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THE EMILIAN MODEL
INSTITUTIONAL CHALLENGES

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INTRODUCTION

Over the last decade, the literature on industrial districts and decentralised business systems in general has aroused an interest that tends to exceed their empirical frequency. A sequence of factors explains this peculiarity. Initially the interest served to restore faith in the viability of small firms and localised linkages in a world of big firms and global networks. Later, the gathering number of case histories - from regional examples such as artisan districts and high-tech agglomerations, to examples of organisational decentralisation such as the hollow corporation - helped to illustrate the significance of the institutional and social foundations of economic life. We learnt that economic success had far less to do with the entrepreneurial virtues of self-reliant rational economic man as postulated by neo-classical economics, than with certain collective foundations such as inter-dependence among economic agents, the presence of business support systems, conventions of dialogue and reciprocity, and, in some localised cases, a culture of social and civic solidarity (see, for example, Aoki, 1988 and Sabel, 1994 on Japan; Trigilia, 1988 and Putnam, 1993 on Italy; Saxenian, 1994 on Silicon Valley; Herrigel, 1995 on Baden Wuttemberg).

More recently, and coinciding with the rise of evolutionary economics (Hodgson, 1993; Metcalfe, 1998), interest in these cases of economic success has begun to turn towards what they can tell us about the mechanisms and sources of economic learning and adaptation. It appears that in today's context of rapid technological change, heightened product obsolescence, and intensively contested markets, an essential condition for economic survival is the ability of firms to keep ahead of the game by learning new tricks and adapting to, or shaping, changing circumstances. An increasingly common place assumption is that the contemporary economy is less standardised and predictable than before, thus placing a premium on innovation and adaptation as a source of competitiveness. What seems less clear from the available conceptual literature concerns, firstly, the precise nature of what influences learning and adaptation, secondly, whether innovation and learning in general automatically facilitate adaptation, and thirdly, whether there is a difference between the properties necessary for path-dependent versus path-breaking adaptation.

This paper revisits the celebrated example of Emilia-Romagna in Italy to add to current knowledge on this latest phase of interest in decentralised business systems. It asks whether the tight coupling that has grown between the region's entrepreneurial model of flexible specialisation and the wider set of institutions which have supported this model is best placed to enable the necessary institutional adaptations in the face of new economic challenges. It is speculated that at just the moment of consolidation of these institutions - from the co-operative and artisan movement, to technical schools and industry-specific service centres - new economic

demands have arisen to question their efficacy and relevance. For example, the region's technologically advanced companies now seem to require more formalised scientific and research inputs from Universities in order to compete in global markets, while in the less prosperous eastern reaches of the region, localities are grasping for new solutions to cope with the problem of insufficient local employment opportunities. The region's institutional legacy seems somehow ill-equipped for these challenges.

My purpose in raising this problem is not to side with a current fashion in evolutionary economics to stress that variety is a source of innovation (e.g. Saviotti, 1996; Grabher and Stark, 1997). Therefore, my aim is not to suggest that the problem in Emilia-Romagna has something to do with its mono-cultural institutional base or singularity of purpose of its industrial system. Instead, I wish to suggest that the ability to tackle new demands is closely linked to the nature of the collective rationalities of action and behaviour which permeate an economic system. Thus, for example, a collective disposition towards experimentation and reflexivity might be said to encourage continual innovation and change, in contrast to a 'procedural' rationality (Simon, 1982) which tends to encourage reactive adjustment towards an economic environment that is considered to be difficult to shape and influence. According to Capecchi and Pesce (1993), in the case of Emilia-Romagna, the presence of intermediaries crossing economy/state/civil society boundaries, to foster common solidarities and understandings, historically has played an important role in facilitating a particular culture of learning and adaptation. This paper asks whether this culture is now threatened by the disappearance of these intermediaries, together with the exposure of the inadequacies of a craft-based rationality.

In light of the emphasis I wish to place on the role of intermediation in learning and adaptation, the paper begins with an account of the socio-cultural and political institutions which came to underpin the entrepreneurial dynamism of the region's business systems. Given the massive and well known literature on this region, much of the first part of the paper will be familiar to readers of this journal, which represents state-of-the-art debate on the region. However, its return to familiar historical literature is for reasons that are different from the mainstream trend to chart the evolution of the Emilian model or explain its institutional base (formal and informal; social, political and economic).

INTERMEDIATION IN THE EMILIAN MODEL

With a population of nearly four million residents (7% of the national population), the region accounts for 8.3 percent of national employment and nearly 9 percent of the Gross National Product, surpassed only by Lombardia and Lazio. The region has the third highest rate of employment and the third lowest rate of unemployment (6%, compared to the national average of over 11%) among Italy's 20 regions, surpassed on both counts only by Valle d'Aosta and Trentino Alto Adige in the far North, which jointly raise only 2% of GNP. Its economic dynamism is confirmed by its share of 11 percent of the nation's exports, placing it in fourth position after Piemonte, Veneto and Lombardia.

In sharp contrast with the trend towards services-led growth in the dynamic core regions of the advanced economies, food and agriculture, and the manufacturing industries remain extremely important to the Emilian economy. Although agriculture now employs under 9 percent of the region's workforce, sectors such as cereals, fruit, vegetables, and especially meat and dairy products, place the region squarely among Italy's food producing regions and earn the region a considerable volume of export earnings. Manufacturing (excluding construction) continues to employ nearly 30 percent of the region's workforce, and accounts for over 10 percent of the nation's output in the sector. The manufacturing industries account for over a staggering 80 percent of the region's total exports, dominated by electrical and mechanical engineering (51% of total exports), ceramics and other non metallic mineral products (13%), fashionwear (11%), furniture, chemicals, and print and publishing.

