

A Theoretical Agenda for Economic Sociology

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INTRODUCTION

Economic sociology is no longer a novelty. Born in the late 19th century and reborn in the 1970s, it has produced a long run of exciting studies and promising leads.² As the century turns, it is timely to look beyond our accumulation of important empirical studies and reassess what theoretical agenda a structural economic sociology might pursue, and where this agenda fits with the main concerns of sociology and economics.

In doing so, we should keep in mind that the production and distribution of goods and services is just one institutional complex of activities, and that the arguments appropriate to them should have some generic similarity to arguments we might develop to explain political action, science and knowledge, family and kinship, and other persistent social patterns. Thinking about how the sociology of the economy is similar to and different from that of other institutions helps us see what kinds of arguments will work best.

INCENTIVES, INDIVIDUALS, CONTEXT AND HISTORY

We may begin by asking what is distinctive about economic sociology as a way to explain the economy. In part this depends on one's concept of "distinctive". One way analysis of the economy is different from that of some other institutions is that it is largely dominated by a particular academic discipline, economics, which is focused theoretically on concepts of rational or instrumental action, and where "methodological individualism" roots all explanation in the activity of concrete persons. Though sociology should develop its own agenda and argument, rather than react to neoclassical economic analysis, concepts can be sharpened by clarifying where they stand in relation to those developed by economists. A unified theory should build on what both have accomplished.

I argue that there are two very general ways in which the instrumental-reductionist vision is theoretically incomplete, that suggest what distinctive explanatory improvements economic sociology can offer. The first is that any account of human interaction which limits explanation to *individual* interests abstracts away from fundamental aspects of *relationships* which characterize

² See Granovetter 1990 for a more detailed historical account.

economic as well as any other action. In particular, horizontal relationships may involve trust and cooperation, and vertical relationships power and compliance, well beyond what individuals' incentives can explain. Trust and power drive a wedge between interests and action. And this happens in part because norms and identities result from and structure interaction in cognitive and emotional ways that escape reduction to self-interest, and indeed are key in actors' definitions of what their interests are.

The second problem for reductionist accounts is that even though we see some spaces where one may adequately explain outcomes by a purely interest-driven model, there is rarely any simple reduction to individual action that can explain how such spaces evolved as they did, with the constraints and incentives that individuals find themselves acting out (cf. my exchange with Gibbons in Granovetter 1999, or such accounts as Padgett and Ansell 1993). In fact, this is a corollary to a more general argument that action driven by interests as well as that driven by trust or power, occur and have outcomes in ways determined by larger contexts than those in which they are located. I mention the situation of interest-driven behavior first only because it is more typically analyzed as context-free.

This second point does not privilege structure over agency, as individuals who find themselves in situations determined by forces beyond their control, and often far beyond their lifespan, may nevertheless turn these situations to advantage and make a deep imprint on future actions and institutions. For example, though it was quite late in the game before Cosimo de Medici could "suddenly apprehend the political capacity of the social network machine that lay at his fingertips" (Padgett and Ansell 1993: 1264), which he had done little to create, once he did, he dramatically changed the course of Florentine history for many generations.

In practice, these two problems typically occur in the same cases, and though one should separate them analytically, it is hard and somewhat artificial to do so for any particular instance, and I do not succeed very well at it in what follows. But I will try to focus first on the mixed sources of action within confined social spaces of the sort that White (1992) referred to as "molecules", before moving in the following section to how such molecules are constituted.

MIXED SOURCES OF ACTION IN SOCIAL SPACES

To illustrate the first point -- inadequacy of a purely interest-based argument -- I begin with information flow. Economic sociology has made major contributions to understanding this flow through social networks in labor markets, and within and between organizations (e.g. Granovetter 1973, 1995; Burt 1992). One way to apply this understanding is to adapt it for instrumental argument about how best to manage one's networks. Not only economists, but also sociologists such as Boorman (1975, on investing in weak ties), and Burt (1992, on the use of "structural holes") have done so. These models follow a rational choice approach to understand information flow through social networks, and make contributions that are valuable but not wholly distinctive from that of economics.

But even for this apparently tractable case, it is difficult to stay within a simple framework of instrumental rationality. My study of job information flow (1995), for example, made clear that it is often profoundly misleading to think of the acquisition of such information as the result of "investment" in contacts. One reason for this is well stated in Blau's discussion of "social exchange": he points out that positive responses from another are rewarding only insofar as the recipient does not think they are *meant* to be (Blau 1963: 62). People want sociability and hope to be liked, approved and admired by others. Insincere approval is better than none (as those who encourage sycophants well know), but pales in comparison to approval without ulterior motive. Though some "investors" in social relations may achieve great skill in simulating sincerity, as shown by the success of "confidence rackets", the desire of recipients for true approval, and the vigilance of most in ferreting out its opposite, sharply bound the role of calculated instrumentality in social life.

So economic sociology can make a first contribution to understanding the economy by calling attention to the mixture of economic and social motives that people pursue while engaged in production, consumption or distribution.³ But there is more to say here, that involves the

³ But this remains a potential contribution, by and large, because we have so far paid surprisingly

contexts of social interaction, and how they arise. People typically pursue multiple purposes simultaneously in intersecting social formations. For example, they go to parties with nothing more in mind than a good time. It seems implausible to consider this economically instrumental behavior, as the component of expected *economic* gain from loud and intense socializing is small to vanishing, thus unlikely to be anyone's main reason for attending.⁴ And yet, information about jobs does pass among partygoers (Granovetter 1995). The point is that the separate institutions of labor markets and expressive socialization routines intersect in ways that *cannot be accounted for by the incentives of individuals*. This links to the second problem for instrumental theory that I mentioned in the previous section, on how the contexts of action arise, and I will take up the point in more generality below when talking about the intersection of spheres and institutions.

