Organizing Diversity: Evolutionary Theory, Network Analysis, and Postsocialist Transformations*

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Abstract

In contrast to the dominant transition framework that examines organizational forms in Eastern Europe according to the degree to which they conform to or depart from the blueprints of already existing capitalisms, this essay examines the innovative character, born of necessity, in which actors in the postsocialist setting are restructured by redefining and recombining resources. Instead of conceiving these recombinations as accidental aberrations, it explores their evolutionary potentials. Its starting premise is that the actual unit of entrepreneurshp is not the isolated individual personality but the social networks that link firms and the actors within them. Drawing on recent developments in evolutionary theory, it cautions that although all-encompassing privatization and marketization might foster adaptation in the short run, the consequent loss of organizational diversity will impede adaptability in the long

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Introduction: Lessons from Labrador

Each evening during their hunting season, the Naskapi Indians of the Labrador Peninsula determined where they would look for game on the next day's hunt by holding a caribou shoulder bone over the fire. Examining the smoke deposits on the caribou bone, a shaman read for the hunting party the points of orientation of tomorrow's search. In this way, the Naskapi introduced a randomizing element to confound a short term rationality in which the one best way to find game would have been to look again tomorrow where they had found game today. By following the daily divergent map of smoke on the caribou bone, they avoided locking in to early successes that, while taking them to game in the short run, would have depleted the caribou stock in that quadrant and reduced the likelihood of successful hunting in the long run. By breaking the link between future courses and past successes, the tradition of shoulder bone reading was an antidote to path dependence in the hunt.

Mainstream notions of the postsocialist "transition" as the replacement of one set of economic institutions by another set of institutions of proven efficiency are plagued by similar problems of short term rationality that the Naskapi traditional practices mitigate. As the economist's variant of "hunt tomorrow where we found game today," neoliberals recommend the adoption of a highly stylized version of the institutions of prices and property that have "worked well in the West." Economic efficiency will be maximized by only through the rapid and all-encompassing implementation of privatization and marketization. We argue, by contrast, from an evolutionary perspective, that although such institutional homogenization might foster adaptation in the short run, the consequent loss of institutional diversity will impede adaptability in the long run. Limiting the search for effective institutions and organizational forms to the familiar Western quadrant of tried and proven arrangements locks in the postsocialist economies to exploiting known territory at the cost of forgetting (or never learning) the skills of exploring for new solutions.

With our Naskapi example we do not mean to suggest that policy makers in contemporary Eastern Europe should select institutions with a roll of the dice. For us, the lesson from Labrador is that institutional legacies that retard the quick pursuit of immediate successes can be important for keeping open alternative courses of action. Institutional friction preserves diversity; it sustains organizational routines that might later be recombined in new organizational forms. Resistance to change, in this sense, can foster change.

¹ This account is drawn from Weick (1977, p. 45).

Institutional legacies embody not only the persistence of the past but also resources for the future. Institutional friction that blocks transition to an already designated future keeps open a multiplicity of alternative paths to further exploration.

Our neoliberal colleagues would be quick to argue that such exploration is costly, inefficient, and unnecessary. In their view, the alternative, evolutionary course of search seems an indulgent squandering of resources, avoidable by exploiting institutions with proven returns. Given limited resources, the economies of Eastern Europe would do better to be quick to the chase, to learn from the leaders instead of the lessons of Labrador.

Recent studies in evolutionary economics and organizational analysis suggest, by contrast, that organizations that learn too quickly sacrifice efficiency. Allen and McGlade (1987), for example, use the behavior of Nova Scotia fishermen to illustrate the possible trade offs of exploiting old certainties and exploring new possibilities. Their model of these fishing fleets divides the fishermen into two classes: the rationalist "Cartesians" who drop their nets only where the fish are known to be biting and the risk-taking "Stochasts" who discover the new schools of fish. In simulations where all the skippers are Stochasts the fleet is relatively unproductive -- for knowledge of where the fish are biting is unutilized; but a purely Cartesian fleet locks in to the "most likely" spot and quickly fishes it out. More efficient are the models that most closely mimic the actual behavior of the Nova Scotia fishing fleets with their mix of Cartesian exploiters and Stochastic explorers.

James March's simulation in "Exploitation and Exploration in Organizational Learning" (1991) yields similar results when he finds that interacting collections of smart learners frequently underperform interactions of smart and dumb.² Organizations that learn too quicly exploit at the expense of exploration thereby locking in to suboptimal routines and strategies. The purely Cartesian fleet in Allen and McGlade's study, like the organizations of homogeneously smart learners in March's simulations, illustrate the potential dangers of positive feedback and the pitfalls of tight coupling. Like infantry officers who instructed drummers to deliberately disrupt cadence while crossing bridges lest the resonance of uniformly marching soldiers bring calamity, we draw the lesson that dissonance contributes to organizational learning and economic evolution.

This book counters the neoclassical prescriptions for the postsocialist economies with an alternative conception of development drawn from new insights in evolutionary theory and network analysis. These schools of analysis are not typically paired, and this

² As John Padgett summarizes March's findings: "(A) Fast learners overspecialize into competency traps. Slow learners preserve collective wisdom. (B) Smart learners respond quickly to noise as well as to true data. They reinforce self-confidence in collective delusions. (C) Homogeneity in "smart" worldview limits the genetic variability necessary for future exploration. (D) Personnel turnover of dumb for smart is good up to a point, as long as others in the organization learn about whom to attend to when." (Padgett, 1992:746)

introductory essay makes the case that their combination provides fruitful tools for understanding the postsocialist transformations.

As we introduce the major themes of the book and anticipate the substantive research findings of its chapters, we shall see that each of the papers contributes in its own way to elaborating the volume's title: Restructuring Networks. The starting premise of this book is that the proper analytic unit, because it is the actual economic unit, is not the isolated firm but networks that link firms and connect persons across them.³ Similarly, the unit of entrepreneurship is not the isolated individual but networks of actors. As such, our attention shifts from the attributes and motivations of individual personalities to the properties of the localities and networks in which entrepreneurial activity is reproduced (Stark 1990). It follows that the economic unit to be restructured is not the isolated firm but networks of firms linking interdependent assets across formal organizational boundaries.

The papers in this volume also exploit the intentionally double meaning of the book's title: Networks are not only the units to be restructured but are also the agents to do restructuring. That is, in place of the dichotomously forced choice of restructuring directed by state agencies versus restructuring via market processes this book explores the possibilities of alternative coordinating mechanisms governed neither by hierarchy nor by markets (Powell, 1990; Stark and Bruszt, 1995).

The volume's subtitle, <u>Legacies</u>, <u>Linkages</u>, and <u>Localities</u>, serves as the organizing principle of this introductory essay. As we make the case for incongruence and explore the possibilities that ambiguity can be a resource for economic action, the reader should be prepared for some dissonance between the conventional meanings of these terms and their usage here. In developing these themes, we shall discover processes and logics quite different from notions that come first to mind. As we have already alluded, we shall see that legacies are not simple residues of the past but can serve as resources for the future.

