
Guest editorial

A crisis of industrial and business networks in Asia?

Asian networks in crisis?

Just like their predominance in earlier discourses of the ‘Asian miracle’ during the late 1980s and early 1990s, ‘networks’ have once again become the core explanatory variable in the latest wave of counterdiscourses of the ‘Asian economic crisis’ of 1997–98. The only difference is that networks are now perceived *not* as a universal panacea for economic development and prosperity, but rather as an evil ‘thing’ whose disturbing practices are deemed as a direct *cause* of the Asian economic crisis. How often do we hear today that the media and popular press outside Asia make a blanket condemnation of networks as the dark side of Asian capitalism(s)? Neoliberal views, particularly those championed by the International Monetary Fund (IMF), are extremely influential in this regard. To them the Asian economic crisis is a consequence of ‘crony capitalism’ in which nepotism and corruption are common among members in the same networks (for example, Lim, 1997; Rosenberger, 1997; see also Bello, 1998; Haggard and MacIntyre, 1998; Lo, 1999; Wade and Veneroso, 1998; Yeung, 2000a). The neoliberals argue that such networks in Asia as the *chaebols*⁽¹⁾ in South Korea, the *keiretsus*⁽²⁾ in Japan, Chinese family businesses throughout Asia, and crony-capitalists in Southeast Asia have been facilitated by the self-interested and utility-maximising behaviour of state officials from South Korea and Japan to Indonesia and Malaysia. They have produced a combined effect of massive accumulation of bad debts and bribes, unequal distribution of wealth and business opportunities, opaque business environments with high risk and uncertainty, or simply the unbearable ‘Asian way’ of business practice and economic development. Backman (1999) has recently termed the downfall of the Asian economies the ‘Asian eclipse’.

It now becomes clear that an appropriate understanding of the *nature* and *construction* of industrial and business networks in Asia is very important to how we interpret and grapple with the Asian economic crisis (and the subsequent Asian revival?) Are these networks really the fundamental cause of the Asian economic crisis? Is there any distinctive feature in these networks which exposes them to higher risks and uncertainties? Are these networks simply indispensable in the material construction of Asian economies? What are the historical and geographical specificities in the constitution of these networks? This special issue does not purport to answer all these questions. Neither does it aim specifically at examining the causes and consequences of the Asian economic crisis (see special issues of several other journals edited by Amin et al, 1998; Chang et al, 1998; Higgott and Rhodes, 2000; Kelly et al, 2000; McNeill and Bockman, 1998). It does aim to show, however, that industrial and business networks are *enduring* features of Asian capitalism(s) and their sociospatial constitution is predominantly organised at the firm and industry levels. To conflate this organisational scale of industrial and business networks in Asia with the national scale of economic miracles and crises is a grave mistake, as manifested in the

⁽¹⁾ *Chaebols* refer to large conglomerates of South Korean companies which owe their rapid growth and development in the period after World War 2 to strong state support (see Wade, 1990).

⁽²⁾ *Keiretsus* refer to Japanese intermarket business groups combining ownership and production networks (see Gerlach, 1992).

neoliberal literature on both the Asian miracle and the Asian economic crisis. Though they may suffer from the general contraction tendencies of the crisis, networks per se cannot and do not explain the origin and causes of the Asian economic crisis.

More specifically, this special issue has two major objectives. First, it aims to evaluate the role of *space* in the organisation of industrial and business networks in Asia. So much of the recent literature in economic geography has privileged the role of geographical proximity in explaining the spatial agglomeration and untraded interdependencies of economic activities (see Yeung, 2000b). The empirical evidence for this tendency towards territorial organisation of production networks is derived largely from studies conducted in North America (for example, Scott, 1998; Storper, 1997) and Western Europe (for example, Cooke and Morgan, 1998; Grabher, 1993). To date, only a handful of geographical studies have been conducted on industrial and business networks in Asia (for example, Cho, 1997; Hsing, 1996; 1998; Izushi, 1997; Park, 1996; Tan and Yeung, 2000; Yeung, 1997; 1998a). All five papers in this special issue are therefore based on empirical research and are expected to contribute to our empirical understanding of the nature and organisation of industrial and business networks in Asia. As far as possible, I have chosen the papers to cover virtually all major industrial and business networks in Asia, including Japanese keiretsu networks, Taiwanese small and medium firm networks, Chinese business networks, and global commodity chain networks.