We may summarize the argument so far by saying that in social interaction, people have mixtures of motives and consequently act in ways difficult to describe in terms of pure self-interest. Sociology has expanded on this point by considering how particular *kinds* of social relations make behavior diverge from the narrowly instrumental. To cut through a vast theoretical underbrush, I simply distinguish here between horizontal and vertical relations, and their impact on this divergence.

Analysis of horizontal (non-hierarchical) relations leads to discussions of "trust" or "solidarity"-- states of relationships or groups that lead to cooperation beyond that to be expected from decision dilemmas such as the "free-rider problem" or the "Prisoners' Dilemma". Vertical (hierarchical) ties are defined by a quality of these relations that we refer to as "power",

little attention to the details of interaction or even to why people pursue attachments, leaving these issues to psychological social psychology. The mixture of motives I cite might appear amenable to a purely instrumental argument of the sort made in rational choice theories, if one "merely" conceives of actors as having not only economic but also social needs in their "objective functions". Proper consideration of this point would require a full discussion of whether in their social interaction people are what might be called "consequentialists" (cf. Sen and Williams 1982: 4) -- i.e. to what extent their social action is undertaken as a means to an end, where the end might be social approval as well as economic gain. Such a discussion is beyond my scope here, but I doubt it is possible to capture much of the texture of social life in such a formulation

⁴ Such socializing behavior, in Weber's fourfold classification of types of social action, has stronger elements of "affectual" or "habitual" than of purposive (*zweckrational*) action (Weber 1921: Ch.1).

to be distinguished from solidarity or trust. The behavioral consequences of power are domination and compliance; these are parallel to cooperation, the behavioral consequence of trust or solidarity.

Trust and power open a wedge between behavior and incentives that instrumental theorists try hard to close. Their efforts are strenuous, because problems of trust and cooperation, and of power and compliance, pose difficult challenges for any theory based wholly on rational choice and self-interest. I will challenge attempts to bring these within the orbit of such theory, but these attempts, even if successful, would still leave much of social life and economic action unexplained, since it would neglect how the larger social setting determines the parameters within which self-interest was defined, a matter that I take up later.

Perhaps the most ink has been spilled on problems of trust and the cooperation that flows from it. The issue became especially pertinent to arguments about rational choice when theorists pointed out paradoxes of rationality – interacting individuals, rationally pursuing their own goals, achieved results worse than if each had adopted a suboptimal strategy, as in the famous “prisoners’ dilemmas”. Mancur Olson’s *The Logic of Collective Action* (1965) applied this argument to political theory by pointing out that cooperation to achieve mutually shared goals would be derailed by genuinely rational actors, since each would try to “free ride”. This chilling discovery parallels that ten years later by Oliver Williamson of the likelihood in market relations of “opportunism” – the alloying of simple self-interest with “guile” (Williamson 1975). These discoveries ended the long era in instrumental theory dominated by what Hirschman (1982) has called the idea of *doux commerce*, stemming from the time of Montesquieu, that rational action and exchange transformed people into gentlemen, who automatically followed the rules of the game and were trustworthy despite incentives to the contrary. This oversocialized conception gave way rather suddenly to a neo-Hobbesian conception of market relations as nasty, brutish and short – likely only in fact if people were anonymous atoms in relation to one another, and highly undersocialized (cf. Granovetter 1985).

For in practice, decision dilemmas and opportunism are overcome if the participants, to use the usual language of everyday life, “trust” one another. Separated prisoners both deny the crime despite the dominant solution, because each trusts the other to do the same. Trust thus leads to an outcome better for the collectivity. But no rational account explains why prisoners would do such a thing; trust means precisely that each expects the other to act against her own interest, as defined by the payoff matrix.

Most instrumentalist literature on trust consists of elaborate efforts to deny the data of everyday life and rescue “trust” from its usual meaning, by explaining that actors only trust each other when incentives are properly aligned so that the trust is reasonable. It is said that we “trust” companies’ promise to repay a debt if a rating company has assigned a AAA to its debt obligation, or that we can trust the other prisoner if the game is repeated *ad infinitum*. Companies keep good faith and avoid default because loss of a high rating is expensive, and prisoners deny because in the long run, they would be wiped out by their own malfeasance if they didn’t. Axelrod’s well-known contribution (1984) takes this point into an evolutionary framework.

While all these phenomena are undeniable, they are hardly conclusive. People often act with confidence because they expect others’ incentives to point them in the right direction, but the commonsense meaning of “trust” is that we expect good behavior of others *in spite* of their incentives; and such trust is vital for the conduct of social and economic life. If everyone assumed that others merely “did the right thing” because of incentives, economic life would be poisoned by incessant attempts to conceal the true incentive situation for one’s own advantage. In fact, the well is not invariably poisoned. In most situations economic actors drink freely despite incentives for their counterparts to act worse than they actually do. Thus, one central task of economic sociology is to lay bare the circumstances under which people may safely set aside suspicions that rational action would require them to have.⁵ By definition, such a task cannot be conceived or implemented from within a theory of behavior that admits only of rational action.