See Grabher, 1993. Here we join with economic sociologists and legal scholars studying East Asian economies from a network-centered approach in which social networks are the basic units of action. Redding and Whitley (1991, p. 79), for example, argue that "Anglo-Saxon conceptions of the legally bounded firm as the basic unit of economic action are inadequate to explain the economic actions and structure of chaebol and Chinese family businesses, both of which have complex extra-firm linkages influencing decision making." Gilson and Roe (19xx) "take as the Japanese structure not a single Japanese corporation in isolation, but the keiretsu structure -- the interlocking webs of firms, which loom so large in the Japanese economy." Hamilton and Feenstra (1995) offer a similar, but more general argument: "Inter-firm networks that rest on strongly normative bonds are better understood as economic organizations in their own right instead of a residual or intermediate category. Embedded networks become units of economic action rather than the firms that constitute them. ... The network linkages are stronger than the firms that make up the networks. Firms come and go, but the networks persist over time."

Similarly, the more systematically we pursue the logic of linkages, the more our analysis turns to the structural features produced by the absences of particular connections. And whereas "localities" might evoke sites in which proximity shapes shared meanings, we examine localities as sites where the simultaneous presence of multiple logics (what we might think of as different "species" of social action) yields complex ecologies of meaning.

LEGACIES

Fitness tests

In the neoliberal prescription for the postsocialist transition, the persistence of organizational forms and social relationships of the old state-socialist system signals an incomplete change, a manifest symptom of a half-hearted implementation of the envisaged new social order. Accordingly, legacies indicate institutional pathologies contaminated with the deficiences of the old regime obstructing the process of transformation: The future cannot be realized because the past cannot be overcome. The legacies of state-socialism block the promising road to free markets.

Free markets, the prominent advocates of neoclassical economics incessantly repeat, are a synonym for efficiency. Notoriously suppressed during state-socialism, competition in free markets guarantees that more efficient organizational forms will survive and that inefficient ones perish. In the relentless struggle for survival only the fittest endure.

Ironically, while economists can still embrace the crude Darwinism of Spencer's "survival of the fittest," contemporary biologists (see, for example, Smith 1984; Gould and Lewontin, 1984; and the essays in Dupre, 1987) have challenged the received evolutionary model arguing that evolution cannot simply be regarded as a one-dimensional process of optimization, a beneficient and unilinear journey from the lower to the higher form of organization, from the inferior to the superior. Natural selection does not yield the superlative fittest, only the comparatively and tolerably fit.

Evolution, in this sense, does not proceed along a single grand path toward perfection but along multiple paths which do not all lead to optimal change. That some developmental paths produce ineffective solutions and suboptimal outcomes is not an indication of evolutionary failure but a precondition for evolutionary selection: No variety, no evolution. Hence, the evolutionary process necessarily entails development through failure: "imperfections are the primary proofs that evolution has occured, since optimal designs erase all signposts of history" (Gould 1987: 14).

This critique of the "survival of the fittest" paradigm, offers an alternative evolutionary model for challenging the neoclassical assumptions of "historical efficiency" (March and Olsen 1989, pp. 5-6) in which survival implies efficiency and mere existence proves optimality (cf. Hodgson 1993). The lesson to be drawn from evolutionary theory is that competition in free markets does not necessarily favour the more fit and more efficient

form of organization: market competition is not an optimizer (Barnett 1995).

Fitness is not an absolute and invariant quantity. Rather, fitness depends on the environment, and the environment may change during the course of the selection process (Carroll and Harrison, 1994). Thus, even if the selected characteristics of an organizational form were the "fittest," they would be so only in regard to a particular, economic, political, and cultural context; they would not be the fittest for a changing or a different context. In fact, the very fitness of an organizational form might, through various mechanisms, induce environmental changes that undermine their efficiency. It follows that organizational forms that are most fit for the "transition" are quite likely to be suboptimal in the subsequently changed environment. In place of the search for the "best" institututions to manage the transition, we might do better to reorient our analysis to identifying the types of organizational configurations that are better at search.

Evolutionary theory, moreover, turns out attention to how the future development of an economic system is affected by the path it has traced in the past. Once we reject the notion that "from whatever starting point, the system will eventually gravitate to the same equilibrium," we are alerted to the possibilities that free markets might lock in economic development to a particular path that does not gravitate to the optimum (Hodgson 1993: 204). Positive feedback can have negative effects. Increasing returns from learning effects and network externalities (Katz and Shapiro 1985) yield real immediate benefits that can preclude selection in the long run of the most efficient organizational form (Arthur 1989; David 1986; Carroll and Harrison 1994). Once an economy is locked into a particular trajectory, the costs of shifting strategies outweigh the benefits of alternatives. This approach to economic history stresses the possibility that the very mechanisms that foster allocative efficiency might eventually lock in economic development to a path which is inefficient viewed dynamically. The mechanisms that are conducive for the synchronic adaptation of the economy to a specific environment may, at the same time, undermine an economy's diachronic adaptability.

⁴ One of the better known of these mechanisms has been introduced in organizational ecology as the concept of "density dependence" (Hannan and Freeman 1989). When the number of a specific organizational form is small (and its density in the population low), the rate of increase of this form will be slow. As the number increases, however, the rate of growth of this form will also increase because of complementarities and, as Alfred Marshall would have called it, positive external economies. As the density of the specific form increases further, however, the rate of increase will decline since competition for resources becomes tougher amongst a growing number of rivals. In summary, the viability of a particular form (as expressed in terms of rates of foundings and rates of failures) first increases and then decreases as a function of the frequency of that form in the population.

The trade-off between allocative and dynamic efficiency⁵ constitutes a fundamental tension in the current transformation in Eastern Europe. Murrell (1991) argues from empirical data that state socialism was no less efficient in allocating resources than capitalist societies. Where it lagged was in dynamic efficiency, in its capacity to promote innovation. This imbalance has survived state socialism: Current reform efforts seem preoccupied with removing institutional legacies for the sake of improving allocative efficiency. But a purging of organizational legacies to gain allocative efficiency can come at the cost of undermining dynamic efficiency just as a narrow adaptation to a specific economic environment can jeopardize the economy's adaptability (Granovetter, 1979, p. 498; Hannan, 1986).

In the perspective developed here, we focus not on the problem of how to improve the immediate "fit" into a new economic environment but on how to reorganize the institutional and organization structure of these economies to enhance their ability to respond to unpredicatable future changes in the environment. Although the institutional legacies of the East European economies might hinder their adaptation in the short run, they could contribute to the economy's adaptability in the long run. We do not seek, of course, to reverse the evaluation of historical legacies from universally viscious to unequivocally virtuous. Instead we aim to highlight the dual potential of legacies to block and to support transformation.

It follows that instead of examining organizational forms in Eastern Europe according to the degree to which they conform to or depart from the ideal types of organizing production in Western style capitalism, this book is concerned with variations and mutations emerging from the recombination of the inherited forms with emerging new ones. Instead of simply conceiving these recombinations as accidental aberrations, this book explores their evolutionary potentials.