The driving force of the Emilian manufacturing economy, as is well known, are its decentralised networks of flexibly specialised small firms. 98 percent of the region's firms employ less than 100 workers, and among these, 41 percent are classified as owner-run firms organised along craft lines and employing less than 15 workers. The manufacturing sector also includes nearly 20 percent of the region's 7,400 co-operatives, the majority of which are small firms. In the main, the small firms are gathered into three types of decentralised network: typical Marshallian industrial districts such as Carpi and Sassuolo, which specialise in individual niche products such as knitwear and ceramics; artisan networks in traditional consumer industries such as clothing, footwear, furniture and various agro-industrial products, which are present across the region but

do not dominate individual areas; and, in contrast to other Third Italy regions, subcontracting networks centred around medium-sized leader firms, specialising in customised or batch production of design-intensive products (e.g. agricultural machinery, office equipment, specialist cars and motorbikes, packaging machinery). Figure 1 shows the region's leading industrial sectors and their location across the region's eight provinces. The only exception which is a-typical of the 'Emilian Model' (Brusco, 1982) is the chemicals sector, located in the eastern provinces of the region through public policy effort, and dominated by vertically integrated large firms (Bianchi and Gualtieri, 1991).

Turning to institutional questions, the literature on the economics of the Emilian Model (or for that matter industrial districts in general) has made it a point to highlight the role of collective externalities normally denied to the self-reliant small firm (Brusco, 1982). Analysis has tended to focus on the attributes of the business networks to which the individual firm belongs and on targeted externally provided services and institutional supports the firms are able to draw upon. Thus we have learnt of the decisive influence on dynamic competitiveness of factors such as economies of task specialisation, flexibilities of vertical disintegration, agglomeration economies, sedimented local knowledge, learning and innovation scope offered by sharing of information and inter-firm dependence, and institutionalised access to credit, information, and other business services.

A parallel strand of literature has focused on the role of a cohesive local political subcultures, to emphasise the economic gains associated with state efficiency and popular civic democracy. This strand draws on the seminal research of Arnaldo Bagnasco (1988) and Carlo Trigilia (1986), and more recently, the work of Robert Putnam (1993) and his research collaborators (Nanetti, 1988; Leonardi and Nanetti, 1990). It has stressed the commonality of goals resulting from the presence of a historically sedimented local political culture that cuts across class, gender, and institutional divides. It has also stressed the fine balance between a responsible state and an active civil society based upon associative organisations of various kinds - a configuration claimed to have secured collective responsibility and checks and balances between the plural authority structures.

My impression is that as the knowledge on Emilia-Romagna and industrial districts in general has become progressively specialised, sight has been lost of the connections between the institutions which support the business systems and the local political subcultures. For example, while in an earlier publication, Phil Cooke (1984) stresses the communalist and craft traditions of the Emilian model, in his new agenda-setting book with Kevin Morgan (1998), the emphasis falls decisively on the role of business support institutions such as interest group associations and agencies supplying business services. Perhaps unwittingly the result has been the relative neglect of the interplay between the institutions of flexible specialisation and the subcultures of

'associationist democracy' (Hirst, 1994) or 'polycentric' politics (which Locke, 1995, distinguishes from hierarchical or polarised politics). This neglect has tended to play down the role of this interplay in not only underwriting entrepreneurship, but also engendering a culture of innovation and experimentation.

Institutional Interplay

Between 1950 and 1970 Emilia witnessed the consolidation and expansion of its small firm business systems around essentially two vectors. First, the gradual industrialisation of the countryside saw the rise of the agro-food industries, as products of the land were transformed into quality foods for export markets (e.g. Parma ham, parmesan cheese). This process drew in small farms and firms, often grouped together as buyer or seller co-operatives, to reap the benefits of scale economies and access to pooled services. At the same time, the region's rural areas and small towns spawned the growth of small manufacturing firms and industrial districts typifying the features of flexible specialisation and Marshallian clusters. At the heart of this model of entrepreneurship lay a series of embedded social practices and conventions, which Giulio Sapelli (1995), in a detailed historical sociology of artisan entrepreneurship in the 'red' province of Reggio Emilia, list to be: a reliance on extended family labour; non-standardised domestic and work-rhythms; the reorientation of peasant values and skills; an ideology of work (over a profit ethic); and entrepreneurial pride.

These craft values - as distinct from the jealous market-individualism of most small firms - came to be institutionally enshrined within a broader communitarian ideology of co-operation and consensus, through the establishment of a political community linking up a variety of social organisations. The uniquely pro-worker and pro-small business Communist and Socialist parties gained majority influence among both the unions and the artisan associations and co-operatives to which the small entrepreneurs flocked. In turn, these associations became important centres of economic power, serving not only to further the interests of small entrepreneurs, but also to provide training in business formation and management. As a consequence, as Capecchi (1990a: 28) notes:

'...a kind of Communist and Socialist "political community" was formed wherein people of the same political leaning came to be in charge of local and regional government, labour unions, small artisan associations and industries, and firms organised as co-operatives'.