⁵ I claim no originality for this formulation of the problem of trust, which runs, for example, through most of the essays in Gambetta (1988). But despite this general agreement in the more or less philosophical literature, analyses of the economy continue to be dominated by attempts to

Though I emphasize the divergence from self-interest resulting from trust in horizontal relations, dislike and corresponding *distrust* and failure to cooperate are equally important and just the flip side of this argument, even though negative relations are rarely integrated into social theory. One nice example is provided by Padgett and Ansell, who describe how the Medicis sat astride structural holes (Burt 1992) among their followers. These divergent networks resulted from low intermarriage rates among different groups of supporters, and they comment that there is “no particular mystery” about this, since “patrician and new men supporters despised each other. Status-conscious patricians ... usually would not dream of sullyng their own honor by marrying into new men families” (1993: 1281). Yet, it was just this separation that gave the Medicis so much leverage in relation to supporters who could not unite.

The concepts of “trust” or “distrust” refer to horizontal relations in which neither party can dictate to the other what she must do. Much of the discussion of trust and the cooperation that flows from it has a parallel in discussions of power and the compliance that flows from it, where the issues are transposed from horizontal and symmetrical to vertical and asymmetrical relations. At all scales in economic action and institutions, people comply, at times, with what they understand others want them to do. Unlike the language of “trust”, however, we have no clearcut usage to demarcate compliance based on incentives from that rooted in other elements of relationships and institutions.

Yet this issue is commonly understood to be important. Blau, trying to carve out a distinctive niche for the concept of “social exchange”, rules out situations where compliance is not plausibly construed as voluntary – as when a thief offers the choice: “your money or your life” (1963: 91). Max Weber classifies types of power in similar ways. For him the least interesting case, which he discusses only briefly, is power based on a “constellation of

reduce trust to incentive alignment.

In practice, economic actors often find themselves in situations where trust in the sense I have proposed is supplemented by a clear assessment of incentives; this is what Portes has called “enforceable trust”. A sophisticated analysis of trust would have to move in the direction of understanding more fully such combinations of driving forces, since neither incentives nor pure trust would suffice in such situations.

interests”, such as a monopoly position in the economy, though it obviously is important in its own right (1921: Ch. 10). Correspondingly, he notes almost in passing that to run a civil administration on the basis of incessant coercion is too expensive and unwieldy for any but the most unimaginative to pursue. Instead, most of his analysis of distinct historical formations dissects the different circumstances under which people consider it *appropriate* to follow instructions given by someone in an authority position over them – the “types of legitimate authority”.

This distinctively sociological argument about compliance and legitimacy, which can be made in industrial organizations as well as states (cf. Burawoy 1979, Granovetter and Tilly 1988; and Freeland 1996) leads us to observe that one reason it is artificial to consider either cooperation or subordination as always reflecting pursuit of self-interest is that in most circumstances, actors have definite conceptions of what action is *appropriate*, and these shared norms or conventions of action, constructed, learned and absorbed within social groups, are explicitly construed by actors as not being matters of self-interest. This is a core part of the meaning of such norms.⁶

Most sociologists have veered away from theoretical argument based on actors’ shared value commitments because of the excesses of mid-twentieth century sociology. This view, which has been called “oversocialized” (Wrong 1961; Granovetter 1985), leaped from observing that such commitments were a significant force in social life to the conclusion that all social action flowed from them. The opposite extreme is to imagine that moral sense about the economy is entirely subordinated to and derivative from some teleological quest for efficiency pursued by

⁶ In discussions of behavior activated by norms and values, Weber’s conception of “value-rational” action as action pursued for its own sake, rather than as a means to an end -- as in the pursuit of truth, beauty or religious enlightenment -- reflects the most radical departure from a consequentialist epistemology. But in his obsessively cautious way, Weber tempers this radicalism by the observation that pure value-rational behavior is rare (1921: Ch.1). A broader swath through the field of self-interest theories is cut by Sen (1977) who observes that many actions in the economy may be propelled by what he calls “commitments” to certain goals. Thus, even though Sen remains within a broadly instrumental conception of action, his main point is that the consequences sought may be contrary to one’s economic or other self-interest if actors are propelled to this goal by value commitments.

social systems, so that observed norms, though admitted to be important, can be assumed to have been selected out for their economic efficiency. The time has come to find a balanced account, to acknowledge the importance of such norms and conventions, while fitting them into a broader frame of social theory.

For the economy, a beginning of this more balanced account is offered by historian E.P. Thompson in his landmark 1971 essay on 18th century English crowds, and the meaning of their frequent collective action to protest practices concerning the movement of essential foods such as grains. Thompson's point was twofold. One was that what appeared to be mass hysteria and highly non-rational crowd action, could upon closer observation be seen as part of an organized and sensible campaign with goals easily understood in instrumental terms. But Thompson did not stop at this, which could be well fit into a rational choice framework; instead he insisted that quite aside from sensible goals, people in these crowds were also heavily animated by outrage at the way economic actors pursued their activity. They had definite beliefs about what were legitimate and non-legitimate actions, based on some sense of what individuals owed to the collectivities in which they were embedded – what he called their sense of “moral economy”.

Note that in this formulation, Thompson, dealing as he was with hungry people, was not likely to fall into the expansionist reductionism of normative hegemony – to claim that norms and values alone motivated his actors. The purely instrumental aspect of food riots is tough to miss, as crowds overturned and looted carts of bread headed for distant markets, and this led him implicitly to a formulation in which norms, identities and instrumental rationality jointly motivate and shape action. To discover what the process is by which these perhaps incommensurable motivations act together is not part of his analysis, but would have to be part of any general explanatory scheme in economic sociology.