Compartmentalization: The organization of diversity

We thus shift from the preoccupation with the efficiency of an individual organizational form to a concern for variety and diversity of forms⁶ central to the

⁵ In the economic literature this tension has been described as "a conflict between short-term 'static efficiency' and long-term efficiency and ... this property relates directly to the distributional characteristics of the firm population. Diversity at the micro level is a prerequisite for stable macro growth" (Eliasson 1984: 263; see also Eliasson 1991; Nelson 1991; Dosi 1991).

⁶ As Michael Hannan argues, "Having a range of alternative ways to produce certain goods and services is valuable whenever the future is uncertain. A society that retains only a few organizational forms may thrive for a time. But once the environment changes, such a society faces serious problems until existing organizations can be reshaped or new ones created. Since reorganization is costly and may not work at all for the reasons state above

perspective of "population thinking" (Mayr 1984 and 1985; Sober 1984, pp. 155-169). As we shall see, the recombination of old organizational forms in the reorganization of the large state enterprises increases variety and diversity within the "genetic pool" for the evolution of new organizational forms. For evolution to work there must always be a variety of forms from which to select: "Selection is like a fire that consumes its own fuel ... unless variation is renewed periodically, evolution would come to a stop almost at its inception" (Lewontin 1982: 151). Diversity and variety allow evolution to follow at the same time different paths which are associated with different sets of organizational forms. When selection starts off not simply from a single trajectory but from a broad and diverse range of evolutionary alternatives, the risk decreases that local maximization results in an evolutionary dead end. Two or more evolutionary trajectories are thus able to cope with a broader array of unpredictable environmental changes than is the case with a single one.

In this perspective, different levels of efficiency associated with the different evolutionary paths are not symptoms of an inefficient selection mechanism. Rather, they are a precondition for improving over-all efficiency since "the rate of increase in fitness of any organism at any time is equal to its genetic variance in fitness at that time" (Fisher 1930: 35). The merciless competition evoked by the crude Darwinism of the "survival of the fittest" is, according to Neo-Darwinism, mitigated by the biological principle of compartmentalization. Compartmentalization buffers the various sub-populations from each other and, hence, allows less efficient ones to coexist with the currently most efficient ones without being exposed to selection immediately. Compartmentalization allows for an increasing diversification of the evolutionary selection (Mayr 1980). In a compartmentalized genetic pool, rare genes have a greater chance to influence subsequent evolution than is the case with a non-compartmentalized genetic pool.⁸ Although compartmentalization detracts from the fitness of the entire system, the sum of the subsystems keeps ready a broader spectrum of answers to environmental challenges and, thus, ultimately arrives at an even higher level of fitness (Weizsäcker and Weizsäcker 1984, p. 188). Similarly, but from a game-theoretic perspective, Boyer and Orlean (1992) argue that a new convention is more likely to take hold in a population of organizations not when it attempts to invade the entire population immediately but when it begins in a relatively buffered subfield of organizations.

(and because new organizations are fragile), it may take a long time to adapt to the new conditions A system with greater organizational diversity has a higher probability of having in hand some solution that is satisfactory under changed environmental conditions" (Hannan, 1986, p. 85).

⁷ See, for example Eigen, et al, 1981. In contrast to the basic selection model, the subdivided population model relaxes the assumption of spatial homogeneity in the genetic composition of populations. Evolutionary biologists more frequently use the term "structure" (see, for example, Wilson 1984 and essays in Brandon and Burian 1984) to refer to processes that we designate here as compartmentalization.

⁸ For related arguments in organizational ecology, see Barnet (1995).

In different terms: containment can be an important element of contamination.

The principle of compartmentalization suggests that it is not simply the diversity of organizations but the <u>organization of diversity</u> that is relevant for the recombination of organizational forms in Eastern Europe. The reproduction of diversity depends on the ability of different levels of efficiency to coexist. On the one hand, evolution comes to a stop in cases where less efficient forms are eliminated through selection immediately: Too little diversity, no evolution. On the other hand, however, the absence of any evolutionary selective comparison might turn diversity into "noise" in which none of the organizational forms would be able to influence the direction of any evolutionary trajectory: Too much diversity, likewise, no evolution.

This tension between too little diversity (emerging from a too low degree of compartmentalization) and too much diversity (resulting from a too high degree of compartmentalization) is exemplified by the analysis of the restructuring of the large state-owned corporations in East Germany (Grabher, chapter 4 of this volume) and in Hungary (Stark, chapter 2 of present book). The resolute East German approach led to a rapid dissolution of the old hegemonic form of the Kombinat and (through the establishment of Western branch plants) to an increasing diversity of organizational forms. But, as Grabher argues, this diversity might yet shrink again in the medium-term future. The superior efficiency of the Western branch plants could lead -- due to a lack of compartmentalization -- to a further crowding out of other organizational forms located mainly within the indigenous small firm sector. The great disparity between the invading front runner and the indigenous laggards could produce a winner-takes-all situation that once again suppresses organizational diversity.

Seen from this perspective, the current Eastern German economy echoes the relative paucity of organizational forms of the old GDR-economy whereas the transformation of the large enterprises in contemporary Hungary builds on the previous decade of organizational experimentation that allowed not only for competition among *firms* but also for competition of *forms* (Stark, 1989). This competition of forms created a broad spectrum of variants in organizing production that increasingly overlapped in terms of personnel, supplier relations, and property rights. With this blurring of boundaries came greater organizational diversity. In contrast to the more recent experience in Eastern Germany, moreover, this diversity of forms has not been challenged by the emergence of a vastly more efficient form. That is, there is greater diversity of organizational forms in Hungary, but there is also much less obvious disparity of "fitness" among them. Whereas in Eastern Germany a preponderant disparity runs the danger of suppressing diversity, in Hungary a "noisy" diversity runs the danger of suppressing selection with the result that less efficient forms might deprive more efficient forms of resources to an extent that blocks the evolution of the entire economy.

Legacies for entrepreneurial careers

The notion of compartmentalization also figures implicitly in proposals for a "twotrack strategy" whereby resources are channeled into the indigenous small firm sector (the former second economy) while adopting more stringent administrative measures to harden the budget constraints of large firms remaining in the state sector. That strategy builds on the pioneering work of István Gábor who was among the first to perceive and analyze the significance of the second economy. In a series of brilliant studies, Gábor (1979, 1985, 1986) demonstrated that the developmental potential of the second economy rested not in some spirit of individual entrepreneurship but in a dynamic tension between the twinned economies of late state socialism. Subsequent advocates of the two-track strategy such as Kornai (1990, 1992), Murrell (1992a,b, 1993) and later Poznanski (1993) argued that this dynamic tension would evaporate if privatization and marketization would be attempted throughout the entire economy. That is, the transformative potential of the emerging marketized sector would dissipate if it was not buffered from the sphere of the large public enterprises (Stark, 1990). Attempts to "privatize" everything at once would lead to privatizing little at all. A strategy of non-compartmentalized privatization would yield firms that were private in name only. Similarly, expectations are not likely to change when those with new behaviors are scattered throughout the population. Actors are more likely to change their expectations when the probability of encountering a new behavior trait is higher (Boyer and Orlean, 1992). Buffering the sub-population of market-oriented actors increases this likelihood; and compartmentalization (buffering that is not absolute but porous) increases the chances that the new patterns of behavior can take hold in the broader population.

