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Geographies of production I

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I Introduction

In an era when (those) academics and scholars (with networked computers accessing well-resourced libraries) have become increasingly reliant upon downloading online publications, receiving email alerts about new journal contents, and becoming adept at the use of internet search engines to speedily locate key quotations, it is perhaps helpful to begin this review with some brief reflections on the nature, purpose and content of progress reports themselves. I first consider such reports at a general level, before turning to the specific case of 'geographies of production'.

A number of aspects of the production and consumption of academic knowledge appear different in the current era. In patterns conceivably becoming akin to 'fast fashion', publications are seemingly required to be short cycle, quick response and high trend (Reinach, 2005; Doeringer and Crean, 2006). The corresponding effects of *pronta moda*¹ (Dunford, 2006; Doeringer and Crean, 2006) upon progress reports are potentially divergent. It might be suggested, for example, that by the time a report is compiled and appears in print 'current' debates may have moved on to an extent as to make assessments seem

unfashionable. Alternatively, it may be that significant increases in the volume of available material and an expanding range of publication outlets make pathways through 'the literature' more influential in structuring our reading.

Academic work has long been shaped by a wide range of fashion arbiters, ranging from key reading lists provided to postgraduate students, to the choice of keynote conference speakers, to – even – the content of 'progress reports' (see also Gibson and Klocker, 2004). My intention thus is not to level a simple charge of academic faddism, nor to suggest that there necessarily has been a straightforward acceleration in the pursuit of novelty in recent years. Two decades ago, Taylor's progress report concluded that 'there is a new trajectory evident in industrial geography research – the formation of citation circles. They are particularly clear in the North American context reinforced by a tendency to quote only the most recent references' (Taylor, 1986: 412). Seven years ago Bassett (1999: 27–28) expressed a similar concern that 'frameworks, concepts and ideas [appeared to be] experiencing a rapidly diminishing half-life'. Nonetheless, it seems important to acknowledge the relative

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strength of certain recent changes in academic knowledge production and consumption. By their very nature, progress reports may be especially susceptible to pressures to document 'increased output and rapid conceptual shifts' (Bassett, 1999: 28), as they are set up to review 'recent' developments within different subdisciplinary walls.

At the same time, it also appears to have become more challenging to pursue work beyond the 'latest' sets of debates, in part because the physical availability of written work increasingly favours new publications over old. Book print runs are shorter; bookshops often stock only relatively new works; and the online availability of journals extends back for only limited periods. Pressures of space have led many academic libraries to store older volumes of journals in inaccessible locations. Again, without wishing to over-extend the argument, this is simply to suggest that a range of trends may now make it more challenging to discern the breadth and depth of intellectual trajectories.

The predecessors of the current report are commentaries on 'industrial geography', which appeared in *Progress in Human Geography* from its inception in 1977. Although there was some intersection with reports on the geography of services (from Daniels, 1985, to Tickell, 2002); summaries of geographies of money and finance (Leyshon, 1995; 1997; 1998) and reviews of work within a political economy tradition (Barnes, 1995; 1996; 1998; and Wills, 1999; 2000; 2002), it was industrial geography reports which generally engaged with many of the questions preoccupying economic geographers, including accounts of post-Fordism and flexibility (Ohuallachain, 1992; Malmberg, 1994); and agglomeration and localized learning (Malmberg, 1996). In the last set of three reports on 'industrial geography', Yeung first reviewed firm organization framed 'through such concepts as networks, institutions and regional development' (2000: 302). He then considered the regulation of firms and their production activities by 'sociocultural

practices' (Yeung, 2001: 294). A final report reflected upon writing on industrial restructuring and labour markets (Yeung, 2002).

Some three to four years ago, the title of progress reports was changed to 'geographies of production', reflecting 'a conscious decision on the part of the editorial board [that] 'industrial geography' was too narrow a range (and concept). 'Geographies of production' could subsume it as well as opening up a much more interesting range of possible issues' (Lee, personal communication, 2006). Rebadged under a new label, subsequent reports have been organized around debates on innovation systems (Bathelt, 2003); conceptualizations of knowledge flows and linkages within 'the cluster debate' (Bathelt, 2005: 204); and the current state of 'relational thinking' in economic geography (Bathelt, 2006: 224; cf. Sunley, 2006).

Much recent economic geographical writing has had a strong conceptual focus on debates surrounding – in very broad terms – networks, clusters, innovation, learning and knowledge. Many of these have been well rehearsed, not least within the preceding set of reports (Bathelt, 2003; 2005; 2006). A comment by Clark *et al.* prefacing an examination of the production networks of European small and medium enterprises seems apposite here: 'we recognize that there is an extensive, highly developed, and differentiated literature on networks in economic geography and the cognate social sciences. It is not our intention to review this literature yet again' (2004: 1306). My concern in this first of three reports, therefore, has been both to cast the net particularly widely, both in terms of the literature under review as well as to attempt to give relatively greater prominence to a range of case-study work. This should not be taken as a vulgar empiricism, but rather as a contention that some of the most interesting conceptual framings have emerged through new, often substantial, programmes of research. As Hudson has suggested, 'theoretical sophistication [should be supplemented by] empirical research of a

variety of sorts that is grounded in . . . different theorizations and their conceptions of valid evidence and knowledge' (2004: 467).