This powerful political community saw to the business needs of the small firm, but, importantly, at the same time it helped to inculcate an associationalist culture across the regional elite as well as link that elite to the broader mass of the region's population. The mainstream political ideology encouraged a culture of participation in mass politics and collective action through interest-group associations, while its diffusion across the institutional spectrum provided an unusually common set of beliefs. Sapelli (1995: 19) explains:

'...the diffusion of reformist ideas together with cultural, social, recreational and religious associationalism, has played a decisive role in forming generations of potential leaders, political or industrial...' (translation of Italian).

After the mid 1970s, the level of formalised institutional support for the region's networks of flexible specialisation increased. Among the Third Italy regions, as is well known from the literature, Emilia-Romagna has been unique in terms of the variety, density and efficiency of public sector support provided for the small firm economy (Leonardi and Nanetti, 1990; Brusco, 1992; Cooke and Morgan, 1998). Famously, this includes the establishment in 1974 by the Regional Authority of ERVET (Regional Agency for the Economic Evaluation of the Territory). The success of ERVET lay in establishing sector-specific or function-specific service centres within easy access of small firms, providing, for example, targeted information and training in a flexible and customer-oriented way (Brusco, 1992; Bandini, 1995; Bellini, Giordani and Pasquini, 1990; Bonaretti, 1995; Morgan, 1997).

But here too, the role of progressive infrastructural and social policies, linked to the region's communalist political culture, should not be underestimated. Capecchi and Pesce (1993), for example, insist that the long-standing commitment of the progressive Left to modernising the physical infrastructure to the highest European standards helped to provide a conducive and efficient business environment, while its unique public sector commitment to high-quality public services, particular welfare needs (e.g. of pensioners, working mothers, the handicapped), and popular cultural projects such as concerts and festivals, facilitated social reproduction at the same time as enhancing quality of life and an inclusive sense of place.

The literature also reminds us that, in contrast to many other regions, support for Emilian small businesses was provided by representative associations - local, provincial and regional - and in a variety of forms (Cooke and Morgan, 1998). Concretely, the Co-operative League and the National Artisans' Federation (CNA) played a vital role for their members by lobbying for favourable legislation and policies, establishing sector-specific training programmes, providing access to a range of business services (from legal advice to technical information), helping to establish consortia for joint purchasing and sales, or in order to secure guarantee loans or credit. Meanwhile, Labour Unions, industry associations, the association of small businesses, the chamber of commerce, and research organisations and consultancies developed research intelligence for the use of their members and sponsors, but also contributed, through widely attended and frequent public seminars and conferences, towards constructing a public reservoir of knowledge, opinion, debate and reputation.

Intermediation

Conceptually, it is important to note that the considerable institutional pluralism and overlap that came to characterise the second vector of urban diffuse industrialisation, did not lead to institutional fragmentation. This was owed largely to cross-institutional commonality resulting

from the region's mainstream communalist ideology and a strong culture of intermediation between the region's political, economic and civic organisations.

The role of the ruling Communist Party was critical in both regards. The structure of alliances established by the Party gathered together, into a heterogeneous coalition, the urban working class, the peasantry and agricultural workers, an urban entrepreneurial and middle class won over by administrative efficiency and good services. Around this coalition, the Party was able to gather consensus around a model of economic and social development based on progressive government, social integration, and entrepreneurial success (Bellini, 1990). In addition, significantly, it was able to exercise 'network' influence (Bellini, *op. cit*.), through the common set of beliefs and values shared by its voters and activists, newspaper readers, recreation club members (ARCI centres) in virtually every district, and participants at mass festivals and rallies. The Party's network influence also helped to secure consensus up and down the hierarchies of the region's powerful 'red' economic organisations, from shop stewards and unions, to the CNA and the Co-operative League. In addition, cross-membership, inter-personal familiarity, and the frequent rotation of the Party elite through senior positions across these organisations served to sediment a common agenda, as well as nurture a diffuse organisational culture of consultation and compromise.

But, as Robert Putnam reminds us, this culture of intermediation was also the product of the democratic culture of civic regions which find themselves finely balanced between an efficient state, and strong associationalist tendencies in civil society. Emilian society is replete with voluntary associations displaying high levels of public participation, in all areas of public life, from recreation, sports and culture to housing, welfare services and education. This fine balance between state and society has served to inculcate, firstly, a tradition of associative governance in which real authority is placed in the hands of autonomous groups (for example, the active role of voluntary organisations and charities in welfare provision). Secondly, it has bred a fiercely republican regional culture that defends individual and group entitlements, rights and responsibilities, an inclusive and shared public arena, and consultative and democratic decision making. Capecchi and Pesce (1993) speak of an 'Emilian way of life' that draws on a number of strands, including a strong feminist tradition, a preference for collective resolution of problems, an appetite for cultural innovation, production and consumption, an eager sense of difference from the rest of Italy, an openness to outsiders, and an advanced sense of citizenship.

The Emilian economy, therefore, has drawn upon an intricate web of mutually reinforcing formal and informal institutions, gathered around a particular way of life combining entrepreneurial success, good government, and social cohesion. To neglect this aspect would be to offer an incomplete account of the success of flexible specialisation in Emilia-Romagna.