INSTITUTIONS AND THE ECONOMY: COOPERATION, COMPLIANCE AND STRATEGIC ACTION AS BYPRODUCTS OF INTERACTIONS AND INTERSECTIONS

Though the previous comments only scratch the surface of how actors are motivated in confined social spaces, I move here to the second main issue I have raised: that such spaces rarely stand on their own, independent of larger network, institutional, cultural or historical trends. A simple example is that while cooperation or compliance depends strongly on particular interpersonal relations and their history, it also depends on the overall configuration of social networks in which people are situated. Thus, while two actors' previous relations partly determine whether they cheat one another, it is also important whether the overall network that contains both is dense, so that news of malfeasance spreads quickly, or sparse, so that it could long be concealed.

But network structure is itself problematic, and can be seen as an outcome of larger social processes, if we rise to higher altitudes and observe "from the air" how networks have been constructed over time. In this regard, considerations of social boundaries, or as White (1992) has described it, coupling and decoupling, are central, and have entered social theory in many different guises. The general and most overarching commonality in arguments about coupling and decoupling is the need to understand how resources, information and influence do or do not move among well-defined and self-reproducing spheres of social structure. The concept of blocked movement is just as important as that of flow, as in White's emphasis on how problematic it is to "get action" and overcome the usual blockage in social affairs (1992). This emphasis is often conceived in terms of individual rational action, that is, how individuals can coordinate spheres or move across them to benefit themselves, but can also be seen in more macrostructural perspective, where one needs to understand what boundaries and linkages are in order to explain why societies function as they do.

These two emphases illustrate a duality between structure and agency. One example is my work on the "strength of weak ties" (1973), which concerns well-defined, cohesive groups

connected to one another, if at all, by weak ties between members of different groups. From the strategic point of view, the individual with many such ties to other groups can turn diverse and non-redundant information to his own advantage, as in competition with others for desirable jobs. But note also that having a presence in multiple networks can mute and muddle one's sense of identity and interests, as first one network, then another, becomes more salient. The ambiguity that results can be confusing for an actor, but may also confer advantage in the form of inscrutability to others, as in Padgett and Ansell's analysis of the "multivocality" and resulting "robust action" on the part of Cosimo de Medici (1993).

One larger-scale implication is that social structures deficient in weak ties would be fragmented, and find collective action difficult, which might mean a failure to mobilize politically (as in my 1973 argument about the West End of Boston, discussed in the following section); conversely, the fact that weak ties channel novel information to new groups links the number of such ties to overall community outcomes such as scientific progress (Friedkin 1980; H. Collins 1974). Burt (1992) pointed out that the relevant units could just as well be collectivities like firms, and that one should pay attention to the "structural holes" formed in the network by *absence* of certain connections. He emphasized the advantage to individual actors or firms from exploiting such holes, and bridging across actors that could otherwise not be in contact with one another. This focuses more sharply than my work on weak ties on how this advantage relies on manipulating structural features of the network, rather than merely collecting resources (such as information) for one's own use. In this regard, Burt's argument lends itself better to understanding power and compliance, based on control of uncertainty (as first proposed by Crozier 1963; cf. Burt 1992: 26-30). Sustaining this control over time depends, however, on preventing structural holes from being closed up, an aspect that requires more sustained analysis.

Economic anthropology has broached similar topics in different language, noting that in many societies, all goods are not commensurable with one another, and can be divided up into mutually exclusive sets of those which are. Such a set is called a "sphere of exchange" (cf. Bohannan and Dalton 1965). Goods or services not commensurable cannot be exchanged in part

because people do not understand how to think about such an exchange, or consider it highly inappropriate. All societies, however technically advanced, retain such distinctions; most of us, for example, could not conceive the appropriate price at which to sell our children (cf. Radin 1996).

Because one sure source of profit in exchange comes from exploiting counterparts' ignorance of usual exchange ratios, the Norwegian anthropologist Barth (1967) highlighted the ability to breach previously separated spheres of exchange as a crucial element of economic success. He gives the example of the Fur, a Sudanese tribal group in which wage labor was considered shameful (i.e. labor and money were incommensurable), and certain products like millet and the beer that could be made from it, were produced mainly to be exchanged for communal labor as in mutual help for housebuilding. In a separate sphere of exchange, food, tools and other commodities were exchanged for money. Arab merchants, outsiders to this social system, arrived and hired local workers to grow tomatoes, a cash crop, paying them with beer. The value of the tomatoes far exceeded the cost of the beer, but this was unclear to the workers since in this setting neither beer nor labor would be exchanged for cash. Because the traders were not bound by the group's moral injunctions to keep the spheres separate, they could exploit the "structural hole" formed by their connections into two separated spheres. Barth defined "entrepreneurship" precisely as the ability to create such new transactions.

A nearly identical conception of "entrepreneurship" has come independently from Austrian-school economist Israel Kirzner (1973). In some ways Kirzner borrowed from fellow Austrian Joseph Schumpeter, who had previously (1926) defined entrepreneurship as the ability to create new opportunities by pulling together previously unconnected resources for a new economic purpose. Kirzner's formulation is closer to that of Barth, however, in that he defines the entrepreneur as someone who connects previously isolated markets by arbitrage. While the arbitrageur needs the Schumpeterian trait of alertness, he plays a different role from Schumpeter's swashbuckling entrepreneur who disrupts the existing equilibrium and shakes up the economic landscape with innovation, opening new opportunities. Kirzner's entrepreneur is,

by contrast, a grey figure who spots price discrepancies across markets, which are a disequilibrium in the general picture, and profits by linking the markets and re-establishing – not disrupting -- a general equilibrium characterized by price uniformity. Having made obvious to everyone the failure of linkage that led to his profits, he could not then further profit from this opportunity and would have instead to find some new discrepancy to exploit.

