

**New Economic Sociology**  
**and**  
**New Institutional Economics**

Rudolf Richter\*  
r.richter@rz.uni-sb.de

Paper to be presented at the  
Annual Conference of the  
**International Society for New Institutional Economics (ISNIE)**  
Berkeley, California, USA  
September 13 – 15, 2001

\*Center for the Study of the New Institutional Economics  
University of Saarland  
P.O. Box 15 11 50  
66041 Saarbrücken  
Germany

Preliminary  
don't quote without  
the author's permission

**New Economic Sociology**  
  
**and**  
  
**New Institutional Economics<sup>1</sup>**

Rudolf Richter  
Saarbrücken, Germany

**Abstract:** This paper deals with similarities and differences between new economic sociology (NES) and new institutional economics (NIE). We start with brief reports on the basic ideas of NES and NIE. Regarding the latter, we concentrate on NIE in the sense of Oliver Williamson who introduced the term and whose work became the main target of sociologists' critique. We show that the contrast between the two fields is less sharp than some social scientists might assume. We then present a review and assessment of the attack of seven sociologists on Oliver Williamson's ideas. The sociologists are Perrow, Fligstein, Freeland, Granovetter, Bradach & Eccles, and Powell. Their battering ram "social network theory" is briefly described and an attempt made to combine network analysis with new institutional economics as understood by Williamson, i.e., his transaction cost economics. The paper is concluded with some thoughts on the convergence of NES and NIE.

## **1. Introductory Remarks**

This paper deals with similarities and differences between the *New Economic Sociology* (NES) and the *New Institutional Economics* (NIE). As we shall see, both deal with social actions. What are then the differences between the two fields – the fundamental

---

<sup>1</sup> I benefited from detailed comments by Mark Granovetter, Richard Swedberg, and Oliver E. Williamson. The usual disclaimer applies.

differences that is – or are there essentially none?

According to Smelser and Swedberg (1994b, 4) there are considerable differences at least between classical sociology and classical economics:

- in sociology actors are influenced by other actors,
- in economics actors are uninfluenced by other actors.

But at a closer look, the contrast between the two fields is less sharp. Economists since Cournot (1838) know and recognize analytically that “actors are influenced by other actors.” But classical economists, being obsessed with the goal of efficiency (Pareto efficiency that is), disliked oligopolies. They do not take them for granted. They wanted to annihilate them politically and to establish in the real world conditions “as if” we would have perfect competition. It is this ideal-typical view of classical economics that has been challenged, among others, by NIE in the sense of Oliver Williamson.

A deeper difference between classical sociology and classical economics exists with regard to their respective models of man:

- sociologists allow for various types of human action, including rational action;
- economists assume only perfect rationality. (Smelser and Swedberg 1994b, 4)

More precisely, perfect individual rationality is the fundamental assumption of neoclassical microeconomics. It was challenged by Simon (1957), whose concept of bounded rationality was introduced by Williamson as an important element into his NIE (Williamson 1975). North, in his later work, seems to go even further. He states that

“a modification of these [rational choice] assumptions is essential to further progress in the social sciences. The motivation of the actors is more complicated (and their preferences less stable) than assumed in received theory.” (North 1990, 17)

With the development of NIE, economists deeply infiltrated sociologists’ territory and

sociologists, understandably, rose in arms. They lined up to a counter attack under the banner of *New Economic Sociology* (NES). It was started in the 1980s at Harvard by former students of Harrison White, among them Robert Eccles (1981), Mark Granovetter (1985), Michael Schwartz. Independently of the Harvard group, several other sociologists joined battle, among them Mitchel Abolafia (1984), Susan Shapiro (1984), Viviana Zelizer (1983). Their objective was to attack economists “by elaborating the sociological viewpoint as forcefully as possible.” (Granovetter and Swedberg 1992, 7)

The number of studies in economic sociology exploded during the following years as illustrated by the review article of Baron and Hannan (1994), the Handbook of Economic Sociology edited by Smelser and Swedberg (1994a, a new edition being in preparation) or the bibliography of the recently established “Economic Sociology Section” of the American Sociological Society.<sup>2</sup> Sociologists rediscovered their old object of research, “institutions”, and developed their own brand of *new institutionalism*. (Powell and DiMaggio 1991, 1 ff., Brinton and Nee 1998, 1 ff.)

Not amazingly, the overlap between the syllabi of graduate courses in economic sociology and issues of the New Institutional Economics became remarkable (cf. James Montgomery<sup>3</sup>). Are the two fields growing together?