EMERGING INSTITUTIONAL CONFLICTS

Through the 1970s and 1980s, the business networks of flexible specialisation and their wider institutional props became intertwined into a coherent system - the Emilian Model, consciously presented as such by its storytellers. Without doubt, much of the region's economic success can be traced to this model. However, an important question raised is whether the conscious effort to develop an all-binding policy discourse by the region's political community has served to neglect problems which do not conform to the model, or worse, hindered institutional adaptation in the face of more radical challenges necessitating looking beyond the 'perfecting-by-craft' industrial culture of the Emilian Model (Bertini, 1995). On the latter point, Gernot Grabher and David Stark (1997), in discussing institutional adaptation in the post-Communist countries, argue that 'dissonance contributes to organisational learning and economic evolution' (p.4), while the 'mechanisms that are conducive for the adaptation of the economy to a specific environment, at the same time, may undermine the economy's adaptability' (p. 11). Whether these dangers confront the Emilian case is addressed in this section.

The mode of economic regulation that has been perfected in Emilia-Romagna - comprising the public provision of services and the institutions of associationalism and intermediation - is one that has evolved in support of a decentralised craft industrial system. The dominant institutional rationality, to complement the behavioural traits of the region's decentralised craft networks, has been one of incremental adaptation, learning by interaction, and the mobilisation of grounded tacit knowledge.

This reading is consistent with the emphasis placed in the emerging literature on the sources of learning and innovation within industrial districts and local business systems (Asheim, 1997; Maskell and Malmberg, forthcoming; Becattini and Rullani, 1993; Bellandi, 1996; Brusco 1995; Lombardi, 1997; Belussi, 1995; Gottardi, 1995). The consensus seems to be that, while networks of technologically advanced firms tend to derive their dynamic competitiveness from access to the fruits of scientific knowledge, codified rules, technological advances, and strategic leadership, loosely-coupled small firm networks tend to rely more on informal, non-scientific, and interactive knowledge as a source of competitive advantage. Success - at individual and network level - is claimed to be the product of craft knowledge and experience, apprenticeship, pooling and diffusion of information, imitation, incremental innovation and adaptation, endogenous routines, and operational flexibility.

One implication is that while the latter properties might provide considerable gains associated with incremental adaptation within niche-markets in which commercial success is predicated

upon continual product modifications, they might be less conducive for path-breaking shifts in product or technological trajectory (Bertini, 1994 and 1995; Nomisma, 1993; Bianchi and Bellini, 1991). In addition, the dominant institutional rationality of action - inclined towards adaptation to externally-driven changes - might prevent the development of a more strategic and reflexive rationality, geared towards path-shaping or environment-changing goals (Lombardi, 1994). In agreement with this interpretation, Charles Sabel (1995: 4) compares task-oriented co-ordination in the Italian craft model with goal-oriented co-ordination among Japanese decentralised firms, to comment:

'...forms of coordination, derived from Japanese experience, that encourage deliberate, experimental revision of the definition and distribution of tasks within and among economic institutions outperform those based on notions of craft or entrepreneurship, that pursue the reintegration of conception and execution of tasks within a division of labor assumed to be natural and beyond reflection. This system of coordination I will call learning by monitoring because of the way it links evaluation of performance to reassessment of goals'.

For Sabel the craft system tends to generate a skill-based interdependency among firms that is able to react with rapidity and craft excellence to shifts in market circumstances. Here, learning is a matter of incremental adaptation in the face of an allegedly unmalleable environment and reliant upon a largely 'procedural' rationality that helps *a posteriori* adjustment to the changing external environment. In contrast, the goal-oriented system allows individual units to experiment and adapt as the 'system oscillates between determining the division of labor for itself and reconsidering that determination in light of execution' (*op.cit*.: 9). In this context, learning by monitoring is a matter of developing a strategic and reflexive rationality across the business network, but especially among the lead organisations, designed towards anticipating, influencing and shaping the economic environment (see Amin and Hausner, 1997, for a more detailed analysis of the merits of different rationalities of action).

Other commentators, however, have observed that small firm networks and industrial districts which have been forced to confront intensified international competition, rapidly changing industry standards, and aggressive market leaders, there is scope for strategic behaviour, radical innovation, and learning by monitoring in general. For example, within networks characterised by considerable entry and exit of firms, and loose ties between the units, the scope for change in product mix and technology is considered to be enhanced by the greater variety of capabilities available and friction between them (Bellandi, 1996; Grabher, 1994). Similarly, networks driven by dominant firms seeking to develop and retain technological and market leadership and manage complex subcontracting and collaborative relationships, appear able to develop a strategic rationality, at least among the network leaders, even if task-specialist units might remain less experimental (Lombardi, 1997, Bellandi, 1996; Ferrucci and Varaldo, 1993).

Path-challenging Entrepreneurial Needs

There is mounting evidence of the emergence of network leader firms in the Emilian economy, displaying signs of 'learning by monitoring', especially in technology-intensive sectors such as automatic machinery or the agro-mechanical sector, and in new research-intensive sectors such as biomedical products (Bertini, 1995; *Scuolaofficina*, 1993; Capecchi, 1990b; Ferrucci and Varaldo, 1993; Lipparini and Lomi, 1996; Lorenzoni, 1992). These are medium-sized firms (80-100 employees), run by highly qualified or creative entrepreneurs with decades of business experience and leadership in a particular industry, often commanding considerable influence within the regional business community and related organisations (e.g. technical schools, research centres, local authorities). In contrast to the flexibly specialised firm of the past, they act as system integrators, offering a portfolio of related goods fashioned and assembled through a series of product-specific subcontracting networks, each with its own leader and follower firms. Their role is to provide international market access, strategic leadership, and resources, respectively through their extensive commercial experience and presence, investment in appropriate managerial and technical expertise, and command over financial and other resources. Their own survival seems crucially dependent upon developing strategic capability and a matching adaptive capacity, so that markets can be anticipated and shaped and so that the organisational architecture and culture of their business network can become experimental and problem-seeking.