Barth and Kirzner both, then, see the entrepreneur through the lens of optimistic midcentury modernization theory. He spots inefficiencies, and simultaneously profits from and remediates them. In the end, the drag on economic progress imposed by differential prices or the inability to exchange certain commodities against one another, is cleared away and the economy can move full speed ahead. Uniform prices are established and previously disconnected elements of markets are brought together so that factors of production can find their optimum use through the unhampered mobility and perfect information that this optimum requires.

But this diverges from the empirical reality of entrepreneurs, who, if they in fact recognize that their advantage lies in sitting astride disconnected chunks of social structure and monopolizing the ability to coordinate whatever flows among them, could hardly be expected to step aside cheerfully and invite any and all to join in this coordination. Here the Schumpeterian image of the entrepreneur as larger-than-life seems more suitable -- such as the Rockefellers and the Carnegies, who had to be legally restrained from their favorite activity, the “restraint of trade” (a special case of what White (1992) calls “blocking action”). Correspondingly, we should not expect the Arab traders of Barth’s Sudanese case to go quietly into the good night of arbitrage, but instead try to parlay their advantage into prominence and local power, depriving others of the same opportunity.⁷

This is a case where power in the economy does not rest on legitimacy, but rather flows from what Weber thought of as the rather boring source of a “constellation of interests”, a position of monopoly. What made it seem boring, however, was the tacit assumption that this

⁷ Unfortunately, Barth’s account breaks off without following the later activity of these innovators (1967: 172); he does note, however, that resistance to their activity was beginning to emerge.

position resulted from some previously given situation, a “natural monopoly” so to speak; whereas in fact, for the cases I have described, it results from existing structure and active agency. The entrepreneur has no chance without a fragmented structure, so that flows among chunks would be a source of profit. But to prime the pump of these flows is non-trivial, and requires not only the cognitive brilliance highlighted by the tradition of Austrian economics, but also the ability to mobilize social resources through networks of solidarity and obligation. Monopoly positions are actively created in situations where other outcomes are technically plausible. Yet, especially in situations where legitimacy is important, the mobilizer who sits at the center of disconnected networks may need to act behind the scenes so as not to appear excessively self-interested; this is part of what Padgett and Ansell, in their analysis of the rise of the Medici, call “robust action” (1993). The combination of mobilization strategy and structural conditions that make centralization and expansion possible is what cries out for theoretical analysis from economic sociology.

Note that the feat of bridging differentiated spheres depends on the spheres first being separate. In analyzing the evolution of societies over time, a typical theme of comparative sociology, from Durkheim (1893) to Parsons (1966) has been the movement from homogeneous structures to ones with a high level of functional and structural differentiation. In political sociology, this differentiation has occupied a place in theory that is related to our problem of explaining the success of economic entrepreneurs. A central question has always been how political leaders manage to assemble the resources required to organize a system of power, that coordinates larger numbers of people into what they all recognize as a single political unit. Eisenstadt’s (1963) analysis of the rise of what he calls “centralized bureaucratic empires” is instructive. His argument is that for such empires to be sustainable, two conditions were necessary: leaders had to have purely political goals autonomous from other social formations or institutions; and the society had to have developed “limited but pervasive differentiation” in its various institutional spheres. That is to say that economic, political, legal, religious, educational and cultural activities had to have become relatively detached from families and households, and

taken on a life of their own, typically measured by the extent of specialized roles and professional identities (1963: 378).

Differentiation is prerequisite, in this argument, because without it, the resources that would-be rulers need to draw on to build and sustain their power are locked up or embedded in undifferentiated kinship or other socially-defined groups, and cannot be mobilized. Historically, economic thought has taken liquid resources as the normal situation, but in fact, analysis of how this liquidity arises is one of the most difficult and important tasks for social theory. To the extent that land, labor or other items construable as commodities cannot be alienated freely, but are part and parcel of complexes of obligation and symbolic meaning, rulers are stymied. Differentiation creates what Eisenstadt refers to as “free resources”, that can be appropriated and moved from one sphere to another by those with the will and wit to do so. This is because specialized sectors could not evolve in the first place without detaching resources from their primordial social sources, and once so detached, even though now in the service of specialized role-occupants, the resources are understood to be alienable. And the first rulers who could appropriate food or other goods in kind from putative “subjects”, moved these goods out of their normal subsistence circuit for purposes of their own and turned this newly profitable transaction to the purpose of expanding their political enterprises. All successful taxation has this quality, and it is no accident that systematic analysis of the rise of modern states focuses on this in detail (cf. Tilly 1975 for the case of Western Europe).

Thus the argument that there is something to gain for those who can bridge discrete social units can be posed at different levels of generality. In the discussions of weak ties or “structural holes”, the units were concrete networks of individuals or organizations. With “spheres of exchange”, the units were defined as the boundaries around certain types of exchange defined by the set of items commensurable against one another. In Eisenstadt’s formulation, the units are the institutional spheres of a society. Any of these might be analyzed in a discussion of mobilizing for either economic or political advantage. Successful economic entrepreneurs most likely engage in bridging at multiple levels.

Samuel Insull, for example, whom I and collaborators have studied in detail in our analysis of the early American electricity industry (cf. Granovetter and McGuire 1998), was one of the few early leaders of the industry to have extensive social contacts into the separated networks of tinkerers/inventors, financiers, and politicians at both local and national levels. The way he moved resources back and forth among these networks could also be described at a more abstract institutional level: he was the first to successfully mobilize political resources in the interest of economic formations in his particular industry. He also applied innovative financial instruments, and accounting techniques such as balloon depreciation, in such a way as to support his particular favored path of technical development. Although Insull shared these innovations within a relatively closed and elite circle, he actively combated attempts of those outside that circle such as sponsors of isolated generation, municipal ownership or decentralized provision. His legacy was one of highly monopolized generation of power, consistent with the argument that successful entrepreneurs do all they can to prevent others from following in their footsteps. Many of the characteristics of the huge holding companies that Insull and his collaborators controlled by the late 1920s were similar to those described by Eisenstadt as “centralized bureaucratic empires”.