The following section considers work on changing geographies of production, with a focus on accounts of restructuring which consider the extent to which old(er) industrial regions are able to upgrade, or to escape 'lock in' effects. A third section summarizes new work on global production networks. In the fourth and final section, I reflect upon Third Italy, and industrial district accounts more generally, as an example of the extent to which academic debate potentially can become *conceptually* 'locked in' to particular (theoretical) pathways. In each section, the intent is to draw attention to recent literature which may track back to more established theoretical themes but at the same time provides an opportunity to recast conceptual frameworks. Highlighted areas include new research on 'old industrial regions' *outside* northern Europe; accounts of global production networks which move beyond exclusively morphological assessments of the shape of networks; and new interpretations of geographies of production within 'industrial districts'.

II Changing geographies of production: industrial restructuring, industry pathways and lock-in

A range of work on changing geographies of production in 'old industrial regions' (Hudson, 1989; 2005) has tended to focus upon regional development trajectories, often involving a detailed examination of specific sectors or firms (Todtling and Trippel, 2004; Schamp, 2005). Conceptually, discussions have been predominantly preoccupied with the extent of regional path dependency or 'lock-in'. Most commentators have closely followed Grabher's (1993) distinction between 'functional', 'cognitive' and 'political' lock-in.² Recent case-study evidence is equivocal on the extent to which old industrial regions may be able to 'upgrade': as Hassink and Shin note, 'the line between successful and open

regions and old, industrialized, insular, inward-looking areas can be very thin' (2005: 573). While attention characteristically has been drawn to the wholesale decline of old industrial areas, Schamp (2005) suggests that parts of the German footwear industry have negotiated change relatively successfully.

Several papers have underscored the effects upon particular places of long histories of corporate concentration. Beyond sectoral (over)specialization, geographies of production in certain regions may be closely dependent upon the fortunes of an individual firm and close attention to the historical geographies of restructuring has been seen as paramount in understanding the contemporary experiences of regions (eg, Hudson, 2005). In this vein, Chapman's (2005) account of transformations in the petrochemical industry reviews the implications of the restructuring of ICI's Teesside operations for industrial structures in northeast England. Dependency upon a particular firm had always brought certain dangers – and any withdrawal by ICI was always likely to mean disinvestment and job losses. At the same time, following the firm's disengagement, the acquisition of ICI's assets by a range of other companies might have had the potential substantially to rejuvenate corporate networks linking the region to national and international economies. Ultimately, however, Chapman suggests (2005: 611) that acquiring companies were likely to view Teesside as a 'less strategic location within [their] corporate geographies' and that they would be significantly less able to exert political leverage in attracting central government funding in the future. Corporate concentration in this example thus clearly demonstrates that 'territorially based advantages may mutate into liabilities' (2005: 597).

A degree of contrast is provided by Whitford and Enrietti's (2005) consideration of recent (2002) restructuring and crisis at Fiat Auto. Historically, Fiat's role in the Piedmont region was one of an 'absolute monarch' dominating and controlling supplier firms. Given such relationships, it might be

anticipated that twenty-first-century difficulties at Fiat might have damaging regional outcomes. However, significant transformations in the automotive production system are seen to point the way to new possibilities for the regional economy. Prompted in part by broader changes in global car production and consumption, Fiat sought to assist, support and coordinate supplier capabilities in the late 1990s through the introduction of schemes such as *Crescita Guidata* ('Guided Growth'). This system led to the development of new competencies, particularly within the realm of design, and enabled lower tier firms to diversify into new markets 'both in and out of the automotive filière' (2005: 779). Significantly too, firms which had been solely tied into national level production relations were pulled into an international arena. As a result, there may be potential for the region to move beyond dependency upon a single industry/employer. Recent developments 'have strengthened the regional industry and [have] led it to generate substantial independent capabilities and associational resources that could be harnessed in the service of real institutional change' (2005: 775).

Whitford and Enrietti (2005) suggest that, despite Fiat's truncation of the *Crescita Guidata* programme, future policy-makers might be able to utilize similar initiatives to promote economic development in Piedmont. Interestingly, although Whitford and Enrietti represent the programme as a 'break from the path of a hierarchical institutional history' (2005: 791), their recommendation that support be managed through (for example) the regional state implies the continuation of top-down relationships between (smaller) firms and coordinating institutions.