Second, this special issue aims to provide some theoretical insights into the *social* and *institutional* mechanisms through which business firms operate within and beyond their national boundaries. All authors of the five papers are committed to transcending the ‘undersocialised’ view of economic action most commonly held by neoclassical economists (as shown in the economic interpretations of the Asian economic crisis earlier). There is now an increasingly significant call by economic geographers to reexamine the concept of the ‘economic’ itself (Dicken and Thrift, 1992; Lee and Wills, 1997; Schoenberger, 1997; Thrift and Olds, 1996; Yeung, 1998b). Using the concept of *networks*, economic geographers (and economic sociologists) have shown that economic action is often embedded in dense webs of ongoing social relations constituted in *and* through space. As observed by Thrift and Olds (1996, page 322), “The topological presupposition of the network is now in common usage in the social sciences as the emblem of an ambition to produce flatter, less hierarchical theories of the economy.” These network theories have indeed placed a much greater emphasis on the social and institutional foundations of economic transactions in today’s global economy. What then are the different approaches to the study of industrial and business networks in Asia? In this introduction to the special issue I present the theoretical contexts of subsequent empirically grounded papers and speculate on the future of networks in Asia.

Dissecting industrial and business networks in Asia

Three theoretical perspectives appear to be particularly influential in our understanding of the economic organisation of Asian capitalism(s): (1) Asian business systems and institutionalism; (2) the statist perspective (state-driven development and political-economic alliances); and (3) global and regional political economy (the global commodity chains perspective and the flying geese model). In the first place, Whitley’s (1992; 1998; 1999) *business system* approach offers a potentially fruitful avenue for understanding the nature and organisation of Asian business firms. He argues that “different kinds of business and market organization develop and dominate different market economies as a result of major variations in social institutions and constitute distinctive business systems” (1992, page 7). As such, the focus of this approach is not so much on culture per se (see Douw et al, 1999; Hefner, 1998; Redding, 1990), but rather on the *institutional structures* of particular business systems that are socially constructed over time and space.

The social organisation of business firms, as a result, is largely shaped by these institutional structures (see also Orrù et al, 1997).

For example, one of the best known characteristics of the Chinese business system is the role and the extensive influence of *business networks* or 'bamboo networks' (Hamilton, 1991; Weidenbaum and Hughes, 1996; Yeung, 1998a). Personal relationships or *guanxi* are one of the most important mechanisms to implement cooperative strategies in Chinese business networks, although their importance obviously changes over time and differs by geographical and sectoral (for example, property) contexts (see Guthrie, 1998; Tsang, 1998; Yeung and Olds, 1999). The reliance on personal relationships, however, is not restricted exclusively to the practice of the ethnic Chinese only (for example, Björkman and Kock, 1995; Lane and Bachmann, 1998; Olds and Yeung, 1999; Windolf and Beyer, 1996). Hodder (1996, page 52) for example, argues that "*Guanxi* (or reciprocity) is not a 'thing', or 'variable' or 'channel'. It does not characterise 'the Chinese', nor is part of a cultural mantle by which individuals can be identified as Chinese" (see also Dirlik, 1997; Nathan, 1993; Ong and Nonini, 1997; Yao, 1997). Instead, cooperative relationships in the Chinese business system are largely embedded in personalised business networks, whereas their Western counterparts tend to enter into cooperative relationships based upon firm-specific business strategies. Interpersonal relationships have served and continue to serve as the foundation of cooperative relationships in Chinese business networks (see Yeung, 2000c in this issue).

The *statist* perspective, on the other hand, tends to stress the role of the state and its apparatus in constructing industrial and business networks in Asia. This perspective originates from the developmental state literature which first made its impact in development studies during the early 1980s (Amsden, 1989; Deyo, 1987; Johnson, 1982; 1995; Wade, 1990). Much of this literature empirically focuses on how the state in Japan and several Asian newly industrialised economies (South Korea, Singapore, and Taiwan) has actively and directly shaped national developmental trajectories through the establishment of economic planning agencies, the pursuit of strategic industrial policy, and the promotion of 'national champions'. These national champions are private firms in highly promising industries and sectors. They are therefore strongly encouraged by the state through loans, grants and subsidies, monopoly rights, tax holidays, and import protection. The inevitable outcome of this strong involvement of the state in industrial development is the formation of strong state–business relations. In South Korea, the dominance of the chaebols in domestic business owes much to the support of its authoritarian regimes (Kim, 1997; Lee, 1997; McNamara, 1999; Steers, 1999). Replicating the success of the keiretsu networks in Japan, the chaebols have developed a cosy relationship with the state and its ministries for mutual gains. Today, the top four largest chaebols (Daewoo, Hyundai, LG, and Samsung) have made it to the top 100 transnational corporations from developing countries. They have become formidable competitors in the global economy (see Yeung, 1999a).