They should, writes Granovetter (2001, 1). Economists and sociologists should build a unified theory on what they have accomplished. This is an old dream of Max Weber’s, a

---

<sup>2</sup> “Economic Sociology Section in Formation”, Mission Statement (21.12.2000), see <http://uci.edu/econsoc/mission.html>

<sup>3</sup> Associate Professor of sociology, University of Wisconsin, College of Letters and Science, Graduate course Sociology 651: Economic Sociology I, see <http://www.gsm.uci.edu/econsoc/Aspersbiblio.html>. Professor Montgomery demands from his students the preparation of a personal handbook on topics which virtually all are subjects of the New Institutional Economics as, e.g., shown in Furubotn&Richter (1997).

continuation of the views of Gustav Schmoller, whom Schumpeter (1926, 355) described as the “father” of American institutionalism. These views were thoroughly destroyed by the German battle of methods (*Methodenstreit*) opened by Carl Menger (1883/1963).<sup>4</sup> Menger’s opinion of the “true methodology” of economics, i.e., neoclassical microeconomics, became the dominant methodological position among mainstream economists. Is this still the case? We don’t think so. There has been a change in economics since Coase (1937, 1960) and the development of modern institutional economics.

We shall continue as follows: We shall start with a brief report on the basic ideas first of New Economic Sociology and then New Institutional Economics. As for the latter, we shall concentrate on NIE in the sense of Oliver Williamson who introduced the term. (Williamson 1975, 1) Next, we shall report on representatives of NES fighting Oliver Williamson’s ideas. Their battering ram “social network theory” will be briefly described and an attempt made to combine network analysis with new institutional economics as understood by Williamson. The paper will be concluded with some thoughts on the convergence of NES and NIE.

## **2. Basic Ideas of New Economic Sociology (NES)**

According to Smelser and Swedberg (1994b, 18) NES covers many of the substantive areas of old economic sociology. But there are also a number of new directions. Their theoretical approaches are fundamentally eclectic and pluralistic. No single perspective is dominant. The influence of Weber (1922, 1968) and Parsons (1937) can be seen, also that

---

<sup>4</sup> Swedberg (1990, 34)

of Polanyi (1944). Some representatives of NES are attracted by the critique of capitalism like Mintz and Schwartz (1985). More interesting, however, is the concept of “embeddedness” as used by Granovetter in the sense that “economic action takes place within the networks of social relations that make up the social structure.” DiMaggio (1990) adds that economic action is embedded not only in social structure but also in culture. Points of interest are the sociology of markets (Barber 1977, Adler and Adler 1984, Mintz and Schwartz 1985, Burt 1982), the sociology of the firm and industrial organization with topics like investor capitalism (Useem 1996); the critique of transaction cost economics (Granovetter 1985, Fligstein 1985, Perrow 1981, u.a.), the sociology of industrial regions (Saxenian 1994).

What are the most prominent concepts of new economic sociology? That is no easy question to answer for an economist. We shall try our best, following Max Weber’s (1968) line of thought.

#### Some preparatory remarks

As mentioned above, sociological concepts are targeted on social action, “which ... may be oriented to past, present or future behavior of others.” (Weber 1968, 22) Interestingly, the reference point is, for Weber, the same as for neoclassical economists – the ideal type of a “purely rational course of action ... which has the merit of clear understandability and lack of ambiguity.”<sup>5</sup> By comparison with this it is possible to understand the ways in which actual action is influenced by irrational factors ...” (ibid.).

In other words, Weber used as reference point the zero transaction cost world with perfect

---

<sup>5</sup> This is complicated, though, by Weber’s (1968, 85 – 86) distinction between “formal rationality” and “substantive rationality”. Swedberg (1998, 36) reads this so that according to Max Weber “value-oriented action can be just as rational as formal economic reasoning.”

individual rationality, a benchmark strongly opposed by representatives of NIE (cf. Furubotn and Richter 1997, 445). Demsetz (1968) coined the term “nirvana approach” for such comparisons.

Sociologists, as economists, deal with empirical uniformities or laws, but related only to social actions. “Sociological investigation is concerned with these typical modes of action.” (Weber 1968, 29) The existence of such “typical modes of action”(hypotheses, laws) enables us to predict or explain social phenomena, that is, to logically derive them from other known social phenomena.

An economist is tempted to translate the analytic methods of economic sociology into the analytic methods of economics. Economists tend to reduce their concepts to rational choice theory. Concepts without such a “micro-foundation”, like the Keynesian absolute income hypothesis, are in *economese* “ad hoc.” Thus, old Keynesian macroeconomics is “ad hoc,” while Neokeynesians try to clear Keynesianism of their bad name by developing “micro foundations” of old Keynesian hypotheses. Economists assume perfect individual rationality to which they try to reduce all social phenomena including power or trust.<sup>6</sup> Sociologists, instead, have a broader view; they dislike this “reductionism” and tend to regard phenomena like power or trust as fundamental parts of their theoretical constructions. Thus, what looks *ad hoc* to an economist may be a basic axiom for a sociologist.