By implication, the characterization of 'old industrial regions' tends to presuppose a geographical corollary in places and spaces where economic development is characterized – relative to histories of production in the north and west – as 'new'. A range of recent papers does much to destabilize this dichotomy by portraying diverse sets of

changes under way in 'new' production locations. Tokatli and Kizilgün's (2004) consideration of the Turkish clothing industry reveals the ways in which a specific firm was able to shift away from subcontracted production for western clothing buyers, develop its own global brand and achieve success in both domestic and international markets. Although power relationships between global buyers and Turkish suppliers initially was one of subordination, a process which Tokatli and Kizilgün (2004: 232) refer to as the 'unintentional leakage' of production and logistical knowledge allowed Erak Clothing to develop the highly successful Mavi Jeans range. Reinach (2005) also provides a fascinating account of transformations in Chinese fashion production, which include the development of focused branding strategies by domestic manufacturers. Among other initiatives, Chinese firms not only acquired Italian-made textile machines, but also successfully recruited 'retired Italian artisans, whom ... they employ for a few years in order to absorb their "love of the product", namely all those little secrets of Italian productivity traditions that a machine alone could never reveal' (2005: 52–53).

At another level, van Grunsven and Smakman's (2005) discussion of apparel manufacturing in Singapore emphasizes that despite the apparent 'maturity' of the industry firms have been able to renew competencies and develop new production strategies. It is suggested that Singaporean firms are likely to maintain an important regional and global position through the increasing control and coordination of overseas production (2005: 678). That Singaporean developments do not appear to 'fit' (2005: 657) existing explanations of industrial decline – and particularly those which rest upon conceptualizations of path dependency and lock-in developed in northern and western contexts – raises important questions about the significance of global flows of knowledge. There has been considerable debate within anthropology and postcolonial labour history as to the extent to

which conceptual frameworks can or should be parachuted into one context from another (from an extensive literature, see Chandavarkar, 1998; Chakrabarty, 2000; Cooper, 2005). To take just one example, theoretical understandings of labour geographies might be enriched by attention to historical and geographical conjunctures of workplace relations: while western labour movements historically have been preoccupied with the struggle for a family wage, southeast Asian campaigns have closely revolved around the achievement of minimum individual wages (Elmhirst and Saptari, 2004: 41–42). Indeed, the dominant issue for labour organizing outside the west in recent decades has been obtaining the right to struggle at all. Notably, however, there have as yet been very few truly reciprocal theoretical ‘trading routes’ (Grabher, 2006) between what might be seen as ‘mainstream’ economic geography, and the work of scholars engaged in research beyond the west.

III Global production networks

Stimulated in part by a significant programme of work by Dicken (2003; and see also Yeung and Peck, 2003), there continues to be a strong interest in global production networks. Current concerns range from reconceptualizing the ‘multi-scalarity’ of networks as a means of addressing the recursive relationships between GPNs and particular regions (Coe *et al.*, 2004: 486) to investigating the role of institutions outside the firm – such as the national state – in configuring network relations (Liu and Dicken, 2006; see also Hess and Yeung’s 2006 review).

Lane and Probert’s (2004) comparison of the British and German clothing industries is an instructive account of the operation of production networks. Specifically they argue that even within an ostensibly highly ‘globalized’ industry it is important to understand the key role played by distinctive domestic institutional contexts. Significantly, Lane and Probert’s account is attentive to geographies of clothing production at a range of spatial

scales. Drawing in part upon – but also significantly developing – the so-called ‘variety of capitalisms’ approaches (see also Asheim and Gertler, 2005; Gertler and Vinodrai, 2005), Lane and Probert (2004: 244) present a detailed study of the ways in which ‘domestically anchored firms [are] inserted into a network of national, international and global relations with customers and suppliers’.

Different network dynamics are seen by Lane and Probert to shape competitive strategies and capabilities in each nation. Whereas German clothing firms have remained largely within the ownership of individual families, UK firms have been subjected to ‘de-listing [and] the break-up of formerly sizeable companies’ (Lane and Probert, 2004: 253), with concomitant effects upon the ability of British firms to upgrade skills or to make technological investments. German firms’ successes in foreign markets as well as producers’ capacities to retain control in the value chain also are attributed to the strength of regulatory systems and institutional support structures. Entrepreneurs are required to employ a ‘master craftsman (*Meister*)’; while a wage extension clause ‘stipulate[s] the adoption of industry-level wage rates even in non-unionized firms’ (Lane and Probert, 2004: 253), for example. Such situations contrast with a lack of market regulation in the UK, which, in part, has led firms to pursue low margin contracts in the ‘middle to low market segment’ (Lane and Probert, 2004: 255).

Although the British case does represent an example of the increasing subordination of clothing firms to more powerful retailers, the divergent pattern in Germany runs counter to dominant characterizations of buyer-driven clothing supply chains (as originally articulated by Gereffi, 1994). Such evidence leads Lane and Probert to suggest that large retailers should not always be characterized as actors with unassailable power in the clothing production network. While they find global production network approaches provocative, Lane and Probert (2004: 248) contend that many accounts lack sufficient empirical

substantiation: they note, for example, that '(Henderson *et al.*, 2002) ... do not [...] substantiate their alternative theoretical conceptualization with empirical data from systematic case studies'.