In Japan the keiretsus are not as dominant in Japan's industrial organisation as their counterparts from South Korea. Gerlach's (1992) excellent study of Japanese keiretsus has shown that much of their dynamics originates from their internal strength rather than from state support per se. Through cross-equity ownership of related firms, these complex networks of keiretsu linkages have enabled informal exchange of information on product and process innovations and facilitated the development of captive markets in Japan for mutual support. Their role in Japanese production networks abroad is much more varied because of geographical distance and host-country preferences for local content and local linkages. In the electronics industry, for example, whereas the keiretsus have played a very important role in the formation of regional production networks, Japanese firms have also relied heavily on these keiretsu networks for access to the global

market rather than for access to local suppliers (see Aoyama, 2000, in this issue). The agglomeration tendencies of Japanese electronics firms in major urban areas in Asia therefore do not necessarily reflect the territorial development of locally embedded intrafirm networks and spatial clusters specific to product chains and/or technology. They may be more related to the level of urbanisation and market development in individual Asian countries. These findings have major implications for understanding the role of firm networks in regional development and industrialisation in Asia.

In Taiwan, the state–business relationship also evolves from family-centred industrial organisation to one in which large firms have much better access to state resources and subsidies (for a case study of the semiconductor industry see Mathews, 1997; Mathews and Cho, 1998). Faced with the lack of competitiveness vis-à-vis large firms, small and medium-sized Taiwanese firms have to leverage their strategic advantages of flexibility and adaptability through informal networks and subcontracting relationships. Some of these small firms have even brought their networks across national borders into China (Hsing, 1998) and Southeast Asia (T J Chen, 1998). In this special issue Buck (2000) has specifically examined the growth, disintegration, and decentralisation of Taiwan's industrial networks in the context of state-led land-reform programme, redistributive agricultural policies, and conservative financial policies since the mid-1960s. He argues that the rapid proliferation of small firm networks in Taiwan was driven by the contingent actions of rural household entrepreneurs which culminated in tremendous rural industrialisation, a phenomenon we observe so well in mainland China today (see W Chen, 1998; Lin, 1997). These industrial networks organised by small and medium firms were the unintended consequences of state policies rather than a creation by state-led development.

In Southeast Asia, the case of Singapore points to a radically different empirical situation whereby the developmental state has actively developed the island economy into a major node of the global spaces of flows (Low, 1998; Perry et al, 1997; Rodan, 1989; Yeung and Olds, 1998). Instead of developing industrial networks constituted exclusively by local firms, the state favours the development and deepening of global–local linkages. On the one hand, Singapore can gain from the influx of foreign high-technology investments. On the other hand, these global corporations can benefit from Singapore's evolving local supplier networks (for a case study of Singapore's electronics industry see Brown, 1998; Perry and Tan, 1998). In other Southeast Asian countries, it appears that political-economic alliances based on patron–client relationships have taken precedence over state-driven industrial networks in these still developing economies. This preference for political connections is particularly important in the context of the state's ethnic-biased redistributive economic policies through which indigenous capitalists (known as *pribumi* in Indonesia and *bumiputra* in Malaysia) have been given special rights and privileges. A natural outcome is the rise of the so-called ersatz capitalism in these Southeast Asian economies (McVey, 1992; Yoshihara, 1988). In this case, the Chinese business system described above has embedded itself in the political-economic alliances of the host Southeast Asian countries. Whereas some ethnic Chinese have consolidated and strengthened their intraethnic group networks to overcome the hostile business and institutional constraints in the host countries, other more pragmatic ethnic Chinese have engaged in patron–client relationships with indigenous Southeast Asian capitalists. This process of 'network juxtaposition' has resulted in a hybrid network structure in Southeast Asia comprising family networks and political-economic alliances. Still other ethnic Chinese have chosen an 'exit strategy' by internationalising their business operations into other parts of Asia and beyond. In their internationalisation process, these ethnic Chinese from Southeast Asia have once again leveraged on their transnational networks of personal and business relationships (see Yeung, 1999b; Yeung and Olds, 1999).