More recently, one can argue that the spectacular success of Silicon Valley’s information technology industry could not have occurred without the development of a new type of financing. The older model was one in which financiers were largely decoupled from the industries which they supported, knowing little of the technical detail, and standing apart from their social and professional circles. In such a model, the only information required was the likelihood of loan repayment, which could be gauged from a general perusal of balance sheets with an assumption of stable markets over the relevant time horizon. This model did not lend itself to rapid technical change, which could not be adequately evaluated with the usual financial tools. Instead, from the 1960s on in Silicon Valley, a new model appeared which facilitated innovation: engineers and other industry members themselves took their windfall profits and became financiers. In alliance with traditional and new sources of wealth, they created the concept and

practice of “venture capital”, in which financiers were members of or closely linked to technical networks, took substantial equity positions in newly financed firms, sat on boards of directors, and sometimes played active management roles (see Kaplan 1999, Chs. 6-7).

The original breach of spheres – moving large profits out of the industry itself, or the families of its members, into financial circles and institutions, made the financial innovators fabulously wealthy, because they could now deploy these funds not simply in the firms that produced them, but into promising innovations originating elsewhere. Moreover, initial successes attracted huge new inflows of funds from limited partners such as pension funds and wealthy individuals, themselves with no obvious connection to technical circles, just as 19th century American banks funded economic expansion by drawing in funds from beyond the kinship groups that set them up on behalf of industries whose advance could no longer be sustained by family funds alone (Lamoreaux 1994).

But those who executed this strategy had no grand plan, but rather were clear-headed enough to take advantage of unique structural opportunities that were presented to them. The “traitorous eight” who left William Shockley’s transistor lab in the 1950s to form Fairchild Semiconductor went on to set the pattern that would dominate much of Silicon Valley’s economy, and to take a central role in their own right. But, as with Cosimo de Medici, the structure that permitted them to do so resulted from a conjuncture of more or less unrelated historical events (Padgett and Ansell 1993), such as Shockley’s atrocious management style, and the peculiar equity-vesting arrangements of Fairchild which presented strong incentives for them to cash out and start new enterprises such as Intel and other now well-known “Fairchildren” (cf. Cringely 1996).

THE SOCIAL CONSTRUCTION OF ECONOMIC INSTITUTIONS

The first part of this paper dealt mainly with the first problem I identified: that incentives alone are a fragile base on which to erect explanatory structures. Even this relatively micro-level point moves the initial analytic focus away from individuals, since the crucial explanatory

complements to incentives -- trust, power, norms and identity – are enacted in horizontal and vertical relations. Only by confining analysis to individuals can one easily sustain a narrow instrumentalist view. I then moved to the second problem, identifying social spaces and institutions or institutional sectors within which people act, and sketching arguments about how such spaces arise, are coupled or decoupled, and how resources flow among them.

Now I want to sketch how we might draw together these micro and macro strands-- how individual actions, conditioned by incentives, trust and cooperation, power and compliance, and norms and identities that affect these states and actions, are shaped by and themselves reshape larger institutional configurations. As before, the issues in economic action have a family resemblance to those in theories of political action. For example, in “The Strength of Weak Ties” (1973) I discussed Herbert Gans’s (1963) paradox, that residents of Boston’s West End, devoted to their neighborhood, and horrified at the prospect of its demolition for “urban renewal”, nevertheless failed to resist by uniting and mobilizing behind local leaders. Gans argued instead that working-class culture, with its distrust of self-seeking leaders, sharply discouraged membership in political groups. The instrumental theorist might instead see garden-variety free-riding – every individual hoping that others would bear the cost of mobilization. My riposte to Gans applies also to the free-rider argument: much might be explained by social structural constraints. I proposed that the neighborhood consisted of cohesive network clusters which were, however, highly decoupled from one another, and that this fragmentation made mobilization difficult, whatever the intentions of individuals.⁸

In more current terms, I suspected a deficit of individuals who could sit astride the West End’s structural holes and send out weak ties into various cliques in order to mobilize resources and claim a leadership role. Gans’s account suggests that mobilization did occur within cliques, but could not spread beyond them. Distrust of leaders beyond one’s network may have

⁸ This seemed the more plausible since studies of other Boston neighborhoods in the same period, that faced urban renewal, but had less fragmented social structures, showed effective mobilization against this same threat – even though residents were equally working-class and presumably equally rational.

stemmed from the lack of a short chain of social relations between ego and such leaders. Where such chains exist, reassurance about the leader's intentions flow along them, plausible in part because one has the possibility of exerting influence through the chain in ways that restrain self-seeking⁹. Here in fact we see issues of trust and power combined as they may often be, through the overall configurations of horizontal and vertical ties.

Economic formations should follow similar principles. Saxenian's (1994) account of Silicon Valley success lays special emphasis on the openness of networks and the free flow of people, ideas and capital across the porous boundaries of firms. Her argument highlights an extraordinary amount of trust among companies and individuals nominally in competition, in part because loyalties lay more with occupational groups; in part because rapid mobility meant that people in separate firms had often once worked together; in part because the culture of engineers stressed heavily the macho goal of exhibiting technical prowess to one another, often more important to self-esteem than high salary or job security.¹⁰ By contrast, the Route 128 complex

⁹ See the classic account in Whyte's *Street Corner Society* (1943) of how Boston's North End residents used their local networks to get a playing field erected.