---

<sup>6</sup> A common ground on which to base “trust” and “rational action” might be the more general concept of “motives of human actions.” It include contrasts like egoistic and altruistic behavior. Thus the old German “institutionalist” Schmoller (1900, 33) writes: “We must concede that economic behavior of today and probably of all times is closely related with self-interest”.... “Yet to find out the truth it will be necessary to go a step further .. [and] ... to analyze psychologically and historically, ... , the basic motives of economic actions [*die Triebfedern des wirtschaftlichen Handelns überhaupt*]. ... “The classical theory of economics [Schmoller calls it *die Theorie der natürlichen Volkswirtschaft*] is, in toto, based on an incomplete analysis of man...” (1900, 92). North (1990, 17) argues similarly as quoted at the beginning of this paper (see also Richter 1996, 574).

Nevertheless, Max Weber (1968, 9) distinguishes between “sociological mass phenomena, the average of, or an approximation to, the actual meaning” and “the meaning appropriate to a scientifically formulated pure type (an ideal type) of a common phenomenon.”<sup>7</sup> The first corresponds, in the language of economists, to an *ad hoc* reasoning the second, in the terminology of sociologists, to a “reductionist” view. Still, average regularities in human behavior need not be reduced to the axioms of individual rationality. They could also be reduced to other underlying principles like neuro-biological, socio-biological, social-psychological etc. laws. Economists, born reductionists, are becoming increasingly aware of such alternatives to pure rational choice (see, e.g., Robson 2001). Nevertheless, in the following we’ll disregard any kind of “reductionism” and concentrate, in the language of economists, on sociological concepts of the “*ad hoc*” type, i.e., as not further reduced “givens”.

#### Some fundamental sociological concepts of NES

We choose the following three NES concepts<sup>8</sup> by understanding them to be (in above sense) *ad hoc* assumptions:

##### (1) Economic Action as Social Action:

“Economic action is seen only as a special, if important, category of social action.”

(Granovetter 1992, 76) Economic relations between two parties can be of different character: implicit or explicit; hierarchical or among equals, mutually binding contractual relations with freely chosen partners (according to the principle of freedom of contract) or power relationships (dominance and compliance), reciprocal or one-sided, based on trust

---

<sup>7</sup> Cf. Coleman (1990, 13) uses the same “purposive theory of action.”

<sup>8</sup> Leaning on Swedberg and Granovetter (1992, 1 – 26), Weber (1968), Nee (1998, 1 – 16).

or burdened by distrust etc.

## (2) Embeddedness of Social Action

Social actions are constrained by ongoing social relations and cannot be explained by reference to individual motives alone. (Granovetter 1992, 53) They are “embedded” in ongoing networks of personal relationships, economic and non-economic, rather than being carried out by atomized actors. The embeddedness concept can be described by social network analysis.

## (3) The Social Construction of Economic Institutions

Real world institutions are rarely the result of games of pure coordination in which agents interests coincide perfectly, they are seldom the work of an “invisible hand” as in David Hume’s or Carl Menger’s famous examples. They are mostly mixtures of conflict and coordination, of opposing and coinciding interests. (Lewis 1969, 14) Sociologists therefore understand institutions to be “social constructions”<sup>9</sup>, i.e., the product of visible hands. Thus, e.g., there is no “invisible hand” behind the creation of a market but a sharp struggle of interests (Swedberg and Granovetter 1992, 17). Further, institutions need *not* be the result of [purely] rational choice. The way to develop institutions may be by trial and error, which may be understood as a form of boundedly rational action. Another form may be habitualized actions which precede any institutionalization. (Berger and Luckman 1966, 53)

Path dependency of institutions matters, not necessarily efficiency. The most efficient solution does not always win out as illustrated by the famous, though questionable,

---

<sup>9</sup> Swedberg and Granovetter (1992, 16).

QUERTY example (David 1986, but Liebowitz and Margolis 1990, Williamson 1996, 242). Scott (1994, 78) points out that “Economists, political scientists, and sociologists productively debate the uses and limits of rational choice; and some economists have begun to wonder whether rule-driven behavior may not have its [boundedly] rational aspects.” Hamilton and Biggart (1988/1992, 182) emphasize the cultural view of organizations: “... industrial enterprise is a complex modern adaptation of preexisting patterns of domination to economic situations in which profit, efficiency, and control usually form the very conditions of existence.”