At the broader global and regional scale, the *political economy of industrial and business networks* in Asia underscores the importance of such extranational forces as global capital and regional factor endowments. Linking industrial development in peripheral countries to the global economy, Gereffi (1996) proposes the global commodity chain (GCC) approach which originates from comparative sociology (Gereffi and Korzeniewicz, 1994; Hopkins and Wallerstein, 1986). He defines a GCC as “sets of interorganisational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the world-economy. These networks are situationally specific, socially constructed, and locally integrated, underscoring the social embeddedness of economic organisation” (Gereffi et al, 1994, page 2). The GCC approach is claimed to be historical and comparative and links both macro-historical concerns with structural changes in the global economy and microorganisational issues of production and distribution (see Whitley, 1996; 1998). In this special issue, Dicken and Hassler (2000) attempt to explain the network organisation of the Indonesian clothing industry by examining its interconnections to global commodity chains of apparel products. They observe that the Indonesian clothing industry is embedded in buyer-driven global commodity chains which connect domestic producers with international networks of production and distribution, particularly those organised by South Korean, Taiwanese, US, and European firms. The shape and the drivers of these production chains, however, are highly dependent upon the geographical markets of individual clothing firms. Whereas clothing firms exporting to Europe tend to depend on the representative offices of European retailers and wholesalers, US clothing companies tend to work with East Asian agents to source for their supplies.

Regional factor endowments also play an influential role in the spatial organisation of production networks by Asian firms, in particular Japanese firms. This observation has led to the rise of the so-called ‘flying geese model’ which postulates a nested pattern of regional industrial networks centred on Japanese firms. The formation of Japanese regional production networks is therefore explained by changing factor endowments in individual host countries and the technological superiority of Japanese firms. The model thus reflects the creation of dynamic comparative advantages that potentially allow host countries to ‘catch up’ with the leading ‘goose’ (Japan in this case). In practice, the model has been extensively criticised (see Bernard and Ravenhill, 1995; Hart-Landsberg and Burkett, 1998; Hatch and Yamamura, 1996). Contrary to the predictions of the model, there is little evidence of a real ‘catching-up’ process cascading through the various economies of the Asian region. Rather, the situation is one in which “Japan is actually flying further and further ahead of the regional flock. The division of labour in Asia, based on the technological capacity of each nation, is becoming more—not less—vertical” (Hatch and Yamamura, 1996, page 28). Situated within this pessimistic assessment of the applicability of the flying geese model to analyse Japanese production networks and regional development in Asia, Edgington and Hayter in this issue call for a more nuanced use of the metaphor and the model. But they have also made an observation that “As a metaphor for understanding Japanese FDI [foreign direct investment] in Asia, [the] flying geese [model] usefully and insightfully intimates an underlying political economy and captures the sense of broad sectoral and geographical patterns” (page 285). Similarly, Tsui-Auch’s (1999) recent comparative analysis of regional production networks in Hong Kong and South China reveals that the flying geese model helps distinguish the developmental role of Japanese capital in Asia. The pattern of regional development, however, reflects the persistence of unequal power relationships rather than ‘multiple catch-up’ or narrowing of gaps in technological and economic capabilities of individual countries.

The future of networks in Asia

Taken together, the five theoretically informed empirical papers in this special issue have shown that networks should be conceptualised both as institutional structures and as social processes; networks are constituted by a collective social order among their players and constituencies. In this regard, my own paper concludes that the dynamics of transnational business networks is “underscored by the role of social actors and the formation of actor networks in which power and practice are socially constructed through ongoing relationships” (2000c, page 217). What then are the future evolutionary trajectories of industrial and business networks in Asia? Not long ago in the late 1980s and the early 1990s, keiretsu networks were praised as the most important competitive advantage for Japanese firms to establish themselves successfully in North America and Western Europe (Gerlach, 1992; Reich, 1991; Tyson, 1993). Just a couple of years later, popular academic writing again praised the role of bamboo networks in propelling Asian prosperity (Weidenbaum and Hughes, 1996). The only difference is that, this time, ethnic Chinese outside mainland China were put in the limelight. Strangely enough, all this praise evaporated as soon as the 1997–98 Asian economic crisis had broken out. Instead, we heard ‘networks’ being condemned unreservedly as the main culprit or the fundamental cause of the crisis. Although this special issue is intended to shed some light on the nature and operations of industrial and business networks in Asia, the future of these networks in the postcrisis era remains highly uncertain. Two pressing issues are critical to our understanding of the future role and functions of networks in postcrisis Asia: (1) network instability and (2) methodological challenges.