But the two-track strategy was nowhere adopted as official policy. Nor can we assume, in any case, that a compartmentalized strategy would have selected behavioral traits of market orientation. What we can do is to examine actual behavior in the emergent small firm sector. Doing so, we see 1) that the second economy has not necessarily promoted a dynamic capital accumulating stratum and 2) that the second economy has not been the primary source of the new economic elite as successful entrepreneurs are likely to come from the ranks of the socialist cadre. Each illustrates the ambiguous legacy of state socialism.

First, as we shall see in Gábor's analysis below in Chapter XX, the small firm sector in postsocialist Hungary is marked by fragmentation and "over-tertialization." Instead of finding small-scale proprietors growing into medium-size employers, Gábor identifies an increasing tendency for small entrepreneurs to shun productive lines of business that involve

⁹ A plausible argument might be made that, despite official rhetoric, Poland's de facto policies came closest to the two-track strategy.

higher investment intensity.¹⁰ He traces these features, at least partially, to economic preferences inherited from the second economy of the past regime including the income-maximizing, consumption orientation of households; aversion to long-term business investment and risk-taking; the low appreciation of free time compared to income; and the poor tax morale. Much of the entrepreneurship in this overly tertiary small firm sector means "moving things," not making them (Maruyama, 1993, p. 166).

Second, technocratic expertise acquired during state socialism provides an important source of entrepreneurship in the postsocialist period. As in advanced market economies, the elite in state socialism was an educated elite -- in the early years, partly because party membership in their youth enabled some to receive higher education, in the later years, because the ambitious joined the party to promote their careers after completing their formal education. That is, under socialism, education and party recruitment went hand in hand. It now appears, and not surprisingly so, that under postsocialism, education and entrepreneurship are closely linked. The legacy of socialism is that the former elite are well-endowed to convert the cultural capital of the education and training acquired in the old order to advance to prominent positions in the new (Bourdieu 1986; Szelenyi and Szelenyi 1995; and for a discussion of recent debates see Hanley 1995).

Empirical studies conducted in Hungary, the Czech Republic, and East Germany are now providing evidence to support an argument that it is the common technocratic character of both party and entrepreneurial recruitment that is a main source of this continuity. Rona-Tas (1994: 62), for example, concludes from a study on Hungay that "cadres are more enterprising both as non-corporate and corporate entrepreneurs." Starting a corporate business upholds the technocratic continuity argument, as the effect of cadreship takes place through education. The new elite of entrepreneurs will substantially overlap with the old one, "because in the transition from socialism the first shall not be last, but rather the first shall last" (Rona-Tas 1994: 65). In a similar vein, Vladimir Benacek's study of new entrepreneurs in the Czech Republic (Chapter XX below) and Thomas Koch and Michael

¹⁰ Gábor's ecological analysis of the "too many, too small" syndrome is an interesting application of the concept of density dependence. "In the first place, parallel with the proliferation and shrinkage of undertakings, economic inefficiency became a less and less effective handicap to entry. In the second place, as the undertakings were growing in number and shrinking in size, it became easier for them to conceal incomes, which provided them a source of protection, independent of economic efficiency, form larger organizations as competitors ... In the third place, the more fragmented they became, the less they could afford, by reason of their diminished incomes ... to seek business expansion, while crowdedness may also have discouraged financially stronger firms as potential rivals from entering the market."

¹¹ For comparative studies of stratification see, for example, Haller, Kolosi and Robert (1990); Blau and Ruan (1990); and Treimann and Ganzeboom (1990).

Thomas's analysis of their counterparts in Eastern Germany (Chapter XX) present findings of a strong connection between managerial or technocratic positions in the state-socialist past and success in entering private entrepreneurship in postsocialism.

Taken together, the studies in this volume point to several legacies of state socialism in the field of entrepreneurial careers: whereas the old socialist hierarchies seem a launching pad for careers in the larger, legal firms of the emerging entrepreneurial sector, the heritage of the second economy pushes towards further fragmentation within the semi-legal sector of micro-firms.

LINKAGES

Loose coupling

In the predominant view, the implosion of state socialism has left behind an institutional vacuum and a social tabula rasa of atomizatized economic and political actors. Instead of atomization and paralysis, this book examines the embeddedness of actors in social ties, whether official or informal. Instead of a social tabula rasa, the volume focuses on how actors attempt to recombine resources, especially by reorganizing the networks that link individuals and firms within and across localities and economic spheres. By examining the constraining and the enabling dimensions of patterned relationships, we emphasize that actors are vividly involved in restructuring networks.

The relational approach adopted here starts not with the personal attributes of actors but with the networks of interaction that link actors (Emirbayer and Goodwin 1994). From this perspective, very strong and dense social networks facilitate the development of uniform subcultures and strong collective identities. But network analysis does not begin and end with social cohesion. A particularly dense and tightly coupled network (in the extreme, where every actor in the network has a direct tie to every other) might promote cohesiveness while hindering the ability to gain information and mobilize resources from the environment.¹² Recent trends in network analysis posit an inverse relationship, in general, between the density/intensity of the coupling of network ties on the one hand and their openness to the outside environment on the other. Similarly, in contrast to conventional cliqueing models (e.g., "who knows whom"), new research in the field is more likely to focus on absent ties in a network social space where actors lack direct connections. Research within this more robust relational analysis is now demonstrating that "weak ties" (Granovetter, 1973) indirectly connecting actors or bridging the "structural holes" (Burt,

¹² On the weakness of strong (multiply connected) ties see Breiger and Roberts 1995. On the strength of weak (or indirect) ties, Granovetter (1973, pp. 1366 and 1376) writes: "Weak ties are more likely to link members of different social groups than are strong ones which tend to be concentrated within particular groups." Hence, "whatever is to be diffused can reach a larger number of people, and traverse greater social distance (i.e., path length), when passed through weak ties rather than strong."

1992) that become "obligatory passage points" (Latour 1988) between relatively isolated groups of actors are crucial for the adaptability of networks.

The evolutionary advantages of loosely coupled networks were early appreciated and systematically differentiated by Weick (1976). First, a loosely coupled network is a good system for localized adaptation. If the elements in a system are loosely coupled, then any one element can adjust to and modify a local contingency without affecting the whole system. Loose coupling thus lowers the probability that the network will have to (or even be able to) respond to every minor change in the environment. A second advantage is that loosely coupled networks preserve many independent sensing elements and therefore "know" their environment better. Third, in loosely coupled networks where the identity and separateness of elements is preserved, the network can potentially retain a greater number of mutations and novel solutions than would be the case with a tightly coupled system. As such loosely coupled networks "may be elegant solutions to the problem that adaptation can preclude adaptability" (Weick 1976: 7). When a specific network fits into an ecological niche, adaptation can be costly because resources that are useless in the current environment might deteriorate even though they could be crucial in a modified environment. Finally, it is conceivable that loose coupling preserves more diversity in responding than do tightly coupled networks and therefore can adapt to a considerably wider range of changes in the environment.