Thus, at the leading edge of the Emilian business system, there are signs of path-moulding evolution and adaptation. The available research suggests that in part these goals are being achieved as a result of shifts in the core competencies and self-understanding of both network-leader and product-leader firms, as they mover towards focusing on strategic or core capabilities. In part, they are the result of a shift towards establishing looser and more reciprocal ties with privileged suppliers and subcontractors who are now expected to experiment with product (rather than just task) configurations and markets. In this regard, the leader firms are becoming more like larger advanced corporations elsewhere at the head of intricate subcontracting networks and managing the benefits of alliance-based forms of business organisation.

There is no shortage of appreciation within the business community of the need for innovations that go beyond the region's dominant industrial culture based on learning-by-doing. In the course of field visits in Winter 1995 and Spring 1996, this became clear in the course of interviews with network leader firms and experts associated with engineering and electronics. For example, the region's Industrial Association, in recognition of the shortage of new firm formation has started to develop incubator programmes with the University of Bologna to facilitate the development of entrepreneurial and managerial skills among science graduates with top technical and research qualifications. Less informally, Bologna's Museum of Innovation and Industrial Heritage (established by the municipality with considerable input from progressive business leaders, University academics and other professionals, and the city's famous Aldini-

Valeriani Technical School - the historical source of most of Bologna's engineering firms) has become an important forum for information exchange and innovation in the engineering and electronics industries. Its educational and cultural mission, its imaginative exhibitions which draw on memory and the latest industrial developments, its research-oriented magazine *Scuolaofficina*, and its splendid facilities for business meetings, have all helped to revitalise waning interest in science and technology among the younger generations, to bring together a community of industrial interests and get entrepreneurs to exchange ideas on new challenges and opportunities.

The region's institutional set up, as suggested earlier, has been one geared towards gradual adaptation to the needs of flexibly specialised small firms, rather than the anticipation of new economic and organisational challenges. The region's institutional history has not been that of developing the tools for critical reflexivity, through which, as Sabel (1995: 20) argues, the policy community, like the learning-by-monitoring firm, becomes 'capable of re-evaluating and revising its substantive purposes' and developing a culture of 'experimental regionalism' in which the central task is 'to help the regional economic actors master the new disciplines of decentralised co-ordination which inform the policy of experimentalism itself'. Instead, the legacy has been largely to assume that the artisans and small firms knew their business best, such that the task of public policy should be to facilitate access to the factors of production (credit, business services, labour, etc.).

It is not readily apparent that the need for a qualitative shift in institutional purpose and behaviour has been grasped by the region's policy and political community. There are signs of an insufficient grasp by public policy actors of new challenges faced by the business community, which might necessitate new ways of delivering policy support. The three examples below suggest that there appears to be a growing need for initiatives that cut across the region's traditional sector-based and factor input-based policies. While it may well be simply a matter of time before these problems are addressed, what is worrying is that the initiatives might emerge as a response to pressures from the business community and other interested parties (thus drawing on a procedural rationality), rather than as the outcome of reflexive deliberation within the policy community of future economic challenges and opportunities.

One example concerns recognition of the centrality of network leader firms. This might necessitate explicit promotion of network-leader firms and their extensive filieres of suppliers and subcontractors. This might involve action to facilitate the search by firms for network partners within and beyond the region, to provide training on the dynamics of network co-ordination, management and renewal, to enable access to latest research and technological advances, to help leader firms to find subcontractors outside the region to alleviate the current-alleged shortage of supply within Emilia-Romagna and to provide support for export promotion and internationalisation in general. If the significance of the 'experimental' firm is as significant as some anticipate, the need for an appropriate policy response is probably as important as the

action taken in the 1980s to establish business service centres for selected sectors and industrial districts. Given the advanced expertise offered by the region's very many service centres in providing several of the above network activities to small firms, the reorientation of effort in recognition of the strategic importance of leader firms may prove to be far less difficult than elsewhere.

Another 'lateral' policy gap relates to a recurrent worry about generational continuity and renewal among entrepreneurs who opened businesses in the 1950s and 1960s. There appears to be a decline in the supply of new entrepreneurs, partly because younger generations prefer higher education, paid work, and professional careers to craft or entrepreneurial lifestyles; a problem exacerbated by lack of interest in the business among sons and daughters. One solution might lie in encouraging new, research-based, entrepreneurship among University graduates (Cooke, 1996). The region boasts international excellence and over-supply in a number of academic fields. Training programmes to improve the business skills of graduates, with efforts to stimulate a virtually non-existent market for venture capital directed to innovative projects, could help nurture the rise of a new generation of entrepreneurs. These are solutions which necessitate actions that are quite different from the region's historical reliance on Technical Schools, personal savings, craft experience, personal contacts and culture of reward through work and family sacrifice, as a source of entrepreneurship.