First, although most researchers would acknowledge the usefulness of networks, few would recognise that the enrolment in networks is accompanied by obligations which, in the worst situation, can produce a ‘lock-in’ effect. The concept of networks implies some kind of leveraging upon group synergy beyond the capabilities of individual members. When a crisis (internal or external) sets in, this ‘lock-in’ effect tends to produce an effect through which all members of the network suffer from the misdeeds of other member(s) if it is an internally driven crisis, or from the extra burden of an externally driven shock. The inherent instability of networks may therefore hamper the performance of individual firms and actors. This theoretical point is best observed in the case of some Chinese business networks in Southeast Asia under siege in the recent Asian economic crisis (Yeung, 1999c). These effects are real and tend to be more applicable to externally driven networks in Asia or, in the words of Dicken and Hassler in this issue, “fragile networks”. In their conclusion, Dicken and Hassler make some speculations on the possible future shape of production networks in Indonesia’s clothing industry and question its long-term viability. To them, these fragile networks are highly vulnerable to the threat of relocation because buyers and agents from outside Indonesia may easily skip Indonesia in favour of other Asian and, even non-Asian, locations for cost-effective manufacturing of apparel products. Edgington and Hayter in this issue also conclude that the expansion and deepening of Japanese production networks and their spatial divisions of labour depend on the full recovery of Asia from its worst-ever economic and, in some countries, political crisis.

Second, how to study networks remains a fundamental *methodological impasse* in economic geography, organisation studies, and economic sociology. Although the five papers in this special issue have adopted a wide range of methodologies from case studies to large-scale surveys and historical research, there is still no clear consensus on how best to map out and disentangle networks and their constitutive relationships. Murdoch’s (1997, page 332) recent suggestion does not help much either:

“Network analysis is quite simple: it means following networks all the way along their length; there is no need to step outside the networks for all the qualities of spatial construction and configuration of interest will be found therein.”

There is a danger that paying excessive attention to actors in networks will descend into a mechanistic framework that atomises agents and focuses solely on the links between them, without a sense of the social processes that constitute these relationships. Perhaps some methodological middle ground needs to be reached so that studying networks means more than tracing networks all the way along their length (as exemplified in most global commodity chains and actor networks studies). It also requires us to think more deeply about the structural properties of these network relationships and their constitution in society and space (see Yeung, 2000d). Only through these kinds of empirically grounded analyses, will we then be able to understand not only why networks are enduring features in Asia, but also why they remain so *after* the recent economic crisis.

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References

- Amin A, Pieterse J N, Milner H (Eds), 1998, “Special issue on models and crisis: turbulence in Asian economies” *Review of International Political Economy* **5** 381–444
- Amsden A, 1989 *Asia's Next Giant: South Korea and Late Industrialization* (Oxford University Press, New York)
- Aoyama Y, 2000, “Networks, keiretsu, and locations of the Japanese electronics industry in Asia” *Environment and Planning A* **32** 223–244
- Backman M, 1999 *Asian Eclipse: Exposing the Dark Side of Business in Asia* (John Wiley, Singapore)
- Bello W, 1998, “East Asia: on the eve of the great transformation” *Review of International Political Economy* **5** 424–444
- Bernard M, Ravenhill J, 1995, “Beyond product cycles and flying geese: regionalisation, hierarchy and industrialisation in East Asia” *World Politics* **47** 171–209
- Björkman I, Kock S, 1995, “Social relationships and business networks: the case of Western companies in China” *International Business Review* **4** 519–535
- Brown R, 1998, “Electronics foreign direct investment in Singapore: a study of local linkages in ‘Winchester City’” *European Business Review* **98** 196–210
- Buck D, 2000, “Growth, disintegration, and decentralization: the construction of Taiwan’s industrial networks” *Environment and Planning A* **32** 245–262
- Chang H-J, Palma G, Whittaker D H, 1998, “Special issue on the Asian crisis” *Cambridge Journal of Economics* **22** 649–808
- Chen T-J (Ed.), 1998 *Taiwanese Firms in Southeast Asia: Networking Across Borders* (Edward Elgar, Cheltenham, Glos)
- Chen W, 1998, “The political economy of rural industrialization in China: village conglomerates in Shandong Province” *Modern China* **24** 73–96
- Cho M R, 1997, “Large-small firm networks: a foundation of the new globalizing economy in South Korea” *Environment and Planning A* **29** 1091–1108
- Cooke P N, Morgan K, 1998 *The Associational Economy: Firms, Regions, and Innovation* (Oxford University Press, Oxford)
- Deyo F C (Ed.), 1987 *The Political Economy of the New Asian Industrialism* (Cornell University Press, Ithaca, NY)
- Dicken P, Hassler M, 2000, “Organizing the Indonesian clothing industry in the global economy: the role of business networks” *Environment and Planning A* **32** 263–280
- Dicken P, Thrift N, 1992, “The organization of production and the production of organization: why business enterprises matter in the study of geographical industrialization” *Transactions of the Institute of British Geographers, New Series* **17** 279–291