A range of more recent papers has begun to address this gap between theoretical exposition and empirical evidence (eg, O Riain, 2004; Leinbach and Bowen, 2004; Angel and Rock, 2005; Liu and Dicken, 2006; Hess and Coe, 2006; Weller, 2006; Parthasarathy and Aoyama, 2006; Grote and Taube, 2006; Johns, 2006; Coe and Lee, 2006; Yeung and Mok, 2006; Rock *et al.*, 2006). Importantly, however, Lane and Probert (2004: 263) emphasize that 'to understand the role of firms in global production networks, one first needs to study them in their domestic contexts'. Their work provides a certain degree of contrast with accounts which have been more closely focused upon the production networks of 'trans-regional actors' (Coe *et al.*, 2004: 476) whose activities then are seen to articulate with 'regional development in specific territorial formations' (Johns, 2006: 153). Lane and Probert's specific attention to the national and international scales of relationships within the British and German clothing industries leads them to emphasize the ways in which 'production networks differ in the geographical levels they encompass' (2004: 264; see also the assessments of pan-European clothing production networks in Begg *et al.*, 2003, and Smith *et al.*, 2005). Ultimately, they argue that clothing production 'networks ... are much more complex and spatially multi-level than most analysts allow for' (Lane and Probert, 2004: 244).

In their examination of the activities of transnational oil exploration and production firms, Bridge and Wood (2005) argue that geographies of production are shaped through networks of knowledge operating at a range of spatial scales. Production networks in the oil sector are mobilized and maintained not simply by means of a more extensive circulation of knowledge at the global scale but also via the enhancement of often very local,

territorialized forms of knowledge (2005: 207). Importantly, Bridge and Wood's account seeks to bring 'knowledge economy' debates (eg, the relative importance of tacit versus codified knowledge in communities) to bear upon broader discussions of the operation of global production networks (see also Coe and Bunnell, 2003).

An alternative approach to production networks is provided by Clark *et al.*'s (2004) consideration of the activities of European small and medium enterprises. Utilizing statistical and econometric methodologies, they seek to account for potential differences between different types of production network (supply and distribution) and between different geographical scales (regional, national, European Union and global) (Clark *et al.*, 2004). Firm ownership patterns and levels of revenue are seen as central in enabling firms to change the scope and scale of their networked relationships.

IV Industrial districts and the legacy of the Third Italy: the dangers of conceptual lock-in?

This final section turns to consider a topic which has preoccupied economic geographers for some considerable time: characterizations of and debates surrounding industrial districts, and particularly the case of the 'Third Italy'. Often moving far beyond a depiction of a region in the centre northeast of the country, the Third Italy took on a strongly symbolic identity and came to stand as a representation of all that was flexibly specialized, distinctively involving close-knit, design-intensive – but often craft-based – production. What came to be seen as characteristic interrelationships between networks of small firms were thought to be critically important in, for example, enabling producers to 'solve specific problems of design, manufacture and marketing' (Sayer and Walker, 1992: 131). In hindsight, it seems astonishing that while most reflections upon the dynamics and characteristics of 'industrial districts' returned again and again to the example of

the Third Italy (as well as – to round out the triumvirate – Silicon Valley and Baden-Württemberg) there were so very few detailed accounts of work practices, industrial organization or production strategies.³ Neither did commentators seem to place great emphasis upon uncovering the concrete manifestations of the oft-celebrated role of regional and local institutional structures. As Agnew *et al.* (2005: 84) have argued: ‘the Third Italy has acquired a certain iconic status in economic geography without much careful examination’.

Several recent commentaries offer a number of key correctives, including the observation that some of the most influential Anglophone literature on industrial districts almost entirely failed to draw upon critical Italian work – and this despite the fact that the author to whom the origins of the term are attributed, Arnaldo Bagnasco, ‘has always been more sceptical about the use of industrial districts as blueprints’ (Hadjimichalis, 2006: 84). Further, Whitford (2001) has implied that while Italian accounts developed to consider the implications of pressures on districts to restructure in the 1990s Anglophone debates largely stood still. In this vein, Dunford’s (2006) recent consideration of the Italian textiles and clothing industry is instructive. While for a time ‘Italy successfully specialized in a traditional sector that was subject to strong competition from low-wage countries’, he argues that ‘a competitive advantage on the basis of creativity, product differentiation, flexibility and innovation’ is being significantly eroded in the current era (2006: 32 and 56).

Agnew *et al.* (2005: 87) contend that the resurgence of production in Italy from the 1960s onwards in fact came to rest upon the successful development of small batch and customized production runs within facilities decentralized from large plants, but still located in the ostensibly more ‘Fordist’ north-west (see also Dunford, 2006). Further, an analysis of export data between 1985 and 1995 leads Agnew *et al.* (2005) to suggest

that the Third Italy as a region was not the key driver of the Italian economy, albeit that certain provinces had successful trajectories. Rather, high export levels from Milan and surrounding areas (particularly to the north) were crucial to Italian economic successes in the 1980s and 1990s (Agnew *et al.*, 2005). Similarly, Dunford (2006: 36) emphasizes the importance for the textile and clothing industry (TCI) of an ‘innovative fashion system that is centred in the fashion capital of Milan’.