The third area of cross-sectoral policy reform that is particularly needed for the region's very many individual small firms which are not locked into inter-firm co-operative networks and wish to remain independent, concerns the availability of developmental and industry-sensitive funding from the banking sector. Historically, banks have tended to offer only short-term credit based on the immediate financial performance of firms, with access largely conditional upon personal familiarity (especially in the rural areas and industrial districts) or the power of persuasion of the financial intermediaries (*commercialisti*) normally employed by firms to obtain bank loans. Thus, beyond the efforts of entrepreneurship-sensitive funding arrangements offered by the Co-operative or Artisan associations, the tradition of merchant or industrial banking and that of risk capital to support new entrepreneurship remain rudimentary. The problem of financial access has intensified in recent years, owing to the profound transformation of the Italian financial system in light of internationalisation, deregulation, privatisation, and more stringent EU and Bank of Italy rules on good practice among banks. The resulting wave of mergers and take-overs, replacement of savings banks by commercial banks, and financial stringency, has considerably dented the credit-worthiness of small firms as banks have become increasingly driven by the imperative to build reserves and make only safe commercial loans.

The financial difficulties of small firms have been actively discussed within policy and research community over the last decade, but this has tended not to translate into appropriate policy action. One policy gap is the adequate provision of 'intelligent' capital from banks to new and existing small firms (once credit-worthiness is established on the basis of a proper understanding

by banks of a firm's). One option might be the availability of long-term investment or equity capital, based upon joint review of a firm's business plan and commercial prospects - not just its short-term financial performance. Such a scheme might also involve a measure of equity investment from the public sector to reduce the financial risk for both the banks and the firms. The *Cassa di Risparmio di Bologna* has begun to offer equity-based risk capital, attempting through regular meetings to break the traditional mistrust and division of duties between banks and small firms. However, its actions remain an exception to the rule.

Institutional Splits

Institutional reaction has been split towards the alleged shift in the economic challenges which face the region's small firm economy. The 'traditionalists' wedded to the model of flexible specialisation (from the Artisan Association, the Co-operative League, small business associations and industrial district organisations, to yeoman ideologues, intellectuals and politicians) appear less perturbed by the new developments. Their commitment continues to lie in perfecting and proselytising the Emilian Model and looking for ways to strengthen, *inter alia*, the delivery of services to small firms, industry-specific supports, local ties in the face of external take-overs and extra-regional production links, and international commercial penetration.

In contrast, the 'modernisers', which includes the more metropolitan organisations and authorities, larger industry associations and unions, business leadership, regional authority, ERVET, and purveyors of technological and cultural advancement, appear to have grasped the significance of the new challenges, but without a clear consensus on the direction in which a radical shift in institutional roles and rationalities should be taken. A good illustration is provided by reforms introduced since the early 1990s to re-focus concerning the role of ERVET and its wider network of service centres. In 1993, after considerable pressure from the region's Confederation of Industry which was seeking to gain greater policy influence, the regional authority introduced a series of reforms to change ERVET into a more market-driven organisation, away from its traditional role as an intelligence-gathering regional development agency. The size of the management board was slimmed down, the number of staff was reduced by a third, public sector funding was reduced, ERVET's control over the industry-specific service centres such as CITER (textiles) or function-specific agencies such as ASTER (technology transfer) was reduced, local branches of the service centres were closed down or rationalised in preference of regional-level centres, and both ERVET and the service centres came under pressure to chase project-based funding from a variety of sources including the EU. One consequence of these reforms in the direction of project-based initiatives (so as to improve efficiency and accountability) has been a reduced scope for programme-based strategic policy making (due to cuts in capacity, project-driven fragmentation, and commercial legitimisation).

This, for some observers (Bellini, 1996), has tended to undermine the agency's role as the region's think-tank and to sever its vitally important role as a key intermediary between the region's institutions (due to its slimmed-down management board which once represented a wide range of interests).

This example, graphically illustrates the contradictions of an under-deliberated and under-negotiated reaction to the need for institutional 'modernisation'. A narrow frame of action concerned with cost-effective delivery of client-determined projects seems to be emerging, in keeping with the general neo-liberal trend world-wide towards lean and task-specific institutions. Such specialisation, viewed in terms of short-term market efficiency based on the delivery of services to clients, can of course be seen as a move towards more skilled and effective organisations. But, precisely at a time when a broader, goal-driven agenda might need to be considered (if you agree with the claim that a paradigmatic shift is under way in the industrial base), such 'slimming down' risks eroding strategic capacity and the power of intermediation between diverse interests. This deficit has rather serious implications for developing Sabel's culture of 'experimental regionalism', since it contributes to undermining the capacity for path-shaping or goal-setting policy formulation and institutional adaptation.

Whether experimental regionalism and its attendant institutional rationalities provide a key to continued long term success is a matter for history to judge, as is the question of whether this particular region is somehow lacking in this regard. Current developments, however, tend to suggest that the issue of radical adaptation does not occupy prime position within the policy community. The leader firms and their associations have a clear understanding of the need for dynamic adaptation in a rapidly evolving and contested market, but they do not constitute an effective regional policy community. Indeed, their primary concern with their own commercial goals limits how far they can become the principal agent for diffusing a culture of learning-by-monitoring. At the same time, there is a danger that even Emilia's rich associationalist tradition is becoming more self-referential and bureaucratic.