### **3. Basic Ideas of New Institutional Economics**

The term “New Institutional Economics” was introduced by Williamson (1975, 1) in his book on *Markets and Hierarchies*. It became soon a catchword for the economic analysis of institutions in general.<sup>10</sup> After some additions, Williamson called later his version of NIE “transaction cost economics”, or shortly TCE (cf. Williamson 1979, 1985). There are many more representatives of this kind of analysis but it is mainly Williamson’s style of reasoning, which challenged sociologists most vehemently. We shall therefore concentrate on the comparison of Williamson’s NIE with NES, starting with a brief review of the basic ideas of Oliver Williamson’s older and newer versions of the New Institutional Economics.

What became transaction cost economics was developed stepwise in a series of articles

---

<sup>10</sup> In Furubotn and Richter (1997), e.g., we understand NIE as a mix of property rights analysis, transaction cost economics, and contract theory.

published roughly between 1971 and 1985.<sup>11</sup> These articles were published and rounded off in Williamson's two books *Markets and Hierarchies* of 1975 and *The Economic Institutions of Capitalism* of 1985. Williamson's claims are bold: "Contrary to earlier conceptions – where the economic institutions of capitalism are explained by reference to class interest, technology, and/or monopoly power – the transaction-cost approach maintains that these institutions have the main purpose and effect of economizing on transaction costs." (Williamson 1985, 1). To sociologists, born skeptics of efficiency considerations, this view was like a red rag to a bull.

The main thrust of his two books may be sketched as follows.

The Markets and Hierarchies Approach to Economic Organization: Williamson (1975)

Williamson's markets and hierarchies approach concerns *social actions*, underlining the affinity of his theory to sociology. The unit of analysis is the transaction understood as a bilateral or dyadic relation. Its execution causes transaction costs part of which are transactions specific investments (asset specificity). Transaction costs are related with incomplete information (uncertainty) and with the limits of human cognitive abilities – in sum: with bounded rationality. Specific investments and incomplete information invite opportunism. Court ordering is partly ineffective and has to be complemented or even substituted by private ordering through internal organization (hierarchy).

Chapter 8 of Williamson (1975) deals with the transition of the organizational form of large enterprises from the unitary form (U-form) to a multidivisional structure (M-form). The chapter relates to Williamson (1967, 1970) and Williamson and Bhargava (1972), which are largely based on the "control loss phenomenon" (1967, 129). Transaction costs

---

<sup>11</sup> Williamson himself outlined his scientific journey of discovery in Williamson (1996, Ch. 14).

are not mentioned. Central argument is the advantage of the M-form *relative* to the U-form but Williamson lists also, textbook style, five “characteristics and advantages of the M-form innovation” (1975, 137). Among these are the division between operating and strategic decisions, the first “assigned to (essentially self-contained) operating divisions”, the latter “principally” to the general office. The M-form would be “corrupted” when the general management involves in the operating affairs (1975, 148). This contention became later an easy target of sociologists’ critique<sup>12</sup>.

#### The Transaction Cost Approach to Economic Organization: Williamson (1985)

The term “transaction cost economics” as name for a new type of economics was first mentioned in Williamson (1979). The concepts used are the same as in Williamson (1975) plus two more, the concepts of fundamental transformation and of relational contracts. These two additional concepts together with the main ideas of Williamson’s TCE may be reviewed as follows:

Non-standard contracts need not result from monopolistic practices. The reason is that transaction specific investments can play an essential role after the conclusion of a contract. Williamson illustrates this by use of his concept of fundamental transformation.<sup>13</sup> After contract conclusion the parties find themselves locked into a bilateral monopoly situation, whereas before they were free to choose with whom to trade. Transaction specific investments of whatever kind (if only in form of time invested in search, inspection, and bargaining) are the reason for this transformation. In addition, the parties don’t know what the future will bring. Under uncertainty it is impossible to

---

<sup>12</sup> Notably by Freeland (1996a).

<sup>13</sup> Which clarifies his “ex post small numbers exchange relation” (Williamson 1975, 29). Alchian suggested to call it the “Williamson transform.” (Alchian 1987, 233)

write a complete contract that details all possible future contingencies. Contracts, in particular longer term contracts, remain unavoidably incomplete or “relational”, i.e., the relationship between the parties matters. The problem is that the lock-in of the parties, in combination with information costs or generally transaction costs, may invite opportunistic behavior (a “hold up”) of the other side. Due to transaction costs the parties have difficulties or are unable to verify their case to a third party (e.g., a court). Thus, court ordering may have to be supplemented or even substituted by private ordering to effectively protect the parties against opportunism of their trade partners. There exist various ways to organize the governance structure of a contractual relationship, not only markets and hierarchies.<sup>14</sup> Their efficacy depends on particular circumstances, *inter alia*, the size of specific investments and the frequency of transactions between the parties.