A key conceptual advance in the consideration of industrial districts is provided by Dunford’s (2006: 29) notion of the ‘magic circle’ – a geographic system which crucially incorporates ‘the vital role of material and immaterial services’ in shaping the TCI value chain.⁴ Importantly, the term develops from Dunford’s analysis of employment, value added and size distribution trends within the textiles and clothing industry itself. This sectoral, rather than strictly district, approach enables him to emphasize the situation of industrial districts within a wider interdependent division of labour and a wider interdependent territorial system. Ultimately Milan’s design and service activities are seen to lie at the centre of a ‘district of districts, or district groups’ (2006: 36), connecting the city with locations specializing in, for example, knitwear, wool, silk, cotton and buttons and button-making machines.

Dunford and Greco’s broader study of Italian regional development concludes with a strong case for ‘transcending existing concepts of the Third Italy’ (2006: 290). Their detailed programme of work on shifts in regional performance, emphasizing ‘contrasts in the work people do, what they get paid for it and how much wealth they create’ (2006: 283), documents a range of changing economic circumstances which are beginning to (re)create divides between the north and south of the country. Significantly, their explicit consideration of the uneven geographies of Italian production moves considerably beyond the more limited purchase of ideal-typical industrial district models.

What I have characterized above as a relatively selective interpretation of the Third Italy has an important broader implication. Hadjimichalis (2006: 89) has noted that a key legacy of Third Italy discourses has been the tendency for many accounts to portray 'society [as] conflict free'. In focussing upon 'organizational and institutional issues' such as trust-based ties and dense social networks of association:

others such as power and inequalities within industrial districts, the limitations of networking, what co-operation, reciprocity and 'social capital' really mean, the informal economy, gender and ethnicity, the generation gap, wages and working conditions, the role of the state and uneven development – to mention but a few – remain in the dark. (Hadjimichalis, 2006: 83)

In Grabher's (2006: 75 and 165) view too, the portrayal of networks 'as webs of trustful ties' has led to a propensity to privilege their more 'benevolent attributes' (see also Grabher and Ibert, 2006).

Bialasiewicz (2006) problematizes questions of local connectivity and trust within a compelling account of contemporary Italian geographies of production. Focusing upon the Veneto, Bialasiewicz draws important connections between the region's position as a wealthy economic powerhouse and its regionalist and often exclusionary politics. What makes the paper a particularly rich assessment is its representation of the *città diffusa*, a spreading but fragmented landscape of small production complexes and large detached family houses 'fill[ing] the spaces between one town and another' (Bialasiewicz, 2006: 48). Production in the *città diffusa* has come uneasily to rely upon a substantial immigrant workforce: 'although the Veneto production machine would grind to a halt without immigrant labour, this 'urbanized countryside' still has not reconciled itself with the presence of difference' (Bialasiewicz, 2006: 59). While there has long been a contradiction between the position of labour (Hadjimichalis, 2006) and the emphasis on cooperation and trust in

industrial district accounts, the Veneto provides an especially striking example of the 'mythologizing [of] "local connectivity"' (Bialasiewicz, 2006: 64).

V Concluding thoughts

Despite initial suggestions about the ever-increasing speed of academic work, readers might consider that the general themes upon which I have chosen to focus are in fact indicative of a lack of innovation and dynamism. Drawing as they do upon seemingly long-standing economic geographical concerns, discussions of 'old' industrial areas, global networks of production and industrial districts might at one level appear less like *pronta moda* and rather more characteristic of 'slow' mass production (Doeringer and Crean, 2006: 8). Fashion metaphors aside, the paper has featured a range of work which may provide a more critical purchase on 'older' debates, in part through the use of detailed empirical work to support and refine theoretical claims.

The literature selected above communicates a number of issues worthy of further consideration. First, reflection upon the conceptualization of 'old industrial districts' raises a broader and particularly significant question about the universality of concepts, the appropriateness of which frequently has been taken for granted. Second, it is important to be aware that a continuing fixation with particular theoretical frames of reference may lead to strong conceptual lock-in. In the case of the Third Italy, the emergence and continuing invocation of a relatively rigid ideal-typical 'industrial district' model frequently has hampered the development of more innovative lines of inquiry. Dunford's (2006) characterization of Italian textile and clothing production organization as a 'magic circle' offers an interesting counterpoint to more well-worn intellectual routes.