- Dirlik A, 1997, "Critical reflections on 'Chinese capitalism' as paradigm" *Identities* **3** 303–330
- Douw L M, Huang C, Godley M R (Eds), 1999 *Qiaoxiang Ties: Interdisciplinary Approaches to 'Cultural Capitalism' in South China* (Kegan Paul, London)
- Edgington D W, Hayter R, 2000, "Foreign direct investment and the flying geese model: Japanese electronics firms in Asia-Pacific" *Environment and Planning A* **32** 281–304
- Gereffi G, 1996, "Global commodity chains: new forms of coordination and control among nations and firms in international industries" *Competition and change* **1** 427–439
- Gereffi G, Korzeniewicz M (Eds), 1994 *Commodity Chains and Global Capitalism* (Praeger, Westport, CT)
- Gereffi G, Korzeniewicz M, Korzeniewicz R P, 1994, "Introduction: global commodity chains", in *Commodity Chains and Global Capitalism* Eds G Gereffi, M Korzeniewicz (Praeger, Westport, CT) pp 1–14
- Gerlach M L, 1992 *Alliance Capitalism: The Social Organization of Japanese Business* (University of California Press, Berkeley, CA)
- Grabher G (Ed.), 1993 *The Embedded Firm: The Socio-economics of Industrial Networks* (Routledge, London)
- Guthrie D, 1998, "The declining significance of *guanxi* in China's economic transition" *The China Quarterly* **154** 254–282
- Haggard S, MacIntyre A, 1998, "The political economy of the Asian economic crisis" *Review of International Political Economy* **5** 381–392
- Hamilton G G (Ed.), 1991 *Business Networks and Economic Development in East and Southeast Asia* (Centre of Asian Studies, University of Hong Kong, Hong Kong)
- Hart-Landsberg M, Burkett P, 1998, "Contradictions of capitalist industrialization in East Asia: a critique of 'flying geese' theories of development" *Economic Geography* **74** 87–110
- Hatch W, Yamamura K, 1996 *Asia in Japan's Embrace: Building a Regional Production Alliance* (Cambridge University Press, Cambridge)
- Hefner R W (Ed.), 1998 *Market Cultures: Society and Values in the New Asian Capitalisms* (Institute of Southeast Asian Studies, Singapore)
- Higgott R, Rhodes M (Eds), 2000, "Special issue on beyond liberalisation: making economic policy in Europe and the Asia Pacific—comparisons, regions, linkages and lessons" *The Pacific Review* **12** forthcoming
- Hodder R, 1996 *Merchant Princes of the East: Cultural Delusions, Economic Success and the Overseas Chinese in Southeast Asia* (John Wiley, Chichester, Sussex)
- Hopkins T K, Wallerstein I, 1986, "Commodity chains in the world-economy prior to 1800" *Review* **10** 157–170
- Hsing Y-T, 1996, "Blood, thicker than water: interpersonal relations and Taiwanese investment in southern China" *Environment and Planning A* **28** 2241–2261
- Hsing Y-T, 1998 *Making Capitalism in China: The Taiwan Connection* (Oxford University Press, New York)
- Izushi H, 1997, "Conflict between two industrial networks: technological adaptation and inter-firm relationships in the ceramics industry in Seto, Japan" *Regional Studies* **31** 117–129
- Johnson C, 1982 *MITI and the Japanese Economic Miracle* (Stanford University Press, Stanford, CA)
- Johnson C, 1995 *Japan: Who Governs? The Rise of the Developmental State* (W W Norton, New York)
- Kelly P F, Olds K, Yeung H W C (Eds), 2000, "Special issue on economic globalisation and the Asian economic crisis" *Geoforum* **31** forthcoming
- Kim E M, 1997 *Big Business, Strong State: Collusion and Conflict in Korean Development* (SUNY Press, Albany, NY)
- Lane C, Bachmann R (Eds), 1998 *Trust Within and Between Organizations: Conceptual Issues and Empirical Applications* (Oxford University Press, Oxford)
- Lee R, Wills J (Eds), 1997 *Geographies of Economies* (Arnold, London)
- Lee Y-H, 1997 *The State, Society and Big Business in South Korea* (Routledge, London)
- Lim L Y C, 1997, "The Southeast Asian currency crisis and its aftermath" *Journal of Asian Business* **13** 65–83
- Lin G C S, 1997 *Red Capitalism in South China: Growth and Development of the Pearl River Delta* (University of British Columbia Press, Vancouver)
- Lo D, 1999, "The East Asian phenomenon: the consensus, the dissent, and the significance of the present crisis" *Capital and Class* **67** 1–23
- Low L, 1998 *The Political Economy of a City-state: Government-made Singapore* (Oxford University Press, Singapore)