Discussion: Williamson’s new “1985” version of NIE, his TCE, is a theory of bilateral contracts under conditions of uncertainty and asymmetric information where legal enforcement and self enforcement complement one another. Both, court ordering *and* private ordering, characterize the governance structure (or “organization”) of non-standard contractual relationships. Attentive actors agree before they come to terms on a governance structure that they regard suitable. Market and hierarchy are two of the imaginable ideal types in a n-dimensional space of possible governance structures. It is important to see that the choice of an efficient (better: “efficacious”) governance structure results not from optimizing some target function subject to a set of constraints. It should rather be understood as a form of boundedly rational or “suitable” choice from a set of governance structures in the sense of Selten’s hypothesis of the *casuistic structure of*

---

<sup>14</sup> Williamson later adds hybrid modes “located between market and hierarchy with respect to incentives, adaptability, and bureaucratic costs.” (Williamson 1996, 107)

*boundedly rational strategies* (see Furubotn and Richter 1997, 165) or – earlier – Alchian’s (1950, 218) argument “that modes of behavior replace optimum conditions as guiding rules of action.”<sup>15</sup> Which governance structure the parties choose depends on the existing situation. To be chosen is the governance structure with the higher probability of survival. The problem for the parties then is to agree on both the “right” diagnosis and the relative “best” cure (governance structure). Williamson’s (1985, 79) table of “efficient governance”, where he suggests four types of governance structures or his later distinction between “market, hybrid, hierarchy” (1996, 117), is to be understood as an example of how to think, not an answer to the parties’ actual decision problem.

Note that TCE, as described above, is concerned with the governance structure of strictly dyadic relations. Yet, in real life, as Granovetter (1985) pointed out, actors are embedded in complex networks of contractual relationships (rights of disposition), formal and informal ones. Thus, an application of the TCE approach to network analysis might be of interest. Williamson (1993, 56) concedes:

“Transaction cost economics mainly works out a dyadic set-up. Albeit adequate and instructive for studying many complex transactions, provision for larger numbers of actors and interaction is sometimes needed.”

#### **4. The Attack of New Economic Sociologists on Transaction Cost Economics**

As mentioned above, sociologists’ critique centers largely on Williamson (1975), viz., on the contrast between markets and hierarchies, or on the assumption of a continuum

---

<sup>15</sup> “Like the biologist, the economist predicts the effects of environmental changes on the surviving class of living organisms; the economist need not assume that each participant is aware of, or acts according to, his cost and demand situation.” (Alchian 1950, 220 f.)

between the extremes of markets and hierarchies.<sup>16</sup> We shall briefly report and discuss the critical comments by seven proponents of NES: Perrow (1981, 1986), Fligstein (1985), Granovetter (1985), Bradach & Eccles (1989), Powell (1990), and Freeland (1996).

**Perrow** (1986, 236) criticizes Williamson's argument "... that efficiency is the main and only systematic factor responsible for the organizational changes [to giant organizations] that have occurred."<sup>17</sup> In Perrow's view, Williamson ignores the uses of power in shaping behavior both inside and outside the organization and oversimplifies the motivational complexity leading to different social arrangements. (Perrow 1986, 247) Rather, the reasons for firms to become big would be quite diverse, saving on transaction costs might be only of modest importance (248).

Discussion: Williamson and Ouchi (1981, 388) replied to the power argument that "vertical integration knows no limits. In quest for power, integrate everything." This would be a refutable implication, contradicted by the facts. "Selective rather than comprehensive vertical integration is predicted by the transaction cost approach." (loc.cit., 389) Over time only integration moves that have better rationality properties would tend to have better survival properties (ibid.). As for the rest, Williamson (1996, 238 ff.) argues, power is a diffuse and vaguely defined concept.<sup>18</sup> Of the various forms of power at most resource dependency would be distinctive to organization theory (and TCE). But it assumes myopic contracts, i.e. contracts without sufficient ex ante safeguards against ex post opportunism (Williamson 1996, 239) while TCE "regards

---

<sup>16</sup> Powell (1986, 255), Bradach and Eccles (1989, 101).

<sup>17</sup> Williamson (1986, 125) as quoted by Perrow (1986, 237).

<sup>18</sup> See also Williamson (1995, 32 ff.).

dependency very differently because it works out of a farsighted rather than myopic contract perspective.” (Williamson 1995, 35)

**Fligstein** (1985) compares various theories of what causes the change of organization of enterprises from the unitary form (U-form) to a multidivisional structure (M-form), among them the transaction cost analysis. According to Williamson (1975), the M-form is a consequence of cumulative “control loss” effects with increasing size due to transaction costs, bounded rationality and opportunism.