Network concepts of strong and weak ties, of tight and loose coupling, can thus be translated back into the problem of compartmentalization in population thinking even as the latter can be expressed in network terms. Thus, just as new traits enter a population by enough buffering for them to take hold within a subpopulation and diffuse throughout a species by enough contact across substructures, so change in the organizational field is fostered by enough strong ties for social cohesion and enough loose coupling for adaptability.¹³

Again, however, we are not claiming an unequivocably positive relationship between the loose coupling and the adaptability of a network. Although diversity and loose coupling might, on a structural level, support adaptability by allowing different levels of efficiency to coexist, they can also, on a cognitive level, result in a cacaphony of orientations, perceptions, goals, and world-views that confounds even minimal cohesiveness. Such is the danger noted by some observers of the Eastern European transformation (e.g. Henderson, Whitley,

¹³ It follows that the exploitation versus exploration problem of the Nova Scotia fishing fleet raised in the introduction could be re-examined throug the concept of compartmentalization expressed in network terms. As such, the purely "Cartesian" simulations in Allen and McGlade's models would be seen as too tightly coupled and the purely "Stochastic" as too loosely so -- with the actual fleet seen as a compartmentalized population with some subregions of the network space showing the density and intensity of strong ties within an overall network structure of loose coupling.

Lengyel, and Csaban 1995) who identify the "chaos" resulting from the multiplicity and ambiguity of orientations and perceptions as a major obstacle to future-oriented economic action. Nonetheless, the essays in this volume invite a tolerance of ambiguity. tolerance is not an unqualified embrace¹⁴ but an explict ambivalence: It acknowledges that ambiguity can be an asset even while it recognizes that these gains can come at the expense of accountability. Aware that an excess of ambiguity can dissipate social cohesion, it is nonetheless alert to the possibilities that ambiguity can be a resource for credible commitments. Just as tolerance for ambiguity is regarded, on an individual level, as an attribute of a mature and robust personality (Loevinger 1976: 23), so here it is seen, on the system level, as a central cognitive precondition for adaptability. Similar to the ways that tolerance for different levels of efficiency enhances the evolutionary potentials of a network, so tolerance for ambiguous or even contradictory perceptions and goals facilitates the search for new answers to new questions. Organizational research "leaves little doubt, that an increase in subgoal diversity and attendant conflict can enhance the quality of search" (Cohen 1984, p. 436). The communication of contradictions and conflicts, sparked by the ambiguity of goals, could act as a sort of an "immune system" for a network (Luhmann 1986, p. 185). In a sense, tolerance for ambiguity constitutes the "intelligence" of a network reducing the chance that contradictory signals are suppressed in favour of a singular but distorted knowledge and an internally consistent but mistaken interpretation.¹

¹⁴ "[A]mbiguity is not satisfying in itself, nor is it, considered as a device on its own, a thing to be attempted; it must in each case arise from, and be justified by, the peculiar requirements of the situation" (Empson 1973: 235). Ambiguous and contradictory perceptions and world views can isolate themselves from each other in a way that ends up in a sort of structural "schizophrenia". Systems might fall victim to a vicious circle of stagnation and fragmentation in which the subunits "may fight the growing entanglement of stagnation by striving for independence. Fiefdoms evolve. Independence is gained, but synergy form interdependence is lost ... Buffers dissolve, and conflict may be triggered incidentically" (Masuch 1985: 29).

¹⁵ Chan (1979: 177) specifies the fatal consequences of suppressing ambiguity in pointing to the counter-productive effects of the preference of intelligence agencies for conformists who share the regime's values and belief system: ""Deviants" in terms of class background, professional training, ideological committment (e.g. pacifists), or racial or ethnic origin are systematically under-represented. Consequently, there is no reason to expect that tendencies of ethnocentrism will be ameliorated or that various cognitive biases will cancel each other out, if we simply increase the number of intelligence bureaus. In fact, the reverse may be true. Errors will be duplicated ... leading to an illusory confidence in the intelligence product."

Loose Coupling in Entrepreneurial Networks

As we shall see in the papers in this volume, rather than being extinguished for the sake of the logical principle of <u>tertium non datur</u> (there is no third case), ambiguity can be deliberately reproduced in particular situations by the <u>tertius gaudens</u> (the third who benefits). Taken from the work of Simmel (1923, pp. 154 and 232) the <u>tertius</u> role is instructive in the Eastern European transformation because it points to an ambiguity from which "the third who benefits" leverages off a stable entrepreneurial position. In certain situations, emerging as the *tertius* depends on creating competition: "Make simultaneous, contradictory demands explicit to the people posing them, and ask them to resolve theirnow explicit-conflict" (Burt 1992, p. 76). Entrepreneurship, in this perspective, emerges from *tertius* brokering contradiction and ambiguity between others: No ambiguity, no *tertius*.

As Judith Sedaitis' analyis of the emergence of new market organizations in Russia suggests (chapter XX below), such a tertius strategy and the strategic utilization of ambiguity seems more easily practiced in loosely coupled networks than in tightly integrated ones. According to her study of the new commodity exchanges in Russia, exchanges organized around loosely coupled networks differ from tightly coupled networks in crucial aspects. Loosely coupled networks (with less density of direct ties among their founders) enjoy greater immediate returns on investment due to their greater maneuverability and more varied access to resources. They are able to serve market demand more directly and to exploit the lucrative opportunities in the disruption of established distribution patterns. With minimal constraints both internally and externally, they are relatively free to pursue tertius strategies in a manner which has been labelled "shark behavior" (Kozminski 1993). At the same time, however, their extraordinary diversity in turn provides little basis for social cohesion.

Commodity exchanges organized around the tightly-knit networks grounded in past institutional arrangements, by contrast, inherit institutional legitimacy yet they suffer a limited profitability. Sedaitis argues that the lower profitability of these tightly-knit networks is due less to the constricted range of talent of their personnel than to the structural incapacity of their netowrks to pursue the aggressive *tertius* strategy favored by the loosely coupled networks. Moreover, for the tightly knit networks, limited outside interaction inhibits processes of learning and unlearning: "Shared past histories constrain the range of future possibilities ... old ties limit organizational flexibility and maintain a "segmented" system of circumscribed action and responsibility that limits the potential of management to respond creatively to the new environment and the problems it poses" (Sedaitis, chapter XX:YY).

Sedaitis' analysis of the Russian commodity exchanges thus marks an important departure from conventional approaches to entrepreneurship in two respects. It can be contrasted, first, to the research tradition that attributed entrepreneurship to the behavioral features of certain personality types, featured prominently, for example, in the early writings of Schumpeter (1912, p. 137) who provided a rich source of iconographic portraits of

entrepreneurs as "whole-hearted fellows" (ganz kerle) combining the genius of creative discovery with the courage of "creative destruction." For Sedaitis, entrepreneurship is not a function of an individual personality but of a social network. Second, Sedaitis' use of network concepts departs dramatically from a recent tendency to view network connections as the property of individuals. In that view, "social capital" (Coleman, 1988) is a new individual-level variable that interacts with other assets ("human capital") in the process of status attainment or career mobility. Accordingly, researchers can now develop measures of the "volume of network capital" in the possession of individual research subjects. However innovative in the field of mobility studies or the analysis of entrepreneurship, the addition of this new variable brings the notion of "network" into the picture in a manner that neglects the relational dimension that is the fundamental insight of network analysis. In Sedaitis' study, by contrast, our attention shifts from networks as property to the properties of networks as she demonstrates that the shape, structure, and characteristics of different kinds of networks make possible different economic activities.