Grabher's (2006) recent paper critically evaluates the lengthy engagement of economic geography with network approaches originating in economic sociology, highlighting the

occasionally problematic directions in which the adoption of such analytical perspectives has led. To cite just a few examples, he suggests that an early concern with the power of large corporations was replaced by 'a less politicized perspective that circles around the question of if and how large corporations function as 'pipelines' through which regions get access to global knowledge' (2006: 169). Similarly, while work on informal networks has focused almost exclusively upon their assistive role 'in mitigating structural shortcomings of markets and hierarchies', it is also important to acknowledge that networks can operate in disruptive and obstructive ways (2006: 170). By way of contrast, Grabher considers the 'promising turnings' (2006: 177) which might be offered by actor-network inflected notions of the rhizome, as well as contemplating the utility of Harrison White's characterization of 'polymorphous network domains' (2006: 179). Both metaphors may offer ways to sidestep the type of conceptual lock-in noted above. Ultimately, however, Grabher cautions against too quickly embracing new metaphors in the place of old: 'both ... are, in short, more inspiring as advice to leave the trodden paths than in specifying in detail the ways ahead' (2006: 183).

Notes

1. Strictly speaking, *pronta moda* is not simply the literal translation of 'fast fashion'. It refers to the quick replenishment of fashion goods as well as to the mid-season delivery of items designed before the start of a season but used to supplement seasonal styles (Doeringer and Crean, 2006: 17).
2. For a comprehensive and critical examination of path-dependency and lock-in, see Martin and Sunley (2006).
3. In fact, there may have been more detailed work on the other two 'iconic' industrial districts than on the Third Italy. See, for example, Saxenian (1990; 1994; 1999; 2002) as well as Staber (1997; 1998; 2001).
4. Fascinatingly as well, the term 'magic circle' reflects the phrase used by an Italian interviewee (Dunford, 2006: 36, footnote 1).

References

- Agnew, J., Shin, M. and Richardson, P.** 2005: The saga of the 'Second industrial divide' and the history of the Third Italy: evidence from export data. *Scottish Geographical Journal* 121, 83–101.
- Angel, D.P. and Rock, M.T.** 2005: Global standards and the environmental performance of industry. *Environment and Planning A* 37, 1903–18.
- Asheim, B. and Gertler, M.S.** 2005: The geography of innovation: regional innovation systems. In Fagerberg, J., Mowery, D.C. and Nelson, R.R., editors, *The Oxford handbook of innovation*, Oxford: Oxford University Press, 292–317.
- Barnes, T.J.** 1995: Political economy I: the culture, stupid. *Progress in Human Geography* 19, 423–431.
- 1996: Political economy II: compliments of the year. *Progress in Human Geography* 20, 521–28.
- 1998: Political economy III: confessions of a political economist. *Progress in Human Geography* 22, 94–104.
- Bassett, K.** 1999: Is there progress in human geography? The problem of progress in the light of recent work in the philosophy and sociology of science. *Progress in Human Geography* 23, 27–47.
- Bathelt, H.** 2003: Geographies of production: growth regimes in spatial perspective I – innovation, institutions and social systems. *Progress in Human Geography* 27, 763–78.
- 2005: Geographies of production: growth regimes in spatial perspective (II) – knowledge creation and growth in clusters. *Progress in Human Geography* 29, 204–16.
- 2006: Geographies of production: growth regimes in spatial perspective 3 – toward a relational view of economic action and policy. *Progress in Human Geography* 30, 223–36.
- Begg, B., Pickles, J. and Smith, A.** 2003: Cutting it: European integration, trade regimes, and the reconfiguration of East-Central European apparel production. *Environment and Planning A* 35, 2191–207.
- Bialasiewicz, L.** 2006: Geographies of production and the contexts of politics: dis-location and new ecologies of fear in the Veneto citta diffusa. *Environment and Planning D – Society and Space* 24, 41–67.
- Bridge, G. and Wood, A.** 2005: Geographies of knowledge, practices of globalization: learning from the oil exploration and production industry. *Area* 37, 199–208.
- Chakrabarty, D.** 2000: *Provincializing Europe: postcolonial thought and historical difference*. Princeton studies in culture/power/history. Princeton, NJ: Princeton University Press.
- Chandavarkar, R.** 1998: *Imperial power and popular politics: class, resistance and the state in India c.1850–1950*. Cambridge: Cambridge University Press.
- Chapman, K.** 2005: From 'growth centre' to 'cluster': restructuring, regional development, and the Teesside