Certainly until recently, institutional innovation was centrally reliant on intermediaries, sharing common cultural and political principles and brokering information exchange and agreement across the region's different social partners and institutions. Some claim that this legacy is being threatened by both the rise of a new professional technocracy across the region's public institutions and bureaucratic governance within individual representative organisations (Vittorio Capecchi, personal communication). The risk is that horizontal links between organisations will weaken and that the leadership of representative organisations will become divorced from their members and constituents.

Innovation Beyond the Emilian Model

It could be argued that Capecchi's positive evocation of intermediation in the past is more appropriate for incremental and path-dependent learning and adaptation, than for a new path-

breaking development trajectory. The logic of argument here would be that while intermediation helps to build up consensus and speed up information flow across the institutional spectrum, it does not necessarily encourage diversity of options or search beyond the mainstream.
Accordingly, Patrizio Bianchi, the Scientific Director of Nomisma in Bologna, claims that the new economic challenges facing the region require more than an attachment to the craft and associationalist institutional culture of the Emilian Model (personal communication). His view is that in pursuit of radical innovation, institutional change should be directed not towards the technocratic solutions proposed by the modernisers, but towards learning from policy initiatives - top-down or bottom-up - elsewhere in the region, which lie beyond the dominant frame of flexible specialisation and which, importantly, have had to cope with shocks requiring unusual responses. In other words, an experimental regionalism based on learning from mould-breaking alternatives (well before circumstances force such a search).
In Emilia-Romagna, examples of such innovation can be found in the less prosperous parts of the region, to the east of Bologna in localities not characterised by flexible specialisation. The experience of two examples are summarised below. They are interesting not only because of their difference from the dominant discourse on the Emilian manufacturing and institutional system, but also because they are novel solutions for the localities themselves, stimulated by severe economic shocks. The examples are not offered for their instrinsic merit, nor is the intention to show that the region has more to it than flexibly specialised small firms and industrial districts. Instead, the aim is to illustrate some aspects of experimentation; in this case an idiosyncratic experimentation forced by events, as distinct from a culture of experimentalism based on routine goal-monitoring behaviour.
The first example comes from the tiny town of Copparo in the province of Ferrara, in which industrialisation traditionally has been dominated by large firms. Copparo is a one company town dominated by a large manufacturer of earth moving equipment, recently taken over by a leading German company. Historically, the culture of negotiation between the company, its workers, and the local authority had been arms-length and often confrontational. Thus, initial reaction to the take-over was that of distrust and opposition. The local community feared post-takeover closure or the demanding expectations of a new German management, while the employers feared confrontation.
This culture, owing largely to the imagination and effort of the Mayor and his independent advisers, has been broken, with considerable progress made towards a culture of open dialogue and negotiation between the social partners. The Mayor managed to persuade the local community that the arrival of the new management should be taken as an opportunity to improve the local linkages of this vertically integrated and closed company, so as to reduce future prospects of closure and easy transfer of assets. To facilitate this shift, the local authority introduced a number of innovations designed to build-up the quality of local supply. These included better training facilities for existing workers, a programme of local infrastructural and

environmental upgrading, an ‘incubator project’ to encourage youth entrepreneurship based on sub-contracts with the main company (already a success, with an entire sub-assembly of parts subcontracted to a new worker co-operative), and a business information centre run by a team of energetic and imaginative young graduates, in order to identify new local entrepreneurial opportunities and training needs, formulate economic policy and intermediate between new policy ventures.

Locally, these innovations are judged to have been a success, even though their economic outcomes are too early to anticipate. Their wider policy relevance, however, lies in two areas. The first is the ability of key protagonists to see and grasp the possibility of a path-breaking rationality of action, involving a new type of relationship and division of labour between the social partners. A considerable shift in attitude and approach was required in order to embark upon a positive restructuring programme centred around a dominant employer. The second is the encouragement of new social capabilities through new organisations, actors and intermediaries, in support of industrial policy actions developed from below, and through democratic dialogue. Part of the process of turning around the inherited policy discourse has been the courageous decision - in this case largely through the assent of the Mayor - to place responsibility in the hands of a younger generation with novel ideas, but no real experience (the incubator project and the business information centre).

The second example of radical innovation relates to remarkable policy shifts introduced by the commune of Forlì, 60 kilometres east of Bologna. In the early 1990s, faced with rounds of industrial crises and mounting unemployment sparked by large-firm deindustrialisation, the local authority launched an ambitious plan of economic recovery based on unorthodox practices and policies. A systematic analysis was undertaken of the nature of the economic crisis, the locality’s weak spots and obstacles to change, and its longer term demographic and social trends. On the basis of this analysis, and consultation with the widest possible range of social partners, the Mayor presented a policy-based programme, with a named list of councillors, before the electorate, as a voting ploy at the local elections.

This innovation alone broke with the normal tradition of voting based on party-loyalty and an undeclared programme and junta. In addition, once in power, the new administration, with its profession-based rather than politician councillors, chose to abandon the traditional functional management structure based on routine delivery of services (e.g. transport, economic development, social welfare) in preference for a priorities-based set of projects managed by individual councillors within a frame of regular board meetings chaired by the Mayor. Each project then drew in a task force of external advisers, proposals were put to the scrutiny of the public and other interest groups, and idea-driven seminars were organised periodically to flush out policy innovations. In other words, the local authority took a lead in embracing a new model of governance based on vision, problem orientation, interaction procedures, partnership, and social legitimacy.