Asset ambiguity

If the legacy of old networks and the structure of new ties are important for determining the types of entrepreneurial activity in postsocialism, might they also figure prominently in the restructuring of large corporations? This is the question posed in the studies by Gerald McDermott (Chapter 3 below) and Stark (Chapter 2) on the Czech Republic and Hungary respectively.

In Czechoslovakia during the 1970s and 80s, under the umbrella of meso-level "Industrial Associations," constituent suppliers and customers, managers and workers, state bank branches, firms and local Party members formed alliances to gain privileges from the center and created informal compacts of economic coordination to limit and adjust to the uncertainties of an economy of shortage. McDermott argues that, over time, these informal networks became institutionalized, though not necessarily legally recognized, and became the frameworks to define and renegotiate claims to individual units of the large state-owned corporations. To the extent that these tightly coupled networks are also sources of mutual hold-up power among the actors, the discretion and the necessary knowledge to reorganize production are bound up in these relationships. Hence, the policy of the state to end-run the potential hold-up powers of firm actors--through rapid privatization--would be "one-legged" (McDermott, Chapter 3).

As McDermott notes, "one of the increasingly evident legacies of socialist economies is that while industrial concentration rigidified the economic and technical links among, say, customers and suppliers, the increasing self-coordination and autarky among interlinked firms within industrial associations allowed for the development of complex informal vertical and horizontal alliances among economic actors" (Chapter XX, p.YY).

McDermott demonstrates that, despite its neoliberal rhetoric, Vaclav Klaus' voucher privatization program did not eliminate the ties that bind so much as rearrange them.¹⁷ The outcome is a web of connections through which a multiplicity of actors are renegotiating not simply contractual ties but their mutual claims on interdependent assets.¹⁸ Through that web, firms, banks, investment companies, local governments, and parts of the state bureaucracy identify firms that should be saved, devise strategies for restructuring assets, bargain about the allocation of resources, and renegotiate the very rules and governance institutions for resolving disputes among them.

The Janus face of networks also influences the Hungarian process of property transformation and corporatization, driven by key actors in the old formal and informal networks who constituted the best organized social group in Hungary during the last decades. As Stark documents in Chapter 2, managers of the large state-owned enterprises are breaking up their organizations -- along divisional, plant, or even workshop lines -- into numerous satellite corporations. Although these newly incorporated entities with legal identities were nominally independent, they combined private, semi-private and stateproperty in a complex manner. Property shares in these satellite organizations are not limited to the founding enterprise but are also held by top and mid-level managers, professionals, and other staff. In the typical pattern of this particular form of "recombinant" property," these private persons were joined in share ownership by other corporations and corporate satellites which were spinning around some other enterprises. At the same time, large enterprises are acquiring shares in each other, creating extensive inter-enterprise ownership networks. Like the ropes binding moutain-climbers on a treacherous face, these ties reduce risk, they buffer the networks from the uncertainty of the transformation shock, and they can facilitate innovation for some, even while retarding the selection process for many (Miner, Amburgey, and Stearns 1990; Ickes and Ryterman, 1994).

In contrast to the essentialist categories of private versus state property, these recombinant practices create networks of horizontal ties of cross-ownership intertwined with vertical ties of nested holdings in which the boundaries between state and private property increasingly blurred.¹⁹ Recombinant property is not, however, a simple mixture of public

¹⁷ For an analysis of the new structure of concentrated ownership that resulted from voucher privatization see especially Brom and Orenstein (1994); on the new "investment funds" and problems of corporate governance in the newly "privatized" Czech firms, see Coffee (1996); and for a comparative analysis of how the patterns of inter-enterprise ownership in the Czech Republic differ from those in Hungary, see Stark and Bruszt (1995).

¹⁸ See Sabel (1993) for a discussion of asset interdependence; Sabel and Prokop (1996) analyze similar organizational dynamics in the Russian setting.

¹⁹ For a related discusion of the blurring of the boundaries of public and private see Gieryn's (in press) fascinating analysis of the architectural design of a biotechnology lab at a major U.S. research university.

and private: it is a hedging strategy that also blurs the boundaries of organizations themselves and blurs, as well, the boundedness of justificatory principles. As Sabel (1990) and Kogut, Shan, and Walker (1992) demonstrate in their studies in Germany and the United States,²⁰ under conditions of extreme market volatility or of extraordinarily rapid technological change, economic actors engage in hedging strategies such as cross-ownership. In cases of extremely complex asset interdependence, it is not clear-cut property claims but an ambiguity of property claims that provides flexible adaptation. Stark argues that Hungarian recombinant property displays similar features of organizational boundary blurring. Such asset ambiguity should not be interpreted, however, as the simple polar opposite of Williamson's "asset specificity" for it occurs in a volatile environment where the state's paternalistic efforts at the centralized management of liabilities creates incentives for managers to employ a multiplicity of justificatory principles to acquire resources. To survive in such an environment, managers become equally skilled in the language of profitability for credit financing as in the syntax of eligibility for debt forgiveness. When they attempt to hold resources that can be justified by more than one legitimating principle, they make assets of ambiguity.

It is this ambiguity, together with the network properties that underlie it, that forms the basis for a kind of strategic play that Padgett and Ansell (1993) label "robust action." At the core of robust action is the fact "that single actions can be interpreted coherently from multiple perspectives simultaneously, the fact that single actions can be moves in many games at once, and the fact that public and private motivations cannot be parsed" (Padgett and Ansell 1993: 1263). The outcome is flexible opportunism, that is, maintaining discretionary options across unforeseeable futures in the face of hostile attempts by others to narrow those options. Crucial for maintaining discretion is not to pursue any specific goals: "For in nasty strategic games ... positional play is the maneuvering of opponents into the forced clarification of their (but not your) tactical lines of action" (Padgett and Ansell 1993: 1265). Victory, hence, means locking in others, but not yourself, to goal oriented sequences of strategic play that become predictable thereby.

The same opportunistic blurring of boundaries that leads to a recombination of assets and a decomposition of the large corporations, also bears a social cost: it erodes (or, in the postsocialist case, retards) accountability. As Stark demonstrates (Chapter 2), the problem with the peculiarly diversified portfolios in the "polyphonic discourse of worth that is postsocialism" is that actors can all too often easily and almost imperceptibly switch among

²⁰ Gereffi (1994) presents similar findings in this analysis of East Asian supplier chains in the garment industry. His "global commodities chain" approach "looks at the configuration of economic and social networks, rather than the structure and strategy of isolated firms, as a key to understanding new patterns of global competition. ... In summary, the transnational governance structures that define buyer-driven and producer-driven Global Commodity Chains (GCCs) make conventional boundaries between firms, industries, and countries obsolete" (Fonda, Gereffi, and Nonnemaker, 1994).

the various positions they hold simultaneously in the coexisting moral economies. To be accountable according to many different principles becomes a means to be accountable to none. Unless we are willing to posit "flexibility" as an over-riding value and a metalegitimating principle, we cannot escape the challenge that postsocialism poses, not uniquely²¹ but acutely, for our epoch: if networks are viable economic agents of permanently ongoing restructuring, how can we make networks (as a new kind of moral actor) accountable?

