Sydney consequently takes a very prominent position. It is obviously the place for many firms to perform decisive functions, integrating the Asian Pacific space into global media markets.

6. Sydney’s socio-spatial structure and development

The restructuring and globalization of Sydney’s economic base over the past decades and changes in political regulation have created winners and losers among the urban population of Sydney, as they have in other metropolitan regions. The resulting spatial

pattern of socio-economic ‘opportunity’ and ‘vulnerability’ has recently been examined for all 240 Statistical Local Areas (SLAs) of the Australian mega metropolitan regions (Baum et al. 1999). These SLAs, largely equivalent to Local Government Areas (LGAs) or local communities, have been classified on the basis of a wide range of socio-economic indicators using cluster analysis. As a result, nine clusters of communities can be identified that span a continuum, ranging from one cluster of highest opportunity (No. 6) to one cluster of severest vulnerability (No. 8). Six clusters lie in between that represent different degrees of either opportunity (No. 2, 3, and 1) or vulnerability (No. 7, 4, and 9), and are also differentiated by socio-spatial characteristics. One cluster is placed in between these two groups (No. 5).

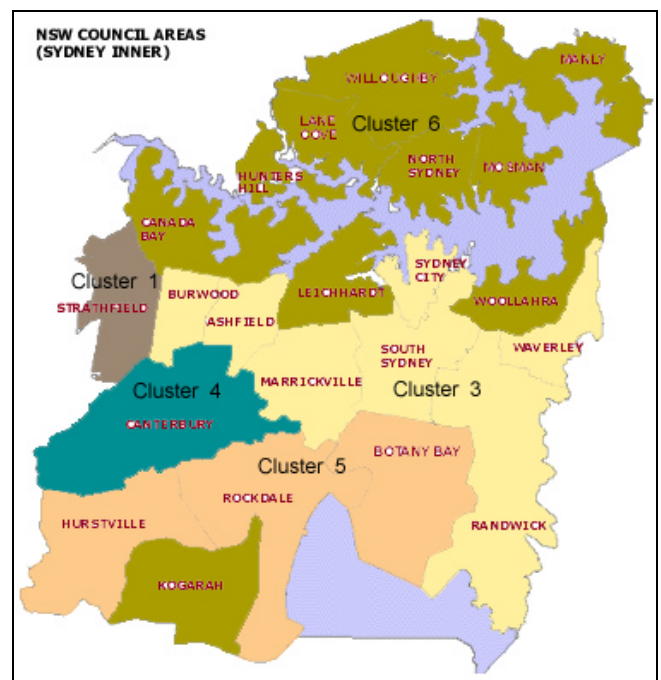


Fig. 11: Clusters of LGAs in Inner Sydney

Almost all communities of the northern part of inner and outer Sydney belong to the first cluster (No. 6), representing the highest opportunity levels. In relation to the average of all metropolitan communities, this cluster is characterized e.g. by the highest share of symbolic analysts, the highest share of high income households and the lowest unemployment rate. The opposite conditions are given in the communities of the cluster with severest vulnerability (No. 8). In comparison to the overall metropolitan average, this cluster is typified by a very high share of routine production workers, the highest share of low income

households and the highest unemployment rate. In Sydney, not a single community is classified into this cluster of severest vulnerability, marking a strong contrast to Melbourne, where about a dozen of communities are ordered into this cluster.

A number of Sydney's communities are, nonetheless, grouped into (other) vulnerability clusters. Some of these communities are in the inner Sydney region, but the majority are located in the outer metropolitan region. The burdens of restructuring and globalization in metropolitan regions thus appear clearer in Sydney's outer communities, as well as in other cities experiencing painful restructuring, in particular, in Melbourne, while the positive effects are exposed in Sydney's affluent inner and northern suburbs.

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- Fig. 6: see report Fig. 4-4.
- Fig. 7: www.isr.gov.au/crc/centres/append/app5.html.
- Fig. 8: Taylor/Catalano (2001), own graphical illustration.
- Fig. 9: GaWC Dataset 8.2, own calculations, see report.
- Fig. 10: Taylor, Catalano, Walker (2001).
- Fig. 11: Baum et al. (1999), own graphical illustration.