This procedural shift has been accompanied by a conscious decision to pursue innovative policy solutions. For example, it soon became clear to the Council that new private sector jobs were not in the offering on a significant scale and that public resources to stimulate job creation were limited. Thus the decision was taken to privilege incubator projects which might serve to develop long term economic capabilities, and relatively low cost solutions targeted towards the most vulnerable groups in the labour market.

An example of the former is the opening of a new university, to compensate for the province's below average higher education achievements. The University is no ordinary academic teaching institution, but one with a strong emphasis on the establishment of applied research centres across the faculties, in the hope that new skills and entrepreneurial ventures of benefit to the local economy may be encouraged. The University has also launched short degrees in areas such as business economics, and social economics, in order respectively to stimulate new firm formation and third sector activities among graduates.

An example of the council's decision to focus on vulnerable groups is the launch of a programme to reintegrate the long-term unemployed, youths, the disabled, and pre-pensioners out of work, into the labour market through socially usefully work. One initiative offers council work for a limited period to unemployed graduates to provide training or new project plans (e.g. architectural renewal), or to less qualified groups to help in the delivery of welfare services or environmental improvement programmes. Another initiative is the provision of a wage subsidy to the many voluntary and non-profit organisations to employ individuals from the target vulnerable groups, many of whom have been through appropriate training programmes funded by the council.

The local authority in Forlì, like that in Copparo, has used the challenge of economic crisis to initiate a radical programme of institutional change in pursuit of new economic priorities. In both cases, only time will tell whether the reforms will deliver the desired economic revitalisation. What is clear, however, is that there is conscious recognition of the need for experimentation, both in terms of policy content and delivery based on institutional opening, reflexivity and adaptation (Bianchi, 1995).

CONCLUSION

In the more prosperous areas of Emilia, particularly those dominated by a particular policy discourse, the signs of experimental regionalism are less clear. At one level, the traditionalist policy discourse remains that of perfecting the international competitiveness of the Emilian Model through new versions of the service centres and other hard institutions of flexible specialisation from the past. At another level, the modernising policy discourse speaks of institutional reform in the direction of cost-efficiency, specialisation, accountability, and support for research and science-based economic activity. The options are either to perfect path-dependent institutional evolution or to embrace a lean, but still top-down, industrial policy that seems remarkably similar to policy shifts in other advanced, technology-based regions.

Nicole Bellini (1996) has described the present policy dualism as an 'ambiguous regionalism' characterised by, on the one hand, the recognition by the policy community of the need for proactive region-building, but, on the other hand, its difficulty to conceptualise a new industrial strategy as well as to acknowledge the value of a rationality of action based on goal-setting and active intermediation. In this regard, he is less convinced than others that the institutional culture of Emilia-Romagna is that of an 'intelligent' or 'learning' region (Cooke, 1997; Morgan, 1997). It may well be that the region's business networks draw upon trust, loyalty, reduced opportunism, the offer of real services, entrepreneurial experience, and region-wide sources of information and innovation, to sustain continual learning and adaptation (as claimed by Cooke and Morgan, 1998). However, the region's public policy culture might be becoming that of an *information-rich* region, which is endowed with a rich institutional structure to help refine an existing industrial trajectory or catch-up with a new one as it makes its demands heard. An *intelligence-rich* public policy culture, in contrast, ought to be able to fashion a new industrial trajectory by monitoring goals, instruments and outcomes, developing capacity to learn and adapt, and consciously accumulating knowledge and memory.

Only time will tell if the institutional set up of the region is becoming less experimental and whether this really matters. Many who marvel at the success of the region rightly claim that its economic strength in Europe continues to grow, which tends to imply that the institutional set up cannot be far wrong. On the other hand, the worrying signs of learning deficit outlined in the second half of the paper cannot be simply ignored, and they do raise an important conceptual point concerning the sources of different types of learning - from rule-based or procedural adaptation to reflexive or experimental learning - and their sustainability over time.

Vittorio Capecchi (personal communication), reflecting on whether Emilia-Romagna possesses a sustainable 'intelligence-rich' public policy culture, concludes that it does, but that an important original source might be at risk. For him, an institutional culture of strategic learning and

adaptation is to be found in the region's socio-political legacy discussed in the first part of the paper, centred around a progressive, values-driven, leadership, associationalist decision making and intermediation between organisations. This generated a vision and a reflexive regional culture. It now risks being undermined by the rise of the new technocratic, efficiency-seeking, regional elite.

An important policy implication is that the region's tradition of democratic associationalism needs retention and revitalisation, through conscious recognition of its practical economic value. This said, in the context of increasing market pressure for agenda-setting rather than agenda-following economic action, this tradition needs to be situated within a culture of learning-by-monitoring that is consciously embraced by the region's public policy community. At one level, this might mean associations - from unions to small firm organisations - having to close the gap with their members constituents, by engaging with them to track new developments and nurture novel ideas and projects. At another level, the policy leadership has to evolve towards providing genuine regional intelligence and strategic guidance. This might necessitate moving away from a culture of providing services, towards one of seeking out and supporting experimental ventures of a cross-sectoral nature (e.g. building links between research centres and businesses, formation of venture capital, development of new markets, youth entrepreneurship projects, export-promotion ventures, information technology networking projects, etc.). It necessitates avoiding a governance culture of pure service, or of command, for one concerned with managing autonomous networks and mobilising intermediaries to develop and sustain experimentalism.

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