- chemical industry. *Environment and Planning A* 37, 597–615.
- Clark, G.L., Palaskas, T. Tracey, P. and Tsampra, M.** 2004: Market revenue and the scope and scale of SME networks in Europe's vulnerable regions. *Environment And Planning A* 36, 1305–26.
- Coe, N.M. and Bunnell, T.G.** 2003: 'Spatializing' knowledge communities: towards a conceptualization of transnational innovation networks. *Global Networks – a Journal of Transnational Affairs* 3, 437–56.
- Coe, N.M. and Lee, Y.S.** 2006: The strategic localization of transnational retailers: the case of Samsung-Tesco in South Korea. *Economic Geography* 82, 61–88.
- Coe, N.M., Hess, M., Yeung, H.W.C., Dicken, P. and Henderson, J.** 2004: 'Globalizing' regional development: a global production networks perspective. *Transactions of the Institute of British Geographers* NS 29, 468–84.
- Cooper, F.** 2005: *Colonialism in question: theory, knowledge, history*. Berkeley, CA: University of California Press.
- Daniels, P.W.** 1985: The geography of services. *Progress in Human Geography* 9, 443–51.
- Dicken, P.** 2003: *Global shift: transforming the world economy* (fourth edition). London: Sage.
- Doeringer, P. and Crean, S.** 2006: Can fast fashion save the US apparel industry? *Socio-Economic Review* 4, 353–77.
- Dunford, M.** 2006: Industrial districts, magic circles, and the restructuring of the Italian textiles and clothing chain. *Economic Geography* 82, 27–59.
- Dunford, M. and Greco, L.** 2006: *After the three Italies: wealth, inequality and industrial change*. Oxford: Blackwell.
- Elmhirst, R. and Saptari, R.** 2004: *Labour in Southeast Asia: local processes in a globalized world, changing labour relations in Asia*. London: RoutledgeCurzon.
- Gereffi, G.** 1994: The organization of buyer-driven global commodity chains: how US retailers shape overseas production networks. In Gereffi, G. and Korzeniewicz, M., editors, *Commodity chains and global capitalism*, Westport: Praeger, 95–122.
- Gertler, M.S. and Vinodrai, T.** 2005: Learning from America? Knowledge flows and industrial practices of German firms in North America. *Economic Geography* 81, 31–52.
- Gibson, C. and Klocker, N.** 2004: Academic publishing as 'creative' industry, and recent discourses of 'creative economies': some critical reflections. *Area* 36, 423–34.
- Grabher, G.** 1993: *The embedded firm: on socioeconomics of industrial networks*. London: Routledge.
- 2006: Trading routes, bypasses, and risky intersections: mapping the travels of 'networks' between economic sociology and economic geography. *Progress in Human Geography* 30, 163–89.
- Grabher, G. and Ibert, O.** 2006: Bad company? The ambiguity of personal knowledge networks. *Journal of Economic Geography* 6, 251–71.
- Grote, M. and Taube, F.** 2006: Offshoring the financial services industry: implications for the evolution of Indian IT clusters. *Environment and Planning A* 38, 1287–305.
- Hadjimichalis, C.** 2006: The end of Third Italy as we knew it? *Antipode* 38, 82–106.
- Hassink, R. and Shin, D.H.** 2005: Theme issue: the restructuring of old industrial areas in Europe and Asia – editorial. *Environment and Planning A* 37, 571–80.
- Henderson, J., Dicken, P., Hess, M., Coe, N. and Yeung, H.W.C.** 2002: Global production networks and the analysis of economic development. *Review of International Political Economy* 9, 436–64.
- Hess, M. and Coe, N.** 2006: Making connections: global production networks, standards and embeddedness in the mobile-telecommunications industry. *Environment And Planning A* 38, 120527.
- Hess, M. and Yeung, H.W.C.** 2006: Guest editorial: whither global production networks in economic geography. *Environment and Planning A* 38, 1193–204.
- Hudson, R.** 1989: Labour-market changes and new forms of work in old industrial regions – maybe flexibility for some but not flexible accumulation. *Environment and Planning D: Society and Space* 7, 5–30.
- 2004: Conceptualizing economies and their geographies: spaces, flows and circuits. *Progress in Human Geography* 28, 447–471.
- 2005: Rethinking change in old industrial regions: reflecting on the experiences of North East England. *Environment and Planning A* 37, 581–96.
- Johns, J.** 2006: Video games production networks: value capture, power relations and embeddedness. *Journal of Economic Geography* 6, 151–80.
- Lane, C. and Probert, J.** 2004: Between the global and the local: a comparison of the German and UK clothing industry. *Competition and Change* 8, 243.
- Leinbach, T.R. and Bowen, J.T.** 2004: Air cargo services and the electronics industry in Southeast Asia. *Journal of Economic Geography* 4, 299–321.
- Leyshon, A.** 1995: Geographies of money and finance. I. *Progress in Human Geography* 19, 531–43.
- 1997: Geographies of money and finance 2. *Progress in Human Geography* 21, 381–92.
- 1998: Geographies of money and finance III. *Progress in Human Geography* 22, 433–46.
- Liu, W.D. and Dicken, P.** 2006: Transnational corporations and 'obligated embeddedness': foreign direct investment in China's automobile industry. *Environment and Planning A* 38, 1229–47.
- Malmberg, A.** 1994: Industrial-geography. *Progress in Human Geography* 18, 532–40.