- McNamara D L (Ed.), 1999 *Corporatism and Korean Capitalism* (Routledge, London)
- McNeill D, Bockman H (Eds), 1998, "Special issue on miracle, design and disaster: the crises of the East and Southeast Asian economies and their causes" *World Development* **26** 1529–1609
- McVey R (Ed.), 1992 *Southeast Asian Capitalists* (Cornell University Southeast Asia Program, Ithaca, NY)
- Mathews J A, 1997, "A Silicon Valley of the east: creating Taiwan's semiconductor industry" *California Management Review* **39** 26–54
- Mathews J A, Cho D S, 1998 *Tiger Chips: The Creation of a Semiconductor Industry in East Asia, 1975–2000* (Cambridge University Press, Cambridge)
- Murdoch J, 1997, "Towards a geography of heterogeneous associations" *Progress in Human Geography* **21** 321–337
- Nathan A, 1993, "Is Chinese culture distinctive?" *Journal of Asian Studies* **52** 923–936
- Olds K, Yeung H W C, 1999, "(Re)shaping 'Chinese' business networks in a globalising era" *Environment and Planning D: Society and Space* **17** 535–555
- Ong A, Nonini D (Eds), 1997 *Crossing the Edges of Empires: Culture, Capitalism, and Identity* (Routledge, London)
- Orrù M, Biggart N, Hamilton G G, 1997 *The Economic Organization of East Asian Capitalism* (Sage, London)
- Park S O, 1996, "Networks and embeddedness in the dynamics of new industrial districts" *Progress in Human Geography* **20** 476–493
- Perry M, Tan B H, 1998, "Global manufacturing and local linkage in Singapore" *Environment and Planning A* **30** 1603–1624
- Perry M, Kong L, Yeoh B, 1997 *Singapore: A Developmental City State* (John Wiley, Chichester, Sussex)
- Redding S G, 1990 *The Spirit of Chinese Capitalism* (de Gruyter, Berlin)
- Reich R B, 1991 *The Work of Nations: Preparing Ourselves for 21st Century Capitalism* (Vintage Books, New York)
- Rodan G, 1989 *The Political Economy of Singapore's Industrialization: Nation State and International Capital* (Forum, Kuala Lumpur)
- Rosenberger L R, 1997, "Southeast Asia's currency crisis: a diagnosis and prescription" *Contemporary Southeast Asia* **19** 223–251
- Schoenberger E, 1997 *The Cultural Crisis of the Firm* (Blackwell, Oxford)
- Scott A J, 1998 *Regions and the World Economy: The Coming Shape of Global Production, Competition and Political Order* (Oxford University Press, Oxford)
- Steers R M, 1999 *Made in Korea: Chung Ju Yung and the Rise of Hyundai* (Routledge, London)
- Storper M, 1997 *The Regional World: Territorial Development in a Global Economy* (Guilford Press, New York)
- Tan C Z, Yeung H W C, 2000, "The regionalization of Chinese business networks: a study of Singaporean firms in Hainan Province, China" *The Professional Geographer* **52** (forthcoming)
- Thrift N, Olds K, 1996, "Refiguring the economic in economic geography" *Progress in Human Geography* **20** 311–337
- Tsang E W K, 1998, "Can *guanxi* be a source of sustained competitive advantage for doing business in China?" *Academy of Management Executive* **12** 64–73
- Tsui-Auch L S, 1999, "Regional production relationship and developmental impacts: a comparative study of three regional networks" *International Journal of Urban and Regional Research* **23** 345–359
- Tyson L D, 1993 *Who's Bashing Whom? Trade Conflicts in High-technology Industries* (Institute for International Economics, Washington, DC)
- Wade R, 1990 *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (Princeton University Press, Princeton, NJ)
- Wade R, Veneroso F, 1998, "The Asian crisis: the high debt model versus the Wall Street – Treasury – IMF complex" *New Left Review* number 228, 3–23
- Weidenbaum M, Hughes S, 1996 *The Bamboo Network: How Expatriate Chinese Entrepreneurs are Creating a New Economic Superpower in Asia* (The Free Press, New York)
- Whitley R, 1992 *Business Systems in East Asia: Firms, Markets and Societies* (Sage, London)
- Whitley R, 1996, "Business systems and global commodity chains: competing or complementary forms of economic organization" *Competition and Change* **1** 411–425
- Whitley R, 1998, "Internationalization and varieties of capitalism: the limited effects of cross-national coordination of economic activities on the nature of business systems" *Review of International Political Economy* **5** 445–481