¹⁰ What we might call "nerd culture" deserves more extensive theoretical and historical attention. Accounts of life inside Thomas Edison's laboratory (e.g. Josephson 1959) sound strikingly like the supposedly unique atmosphere of hackers writing code all day and night, sustained only by gallons of cola, with sleep an occasional luxury to be indulged in only briefly and on the spot rather than in a separate location. Gavin Wright's (1998) account of American industrial growth in the 19th century suggests a long history of networks of male tinkerers, early nerd prototypes, busily impressing one another, as an integral part of the progress of mechanical invention and innovation. Their propensity to travel around, showing off their achievements, may have been an crucial factor in accelerating technical developments.

One identifying characteristic of the "nerd" is awkwardness in social relationships, compared to facility with equations and/or mechanical devices. A common observation is that this technical facility becomes a way for people who are otherwise awkward to communicate with one another, and achieve status and community. This observation is not time-bound, but links to very general themes in the history and sociology of science and technology. The French tradition in the sociology of science, for example, stresses that the networks that matter are not merely social, but "socio-technical", in which machines or techniques can be nodes that connect individuals to one another (cf. Callon 1989). Randall Collins observes, in his sociology of philosophy, that technologies "evolve by tinkering. Earlier machines are modified, adapted ... combined with other lineages of technology. Hence they may be conceived of as networks – indeed as genealogies – in their own right; there is a crucial connection *from machine to machine*, and not merely from person to person" (1998: 536). Thus, if tinkerers are not communicating with one another through the medium of machines, technical development will slow or stop. "Boyle's vacuum pump could not be successfully imitated by anyone who had not physically used an earlier exemplar" (Collins 1998: 993, n. 10), and in general, the "tacit knowledge" required to improve equipment requires face-to-face contact transmitted by a

in the Boston metropolitan area shows an uncomfortable resemblance to Gans's West End, a collection of what Gernot Grabher has called (in a German context) "cathedrals in the desert", trying to be self-sufficient, avoiding the sharing of ideas or personnel, and ultimately finding this strategy self-defeating in a fast-moving technical environment.¹¹ The successful model resulted from complex intersections of firms, occupational groups and social networks, and a mobilization of goals that were a mixture of personal pride, social standing and financial gain, harnessed to one another in ways that led to achievements no single goal alone could have sustained.

Given the extensive network connections, structural holes are few in such a setting. There is correspondingly little in the way of power centers among Silicon Valley industrial firms, even though some have grown large and important in revenues. But in the supporting infrastructure, such as finance and law, there is much more striking stratification and hierarchy of power. Though the systematic research remains to be done on structures of status and influence, informal accounts suggest that having the right venture capitalist (e.g. Kleiner, Perkins, Caulfield and Byers, or KP in local parlance) or the right law firm (e.g. Wilson, Sonsini, Goodrich and Rosati) is a great advantage in one's industrial progress; such firms therefore have the power to dictate terms favorable to themselves. Historical accounts suggest that this dominance traces back to earlier periods when these leading firms faced a fragmented resource base and were unusually successful in mobilizing across separate networks and sources, as I briefly discussed earlier under the heading of the relative coupling and decoupling of finance and industry.

Another example illustrates and further develops these themes. Richard Locke's *Remaking the Italian Economy* (1995) analyzes contrasting outcomes from the 1970s and 1980s re-structuring of the two major automakers Fiat and Alfa-Romeo. Fiat restructured by vigorously repressing labor unions, creating so much industrial conflict that the entire region suffered. Alfa

personal network (Harry Collins 1974). Thus the details of nerd networks and their coupling and decoupling may have a substantial impact on technical development. For Silicon Valley, see especially accounts of the central role of the "Homebrew Computer Club" in leading to the development of the personal computer (Cringely 1996).

¹¹ This argument seems strongly supported by the 1998 demise of the once-legendary Digital Equipment Corporation, which was bought out by upstart Compaq Computer.

Romeo had a more complex negotiated process with a happier regional economic ending. Locke attributes this difference to how networks of political actors and associations were structured in Turin and in Milan. In Fiat's base, Turin, political actors and associations mainly clustered in two opposing camps, one associated with business and the other with labor, having strong internal links but few connections between -- a pattern he refers to as "polarized networks". Milan's pattern was, instead, "polycentric", in which associations and interest groups form a dense network and are linked to one another through many horizontal ties. In polycentric regions, he argues, frequent communication and the larger number of intermediaries mute conflict and keep lines of communications open. In such a structure, trust is facilitated, whereas the absence of intermediaries in Turin aborted attempts by moderates on both sides to reach compromise. The intermediaries humanize the other side by familiarity with it, and provide a line of communication for tentative discussions. In their absence, as in Turin, to express a sentiment of compromise toward the other side looks implausible and even treasonous. Such overtures would falter in any case, since there would be no obvious known and trusted interlocutors to receive them. So the structural situation creates cognitive and normative pressures which reinforce the separation and make conflict more likely.

In his analysis of the textile industry, Locke uses these distinctions to understand why the widely heralded success of small-firm networks in Italy in fact seems subject to sharp regional variations, increasingly failing in some areas while flying high in others. He suggests that whether such a form works is not an abstract matter, but depends on its compatibility with the local social and political networks. In particular, the rather polarized and hierarchical networks of Prato turned out to be much less fertile ground in the longer run for this form than those of polycentric areas such as Biella (Locke 1995; for similar arguments on the auto industry, but at a national level, see Biggart and Guillen 1999).