- 1996: Industrial geography: agglomeration and local milieu. *Progress in Human Geography* 20, 392–403.
- Martin, R.** and **Sunley, P.** 2006: Path dependence and regional economic evolution. *Journal of Economic Geography* 6, 395–438.
- O Riain, S.** 2004: The politics of mobility in technology-driven commodity chains: developmental coalitions in the Irish software industry. *International Journal of Urban and Regional Research* 28, 642–63.
- Ohuallachain, B.** 1992: Industrial-geography. *Progress in Human Geography* 16, 545–52.
- Parthasarathy, B.** and **Aoyama, Y.** 2006: From software services to R&D services: local entrepreneurship in the software industry in Bangalore, India. *Environment and Planning A* 38, 1269–85.
- Reinach, S.S.** 2005: China and Italy: fast fashion versus Pret a Porter. Towards a new culture of fashion. *Fashion Theory – the Journal of Dress, Body and Culture* 9, 43–56.
- Rock, M.T., Angel, D.P.** and **Lim, P.L.** 2006: Impact of firm-based environmental standards on subsidiaries and their suppliers – evidence from Motorola-Penang. *Journal of Industrial Ecology* 10, 257–78.
- Saxenian, A.** 1990: *The origins and dynamics of production networks in Silicon Valley*. Berkeley, CA: University of California.
- 1994: *Regional advantage: culture and competition in Silicon Valley and Route 128*. Cambridge, MA: Harvard University Press.
- 1999: *Silicon Valley's new immigrant entrepreneurs*. San Francisco: Public Policy Institute of California.
- 2002: *Local and global networks of immigrant professionals in Silicon Valley*. San Francisco: Public Policy Institute of California.
- Sayer, A.** and **Walker, R.** 1992: *The new social economy: reworking the division of labour*. Oxford: Blackwell.
- Schamp, E.W.** 2005: Decline of the district, renewal of firms: an evolutionary approach to footwear production in the Pirmasens area, Germany. *Environment and Planning A* 37, 617–34.
- Smith, A., Pickles, J., Begg, R., Roukova, P.** and **Bucek, M.** 2005: Outward processing, EU enlargement and regional relocation in the European textiles and clothing industry: reflections on the European Commission's communication on 'The Future of the Textiles and Clothing Sector in the Enlarged European Union'. *European Urban and Regional Studies* 12, 83–91.
- Staber, U.** 1997: Specialization in a declining industrial district. *Growth and Change* 28, 475–95.
- 1998: Inter-firm co-operation and competition in industrial districts. *Organization Studies* 19, 701–24.
- 2001: Spatial proximity and firm survival in a declining industrial district: the case of knitwear firms in Baden-Württemberg. *Regional Studies* 35, 329–41.
- Sunley, P.** 2006: Relational economic geography: research tools or a new vocabulary, 36 pp. Manuscript available from the author at School of Geography, University of Southampton, Highfield, Southampton SO17 1BJ.
- Taylor, M.** 1986: Industrial geography. *Progress in Human Geography* 10, 407–15.
- Tickell, A.** 2002: Geography of services: progress in the geography of services III – time to move on? *Progress in Human Geography* 26, 791–801.
- Todtling, F.** and **Trippel, M.** 2004: Like phoenix from the ashes? The renewal of clusters in old industrial areas. *Urban Studies* 41, 1175–95.
- Tokatli, N.** and **Kizilgün, O.** 2004: Upgrading in the global clothing industry: Mavi jeans and the transformation of a Turkish firm from full-package to brand-name manufacturing and retailing. *Economic Geography* 80, 221–40.
- van Grunsven, L.** and **Smakman, F.** 2005: Industrial restructuring and early industry pathways in the Asian first-generation NICs: the Singapore garment industry. *Environment and Planning A* 37, 657–80.
- Weller, S.** 2006: The embeddedness of global production networks: the impact of crisis in Fiji's garment export sector. *Environment and Planning A* 38, 1249–67.
- Whitford, J.** 2001: The decline of a model? Challenge and response in the Italian industrial districts. *Economy and Society* 30, 38–65.
- Whitford, J.** and **Enrietti, A.** 2005: Surviving the fall of a king: the regional institutional implications of crisis at Fiat auto. *International Journal of Urban and Regional Research* 29, 771–95.
- Wills, J.** 1999: Political economy I: global crisis, learning and labour. *Progress in Human Geography* 23, 443–51.
- 2000: Political economy II: the politics and geography of capitalism. *Progress in Human Geography* 24, 641–52.
- 2002: Political economy III: neoliberal chickens, Seattle and geography. *Progress in Human Geography* 26, 90–100.
- Yeung, G.** and **Mok, V.** 2006: Regional monopoly and interregional and intraregional competition: the parallel trade in Coca-Cola between Shanghai and Hangzhou in China. *Economic Geography* 82, 89–109.
- Yeung, H.W.C.** 2000: Organizing 'the firm' in industrial geography I: networks, institutions and regional development. *Progress in Human Geography* 24, 301–15.
- 2001: Regulating 'the firm' and sociocultural practices in industrial geography II. *Progress in Human Geography* 25, 293–302.
- 2002: Industrial geography: industrial restructuring and labour markets. *Progress in Human Geography* 26, 367–79.
- Yeung, H.W.C.** and **Peck, J.** 2003: Making global connections: a geographer's perspective. In Peck, J. and Yeung, H.W.C., editors, *Remaking the global economy: economic-geographical perspectives*, London: Sage, 3–23.