- Whitley R, 1999 *Diverging Capitalisms: The Social Structuring and Change of Business Systems* (Oxford University Press, New York)
- Windolf P, Beyer J, 1996, "Co-operative capitalism: corporate networks in Germany and Britain" *British Journal of Sociology* **47** 205–231
- Yao S, 1997, "The romance of Asian capitalism: geography, desire and Chinese business", in *The Rise of Asia: Critical Visions of the Pacific Century* Eds M T Berger, D A Borer (Routledge, London) pp 221–240
- Yeung H W-C, 1997, "Business networks and transnational corporations: a study of Hong Kong firms in the ASEAN region" *Economic Geography* **73** 1–25
- Yeung H W-C, 1998a *Transnational Corporations and Business Networks: Hong Kong Firms in the ASEAN Region* (Routledge, London)
- Yeung H W-C, 1998b, "The social-spatial constitution of business organisations: a geographical perspective" *Organization* **5** 101–128
- Yeung H W-C (Ed.), 1999a *The Globalisation of Business Firms from Emerging Economies* (Edward Elgar, Cheltenham, Glos)
- Yeung H W-C, 1999b, "The internationalization of ethnic Chinese business firms from Southeast Asia: strategies, processes and competitive advantage" *International Journal of Urban and Regional Research* **23** 103–127
- Yeung H W-C, 1999c, "Under siege? Economic globalisation and Chinese business in Southeast Asia" *Economy and Society* **28** 1–29
- Yeung H W-C, 2000a, "State intervention and neoliberalism in the globalising world economy" *The Pacific Review* **13** forthcoming
- Yeung H W-C, 2000b, "Organising 'the firm' in industrial geography I: networks, institutions and regional development" *Progress in Human Geography* **24** forthcoming
- Yeung H W-C, 2000c, "Embedding foreign affiliates in transnational business networks: the case of Hong Kong firms in Southeast Asia" *Environment and Planning A* **32** 201–222
- Yeung H W-C, 2000d, "Practising new economic geographies? Some methodological considerations", paper presented at the RGS–IBG Annual Conference, 4–7 January 2000, University of Sussex, Brighton; copy available from author
- Yeung H W C, Olds K, 1998, "Singapore's global reach: situating the city-state in the global economy" *International Journal of Urban Sciences* **2** 24–47
- Yeung H W C, Olds K (Eds), 1999 *The Globalisation of Chinese Business Firms* (Macmillan, London)
- Yoshihara K, 1988 *The Rise of Ersatz Capitalism in South East Asia* (Oxford University Press, Singapore)