Here we veer into the territory of "social capital", but the puzzle from the point of view of Putnam's (1993) argument is that all these cities had a rich associational life, supposedly the progenitor of the norms, networks and trust that compose this capital. The difference was that

Turin's and Prato's associations were structured vertically, with few ties across to other types of association, but with further vertical ties reaching out of the region to national parties or other organizations; Milan or Biella, by contrast, were richer in horizontal ties, of the sort which muted conflict in one case and facilitated the myriad details of inter-firm cooperation in the other. So it is not just the density of associational life that matters for economic (or political) outcomes, but the structure of its ties (as also emphasized, e.g., in Lin's theory of social capital (2000)).

These points link to an older tradition of thought that might be called "neo-Tocquevillian"¹², which emphasizes the importance for community, democracy and other political and economic outcomes, of associations and "cross-cutting ties". In Lipset's classic formulation (1963: 77):

Multiple and politically inconsistent affiliations, loyalties and stimuli reduce the emotion and aggressiveness involved in political choice. For example, in contemporary Germany, a working-class Catholic, pulled in two directions [i.e., toward his class and toward his religion], will most probably vote Christian-Democratic, but is much more tolerant of the Social Democrats than the average middle-class Catholic. ...the chances for stable democracy are enhanced to the extent that groups and individuals have a number of cross-cutting, politically relevant affiliations.

More should be said in comparison of these older and newer theoretical traditions, but for now a couple of points seem interesting. One is that while the midcentury literature on "cross-cutting ties", emerging as it did from a structural-functional view, stressed their role in conflict reduction (cf. e.g. also the anthropological tradition represented by Gluckman 1965), the existence of cross-cut, which I would characterize as some level of coupling among discrete networks or institutions, also provides channels through which a strategic actor may leverage weak attachments across segments so as to assemble resources into a larger social entity. If that entity is a political structure, we might challenge the idea that such a pattern enhances democracy, since political entrepreneurs might find this the most fertile ground on which to

¹² I am indebted to Carlos Forment for this usage.

assemble empires or other autocratic systems; if the larger entity is an economic organization, such as a business group, conglomerate or strategic alliance, then we are talking about the organization of economic influence, such as that possessed by the Schumpeterian entrepreneur. Here we might think of Alfred Sloan pulling together the bits and pieces assembled earlier but only lightly coupled by William Durant, into General Motors.

Thus, we may distinguish three kinds of structures and corresponding potentials: the highly decoupled structure, without crosscutting ties, might be more prone to conflict when interests collide, but less likely to ever be pulled together into a social phenomenon of larger scale. The weakly coupled structure may lead to more consensual outcomes when conflict arises, but in the presence of an active entrepreneur may most lend itself to the amassing of power or influence over a large social entity. The highly coupled structure has, in effect, less structure. It may be the most amenable to a high level of cooperation, but even less likely than the first type to ever be highly coordinated from a center.

This rough typology has the advantage of stressing structure yet leaving an important role for agency. I take the structures and their connectedness as given, but this can only be for convenience of exposition. Certainly one of the most interesting issues is where these patterns originate. One of the most problematic aspects of early social capital formulations was the idea that current political outcomes are determined by the communal patterns of eight hundred years earlier. But to overcome this requires some focused historical argument about what determines network structures, and to what extent they may be altered by strategic actors who understand how to assemble resources.

SUMMARY AND DISCUSSION

In this paper I have emphasized the need for theory in economic sociology that moves away from reductionist conceptions and purely instrumental formulations. Much that is distinctive in sociological thought lends itself to this movement: the stress on multiple motives, on mixtures of instrumental and non-instrumental action, and the importance of trust, power and norms at a small-scale level of interaction. Larger-scale sociology, with its emphasis on the

intersection of social networks and institutional arrangements, and the intricate interplay of structure and agency through coupling and decoupling, presents further reasons to be suspicious of reductionist accounts, as well as a positive argument about how economic outcomes arise.

I have purposely *not* argued that what is distinctive about structural economic sociology is its emphasis on the embeddedness of action in social networks. While I naturally believe that many of the important contributions of economic sociology stem from its interest in network analysis (cf. Granovetter 1985), a focus on the mechanics of networks alone is not sufficiently distinctive theoretically from instrumentalist theories to lead us toward the more complex synthesis that we seek in understanding the economy. Instead, we need to work harder at connecting social network analysis to the central theoretical problems of sociology. The crucial point is that fundamental concepts like solidarity, power and norms cannot be understood except in relational terms; their very definition relies on social relationships, and they are produced in social networks, as is well understood in the “classics” of Durkheim, Weber, Simmel and Marx. In 1959, Kingsley Davis labeled as a myth the idea that that “functional analysis” was a separate method in sociology and anthropology; structural sociologists must similarly move away from a sectarian view of “network analysis” as a separate theory or method. Its power is that it is coterminous with the central concerns of any institutional analysis, of which the economy is a special case.

If the comparative advantage of relational analysis is its indispensability for understanding trust, solidarity, cooperation, power, domination, compliance, norms and identity, it does not follow that we should abandon the sophisticated analysis of how individuals pursue incentives in well-defined social spaces. This set of arguments, pursued for generations by cadres of many of the best and brightest social scientists, has reached a high level of refinement. The most daunting agenda for a unified social science is to integrate such analyses with the more contextually complex arguments of structural sociology. It is a rather special case where context stands still and is decoupled from rational action in a clearly identified social space; yet this special case has commanded the vast majority of intellectual resources poured into understanding

the economy. The challenge for the new century is to build theory for the more general case, where contexts, structures and individual actions interact and change together. The world has not stood still, and theory has a lot of catching up to do.

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