LOCALITIES

Locality as ecology

In the dominant view, localities are irrelevant in constructing transition strategies. When not centered squarely at the level of the individual firm, analysis of the postsocialist transformations typically focuses on policies and institutions at the level of the national economy such as monetary policy, legal frameworks for corporate governance, or regulatory institutions for banking and finance. Place, the problem of localities, is out of place in these perspectives.

The papers in this volume, by contrast, bring localities into focus as sites of economic action. In so doing, they draw on the new economic sociology which demonstrates that globalization does not displace the properties of localities but makes them all the more salient. As greater market volatility shifts strategic action from economies of scale to economies of scope and then to economies of time (Storper 1989; Teece 1993; Sabel, 1994; Gereffi, 1994), local knowledge, local culture, and local networks give shape to the new organizational forms of flexible specialization.

It was with the analysis of the Industrial Districts of northern Italy that the potential of localities to contribute to economic development most dramatically entered the research literature in the 1980s. The stories of regional production systems concentrated in the province of Emilia Romagna have typically been written as success stories of a coherent system of economic institutions whose compatability makes for the decisive transaction-cost efficiency of the regional cooperative networks. These networks are deeply embedded within an institutional infrastructure that effectively provides for support services.

But the story of the Italian Industrial Districts might also be read in a different light. The Italian textiles and clothing districts in particular are composed of an extremely broad and heterogeneous spectrum of diverse institutions and organizational forms ranging from internationally-renowned design ateliers and technologically highly-advanced medium-size

²¹ See especially Teubner (1993) for an insightful discussion of how new network forms of organization pose challenges for legal theory.

firms at one pole to small artisanal firms and illegal homeworkers at the other. Instead of regarding this spectrum as a coherent set whose efficiency is based on the transaction cost savings gained through the compatibility of the various organizational forms, the evolutionary strengths of the industrial district might be based on the very incompatability of these forms. In this view, not systemic coherence but organizational discrepency is the effective evolutionary anti-body against hegemonic "best practice solutions." By preserving the richness of diverse organizational routines for the evolution of new organizational mutations, discrepency increases the adaptability of the region.

The resistance against the economistic temptation to streamline, at least in the Italian Industrial Districts, seems not to be an entirely intentional product of institutional design. In these districts, the spatial proximity of closely knit cooperative networks in small neighborhoods is seen as a major source of their transaction-cost efficiency. From an evolutionary perspective, however, the transaction cost effects are less important than the fact that spatial proximity allows for a continuous exchange of resources, information, and personnel across these diverse, even incompatable, forms of production. Whether or not proximity economizes on transaction costs, its long term benefit is to facilitate a cross-fertilization across disparate forms less likely if spatially dispersed. Like the Naskapi caribou ritual of our introduction, spatial proximity in the northern Italian districts acts as a sort of random generator disrupting the tendency toward transaction cost-efficient relations with compatable firms. In preventing hyper-efficient behavior, spatial proximity does not dissolve incompatability but enhances it.

Expressed in different terms, this view of industrial districts analyzes localities as ecologies of diverse organizations. Localities are sites of interdependence of even greater complexity than the proprietary ambiguities of complementary and cospecialized assets across the boundaries of enterprises. The interdependencies within localities are more complex because they entail ambiguities across different social logics, routines, and practices involving not only business firms but political, religious, residential, and family life. Because these logics cannot be reduced to each other or expressed in the equivalents of a common currency of, localities are not simply compartmentalizing buffers separating subpopulations of the same species of organization but are complex ecologies of diverse "species" of social ordering principles.

Postsocialist localities

In the post-World War II era, two major policies had inordinate weight in shaping the economic geography of state socialism: the vigorous rationalization of industries and the clustering of new inter-related plants in the countryside. To facilitate central administration of industries, the authorities consistently decreased the number of firms while increasing their size. Once labor shortages developed in traditional regions of industrial manufacturing, the government could tap into excess rural labor by grouping plants around small, isolated communities. This was particularly possible with the so-called footloose

industries such as textiles, engineering, or electronics. Subsequently, communities became increasingly isolated from one another at the same time that they became increasingly dependent on these local firms or plants for employment, economic resources, and social services such as housing, medical services, kindergartens, sport facilities, and the like (McDermott, Chapter 3 of this volume).

The "company town" syndrome emerging from state socialist policies in the recent past explains the importance of the local level in the restructuring of the large state-owned corporations in the present. Whereas enterprise directors were formerly confronted by compulsory coordination with state ministries, provincial party committees, and the central management of the large combines, the collapse of the socialist hierarchies has the consequence that managers of individual plants now frequently face only the representatives of local government (Burawoy and Krotov 1992). Under conditions of high concentration and industrial monostructures, privatization and restructuring do not result in a competive market structure but rather in a new pattern of interaction between state and economy which is often confined to the local level (Wiesenthal 1993, p. 10). According to Shleifer and Boycko (1993, p. 48) for example, in Russia, local governments have legitimacy as elected bodies and have been given control over electricity, water and other utilities which they can translate into influence over firms: as a result, they "have found tremendous room to govern their localities." As the papers on local governments in Eastern German by Hellmut Wollman (Chapter XX below) and in Hungary and Russia by Chris Pickvance (Chapter XX) indicate, with the central state bureaucracy having lost many of its functions but with market transactions between enterprises only poorly developed, the emerging governance structures of postsocialism are shaped by a growing number of decentralized and local actors who try to find a position in the uncertain and volatile conditions beyond plan and market.

Entrepreneurs in localities; entrepreneurial localities

The emerging localized governance structure based on horizontal rather than on hierarchical or market coordination can contribute to the mobilization of resources in the formation of new entrepreneurial units. In their study of a small community new Budapest, Tibor Kuczi and Csaba Makó (Chapter XX below) indicate how local network ties reduce uncertainties and risks facing start-up ventures. That is, network linkages act as buffers retarding selection and reducing the "liability of newness" -- a problem facing new firms in any economy but particularly acute in the volatile uncertainties of postsocialist economic transformation. Kuczi and Makó point to trust-based relations where patterns of economic exchange are interwoven with ties of kinship and friendship. In that local community they studied, new contractual arrangements often follow informal relations among actors with shared experiences in the recent past whether at the locally dominant state enterprise or through joint participation in the second economy. In such conditions, trust reduces the risks involved in the selection of suppliers, business partners, and employees. Kucszi and Makó conclude that among these local networks, economic transactions are regulated by

"relational contracting" in which the stronger partner does not exploit situations where the weaker partner is vulnerable and where maintenance of the tie itself is a value that regulates exchanges and moderates disputes.