Fligstein (1985, 382) tests the various theories on the basis of the lists of the 100 largest firms by asset size and finds that Williamson’s argument is not “an important explanation” of the genesis of the M-form. Organizational change does not imply that the most important organizational problems are being solved. Instead, Fligstein advances the theory that actors are first constructing an organizational problem, then claim to be able to solve it, and finally, in order to do so, have to be in the position to implement their proposed solutions. In other words, they must be key actors whose strategic bases of power are consistent with the proposed organizational form (386). “In the end, the actions of key actors may or may not work to preserve the organization.” (1985, 388 f.)

Fligstein later clarifies that his model of action should not be mistaken for the model of perfectly rational or boundedly rational actors of economic theory. Rather, “actors are assumed to construct *rationales* for their behavior on the basis of how they view the world. Their goals and strategies result from those views and are not the product of an abstract rationality. The construction of courses of action depends greatly on the position of actors within the structure of the organization, which forms the interests and identities of actors.” (Fligstein 1990, 11)

Discussion: Fligstein's view comes close to the power argument by Pfeffer (1981) and Perrow (1970, 1981). He argues that "actors must have some resource base either within the organization or the environment whereby they have the power to enforce their solution in the organization." (Fligstein 1985, 388) Insofar as resource dependency is the source of power, Williamson's (1996, 238 ff.) counterarguments apply. They are quoted above. The comparative character of Williamson's argument, that the M-form "favors goal pursuit and least-cost behavior more...than does the U-form organizational alternative" (Williamson 1975, 150) is disregarded or takes second place.

**Freeland** (1996) doubts that the M-form succeeded because it reduced costs by creating a clear distinction between strategic and tactical planning. He supports his view by a paradigmatic case study of General Motors between 1924 and 1958. "For most of its history, GM intentionally violated the axioms of efficient organization to create managerial consent... The textbook M-form may actually undermine order within the firm, thus leading to organizational decline." (1996, 483) --- "Although TCE makes the problem of order central to organizational analysis, the resolution that it offers is fraught with difficulties." (487)

Discussion: Freeland calls the target of his critic "TCE," though Williamson developed TCE only in 1979 ff.. *De facto*, Freeland criticizes Williamson's earlier work of 1967, 1970 and 1972, which is based, as was mentioned above, on the control-loss phenomenon (Williamson 1967, 123). The term "transaction cost" does here not appear, let alone transaction cost economics. Freeland could have mentioned that in his critic. In its substance, Freeland's criticism tends to be somewhat sophisticated. Williamson develops *expressis verbis* his arguments for the M-form relative to the U-form. Of course,

voluntary acceptance of an order (i.e., its legitimacy) is vital for its functioning. But that includes a broad range of control techniques of a hierarchy from strict fiat (e.g., military command structures) to utmost participative decentralization (e.g., a extreme cases of codetermination). The most effective type of voluntary acceptance of an order, if there is one, depends probably on ruling circumstances. Williamson did not analyze this issue, neither did Freeman (1996).

**Granovetter** (1985, 1995) wrote, according to Hamilton and Feenstra (1995, 56), the most important critique of Williamson's NIE. His critique also centers on Williamson (1975). Granovetter argues that Williamson's appeal to authority relations "in order to tame opportunism" constitutes a rediscovery of Hobbesian analysis, an over-emphasizing of hierarchical power. The 'market' would resemble Hobbes's state of nature. "It is [in the end] the atomized and anonymous market of classical political economy, ..." (Granovetter 1995, 224). Instead, "the anonymous market of neoclassical models is virtually nonexistent in economic life and ... transactions of all kinds are rife with ... social connections ... This is not necessarily more the case in transactions between firms than within ..." (1995, 217). Williamson's dyadic approach disregards the individual's embeddedness in a social network and its effect on the creation of trust (Granovetter 1995, 200). In real life, all business relationships are mixed up with general social relationships (1995, 237). Williamson "vastly overestimates the efficacy of hierarchical power ... within his organizations." (1995, 220) Granovetter stresses the role of social structure and claims that

“... order *and* disorder, honesty *and* malfeasance have more to do with structures of such relations than they do with organizational form.” (1995, 236)

Discussion: Nee and Ingram (1998, 22) criticize Granovetter's embeddedness argument. They argue that his focus on personal relationships would introduce an element of indeterminacy into economic sociology as an explanatory program of research. "We do not know *ex ante* whether, and to what extent, personal ties can cement trust between economic actors" (ibid.). The axiom "never lend money to a friend" illustrates the point (1998, 23). "In the absence of a reliable third-party enforcer there is often no firm basis for deciding whether an acquaintance or friend is trustworthy. That is why the new institutionalists among economists argue that formal institutional arrangements and their enforcement are necessary to back informal constraints in modern economies where the payoff from malfeasance and opportunism is high ..." (1998, 23). Instead, Nee and Ingram favor social exchange theory in which norms and (boundedly) rational choice are of paramount importance.<sup>19</sup> They try to build a fully integrated model of institutions, embeddedness and group performance (1998, 3 ff.).