The networks of small-scale proprietors in Kuczi and Makó's study bear some resemblance, at first glance, with the Northern Italian industrial districts -- for example, their preference for localized business contacts in the absence of a strong state, and the importance of traditional relations in contract enforcement. But the traditional elements are only a part of the success story of the Northern Italian districts. And although Kuczi and Makó indicate that an entrepreneurs' club and a local foundation were in the planning stages at the time of their study, the community they examined showed few signs of the highly organized craft associations, trade unions, and administratively competent local authorities so important in the northern Italian district.

Moreover, there are reasons to question the causal connection between traditional ties, relations of trust, and local development. For Gábor (Chapter XX), the liabilities of traditionalism are likely to outweigh the benefits. First, to the extent that second economy producers continue their old habits of making market transactions only where social relations have already preceded, they might be disadvantaged in establishing business ties where arms length transactions are entirely appropriate (even to the point of foregoing advertizing, for example). Second, in the absence of strong civic associations (blocked under communism, but thriving in Italy)²², Gábor is unwilling to assume that the legacy of the proximate ties of the second economy are relations of trust. It might just as well be that the most salient "shared experiences" from the past are relations of mistrust and that new exchanges based on them will bear that stamp (Kemény 1996). In slightly different terms, instead of the Northern Italian route to prosperity, for some postsocialist economies the Road to Europe might run through Sicily.

Finally, what if the direction of causality does not run from local identities to cooperative development strategies but the reverse? This is the question posed by Charles Sabel in rethinking the dynamics of the Italian districts and other regional developmental associations. Cooperative relations, Sabel argues, are not based on primordial loyalties but on "studied trust" (Sabel 1992). One of the clues to these processes is that Sabel and his colleagues (Sabel 1992; Hirst and Zeitlin, 1991; Sabel and Zeitlin 1996) find cooperative regional development projects in districts whose recent histories were marked by intense conflicts. Yet contemporary accounts by actors in these same localities repeatedly refer to harmonious pasts as history is reconstructed in line with the present. Thus, instead of shared identities giving rise to social relations of trust, this work suggests that cooperative configurations reshape identities that can then be shared. Although historically inaccurate, these identities are no less real in their effects as templates for current cooperative action.

²² Trigilia 1986; Stark 1990; Gabor 1990; Putnam 1993.

In this alternative view, localities contribute to innovative and cooperative development strategies not because they are a locus of shared meanings but because they are sites of interdependence among different social groups and different social logics. Because localities cannot be indifferent to this interdependence, we can say that localities are means for organizing diversity. Several of the papers in this volume develop these insights -- from Stark's notion that actors are manuvering not only through an ecology of organizations but through an ecology of ordering principles (Chapter 2, p. YY) to McDermott's analysis of how localities are the sites for complex negotiations among actors whose claims are not only competing but also very heterogeneous in character (Chapter 4, p. YY).

A similar conception of localities as ecologies of social logics informs the study of regional development in Poland by Jerzy Hausner, Tadeusz Kudlacz, and Jacek Szlachta (Chapter XX below). Hausner and his colleagues examined economic development in nine provinces in Southeastern Poland in a study that takes the locality not only as the unit of observation but also as the unit of analysis. In seeking to explain why economic development takes off in some regions and not others, they turn from the properties of individuals to the properties (characteristics, qualities) of the localities themselves (for an earlier ecological study of rural entrepreneurship in China, see Nee and Young 1991). In contrast to Kuczi and Makó who provide such a rich community study of enterpreneurs in localities, Hausner, Kudlacz, and Szlachta might be seen to study entrepreneurial localities. Hausner et al conclude that the best regional development strategies are not led by yet another administrative or quasi-governmental unit in the form of intermediate-level "Regional Development Authorities." Instead, a major factor explaining the differences in regional restructuring was the presence of networks linking diverse types of organizations.

Conclusion: Friction

In the opening pages of <u>The Economic Institutions of Capitalism</u>, Oliver Williamson (1985, p. 18-9) observes that

Transaction costs are the economic equivalent of friction in physical systems. ... But whereas physicists were quickly reminded by their laboratory instruments and the world around them that friction was pervasive and often needed to be taken expressly into account, economists did not have a corresponding appreciation for the costs of running the economic system. Thus, although positive economics admitted that frictions were important in principle, it had no language to describe frictions in fact.

Williamson's contribution to economics has been to develop an analytic strategy to understand "friction" in economic transactions -- with the aim of guiding policies and promoting institutions that minimize these transaction costs. The essays collected in the

present volume can be seen as bringing the analysis of friction into the study of the transforming postsocialist economies. They differ from Williamson's project, however, in two fundamental ways. First, the friction they examine is not that of economic exchanges per se but the friction of economic restructuring: that is, whereas Williamson turns our attention to <u>transaction</u> costs, we are concerned here with <u>transformation</u> costs. In fact, to the extent that institutionalization is a kind of "investment in forms" (Thévenot, 1984) that reduces the costs of future transactions, such transformation costs might be conceptualized as sunk transaction costs. Second, unlike the Williamsonian tendency to assess as superior those forms that minimize friction, the essays here see a positive role for economic friction. To be sure, we are not advocating higher transformation costs or seeking to promote institutions with steep transaction costs; but it does seems to us useful to question the notion of a "smooth" or frictionless "transition."

That position begins from the insight that some friction may be essential for the functioning of markets by undermining positive feedback loops that can lead to lock-in. Such was the lesson drawn by the federal Securities and Exchange Commission in the aftermath of the 508-point crash of the New York Stock Exchange on October 19, 1987. As trading in some fields was approaching an almost frictionless character with advances in "program trading" -- computerized, high speed trading of baskets of stock by major investors with simultaneous and nearly identical information -- the Securities and Exchange commissioners saw a danger that some markets could pass from volatility to chaos. To maintain orderly markets, the commissioners designed a set of "collars" that trigger temporary halts in computerized index arbitrage when the Dow skips more than a certain number of points in either direction. Like the Naskapi caribou shoulder bone that disrupts the negative effects of positive feedback, these so-called circuit breakers bring time, and hence friction, back into the Exchange.²³

Our aim in this introductory essay has been to begin the analysis of the circuit breakers that bring friction to the postsocialist transformations. Institutional legacies produce the friction that grinds against a smooth transition but preserves diversity for future recombinant strategies. Inter-enterprise linkages buffer firms and retard selection, but the redundant relations of loosely coupled networks produce the friction of ambiguity that facilitates entrpreneurial strategies. And the multiple ordering principles of localities produce the friction that inhibits too-simple harmonizations but yields more complex ecologies that are the basis for regional development strategies. With the concepts of compartmentalization, asset ambiguity, and local ecologies of meaning we can proceed to analyze how actors reconfigure legacies, linkages, and localities to forge pathways from state socialism.

²³ See Robb (1990) for an account of the Commission's decision. Heberlein (1995) and Petruno (1994) assess the impact on the New York Stock Exchange. Since it was put in place in 1990, the NYSE "collar" has been triggered fewer and fewer times each year, as market swings have died down.

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