Williamson asks in his reply to Granovetter's arguments: More sophisticated analyses must be judged by their value added. "What are the deeper insights? What are the added implications? Are the effects in question really beyond the reach of economizing reasoning?" (1984, 85, 1996, 230). In a later reaction, Williamson (2000, 596 ff.) writes (in effect) that he and Granovetter are talking at cross-purposes. The embeddedness concept<sup>20</sup> is located on a higher, more general level than his TCE approach; embeddedness is taken as given by the representatives of the NIE. Granovetter would doubt that. An application of TCE to network analysis may clear that issue. It may

---

<sup>19</sup> "... we do not see humans as hyperrational – as does neoclassical economics – possessing perfect information and unbounded cognitive capacity." (Nee and Ingram 1998, 30)

<sup>20</sup> Embeddedness is defined by Williamson as "informal institutions, customs, traditions, norms, religion." (Williamson 2000, 597, Fig. 1, first box)

analgamate Williamson's demand for "deeper insights" with Granovetter's claim that his concept of embeddedness constitutes any less of a theoretical argument than TCE. As mentioned above, Williamson (1993, 56) himself concedes that "provision for larger numbers of actors and interaction is sometimes needed." We'll take up this issue further below.

**Bradach and Eccles** (1989) emphasize, as did Perrow (1986) before, that the ideal type of markets and hierarchies is not a mutually exclusive control mechanism, as poles of a continuum with "hybrid modes"<sup>21</sup> located in between. Rather, price mechanisms are also installed in hierarchies (Eccles 1985) and markets contain hierarchical elements as well (Stinchcombe 1975, Perrow 1986). Actors may also use different governance structures for the same type of transaction with different partners, e.g., franchise units and own units or a company may make and buy an intermediate product. Bradach and Eccles (1989, 112 ff.) call this "plural forms"<sup>22</sup> and hypothesize "that in many cases *either* mechanism will work and that the choice of mechanism is primarily a function of the vagaries of circumstance – ..." (1989, 115). Plural forms may be, at least in part, driven by senior management's recognition of the indirect control afforded by them.

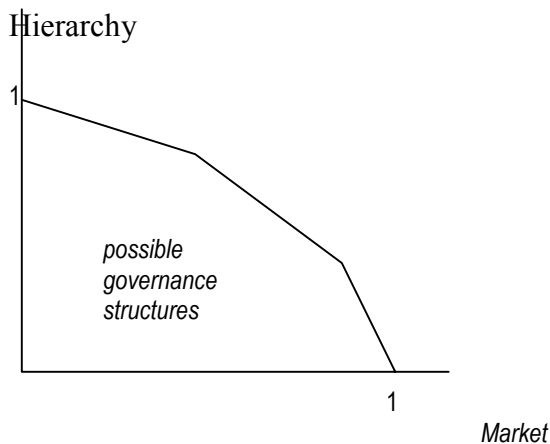
Bradach and Eccles criticize TCE also by arguing that "mutual dependence between exchange partners ... [promotes] trust [which] contrasts sharply with argument central to the transaction cost economics that ... dependence ... fosters opportunistic behavior." (1989, 111)

---

<sup>21</sup> As in Williamson (1985, 83; 1991, 280; 1996, 117).

<sup>22</sup> They provide many real life examples.

Discussion: Markets and hierarchies can be easily understood as a two-dimensional mix (Fig. 1). It could also be generalized to a mix of higher dimensions as, e.g., three dimensions: markets, hybrid modes, hierarchies (Williamson 1996, 117). Thus, in the first case, less market does not necessarily mean more hierarchy, or in the second case, all sorts of combinations of markets, hierarchies and hybrid modes are imaginable - also “plural” modes. What matters in TCE is the choice of an efficient governance structure, of “economizing.” It is to be understood as a boundedly rational (“casuistic”) choice from a set of possible governance structures under given circumstances (see above, Section 3). The parties have to agree on both the “right” interpretation of circumstances and the “best” suiting governance structure.



**Figure 1:** Two-dimensional space of possible governance structures; here: market and hierarchy, 1 = ideal types.

As for the argument by Bradach and Eccles, that “mutual dependence between exchange partners ... [promotes] trust” not opportunistic behavior, Williamson (1996, 260) replies that “because opportunistic agents will not self-enforce open-ended promises ... efficient exchange will be realized only if dependencies are supported by credible commitments.

... Indeed, I maintain that trust is irrelevant to commercial exchange and that reference to trust in this connection promotes confusion.”

**Powell** (1990) introduces networks as a distinctive form of coordinating economic activity. He recurs to high tech start-ups in the United States and Europe, which do not follow the standard model of small firms by developing internally through an incremental and linear process but by an entirely different model: “An externally-driven growth in which preexisting networks of relationships enable small firms to gain an established foothold almost overnight.” (1990, 300 f.) Powell doubts that “the bulk of economic exchange fits comfortably at either of the poles of the market–hierarchy continuum” and that the mixed mode [hybrid form] is particularly helpful (1990, 298). This would be a too quiescent and mechanical idea that fails to capture the complex realities of exchange. “By sticking to the twin pillars of markets and hierarchies, our attention is deflected from a diversity of organizational designs that are neither fish nor fowl, nor some hybrid, but are distinctly different forms.” (1990, 299)

Powell illustrates his argument by three types of network forms:

1. craft industries, like construction, publishing, film, and recording industries;
2. regional economies and industrial districts, like German textiles or the Silicon Valley;
3. strategic alliances and partnerships, as common in particular in technology-intensive industries.

Powell (1990, 323) claims that Williamson’s focus on the transaction as the primary unit of analysis, rather than the (social) relationship, is misplaced. As the rationale for

network forms Powell emphasizes three factors: know-how, speed and trust (1990, 324 f.). He concludes that “certain kinds of institutional contexts, that is, particular combinations of legal, political, and economic factors, are especially conducive to network arrangements ...” (1990, 326). They involve a distinctive combination of factors: “skilled labor, some degree of employment security, salaries rather than piece rates, some externally-provided mechanisms for job training, relative equity among the participants, a legal system with relaxed antitrust standards, and national policies that promote research and development and encourage linkages between centers of higher learning and industry – which seldom exist in sufficient measure without a political and legal infrastructure to sustain them.” (1990, 326 f.)

Discussion: Obviously all organizations – also markets and hierarchies – can be described as networks. The concept of social networks is of a higher level than the concepts of markets and hierarchies – or of “hybrid modes”. Thus, it is hard to understand why Powell (1990) or Grabher (1993) call networks a *tertium* in relation to markets and hierarchies. Nohria (1992, 12) excuses Powell’s argument as a rhetorical strategy to get beyond the market and hierarchy distinction “that has become the dominant frame of the comparative analysis of organizations”. It is an attempt to center attention on the distinctive “logic of collective action [in networks] that enables cooperation to be sustained over the long run.” Still, classical economists would disfavor the concept of markets as social networks for normative reasons. For them, the idea would smell of collusion. In the ideal type of a competitive market buyers and sellers remain anonymous. There exist no social networks (social structures), no customer relationships, no interfirm alliances, which in the real world with transaction costs play such an important role. In

the world with transaction costs, though, the situation is different. There may be efficiency arguments for markets as networks. Larson (1992), using the social network concept, examines highly cooperative interfirm alliances.<sup>23</sup> Formal contracts would be relatively unimportant, "... the significance of trust and reciprocity norms appear to reflect the reality of economic exchange: it takes place within and is shaped by social controls." (1992, 98) Note, however, that his analysis showed also a high failure rate of alliances. Larson finds: "Critical to the development of network forms is the history of prior personal relations and reputational knowledge that provides a receptive context for the initiation and evolution of economic exchange." (1992, 99) The concept of trust, as used by Powell and Larson, seems to be what Williamson (1996, 256) calls "calculative trust", which is best described in calculative terms. It is imaginable both in an embedded bilateral relationship as well as in an "un-embedded" one.

#### Sociologists' attack on TCE: Attempt of a summary

Most of sociologists' attack on TCE consists of questioning the realism of the assumptions of Williamson's hypothesis. They say, not transaction costs are much of an issue but power, trust, embeddedness, social relationship, networks or other sociological concepts. But hypotheses are never descriptively "realistic" in their assumptions. Milton Friedman pointed that out and adds, what is important is that they are sufficiently good approximations

"... for the purpose in hand. And this can be answered only by seeing whether the theory works, which means whether it yields sufficiently accurate predictions."(Friedman 1953, 15)

Important is the conformity to experience of the implications of TCE, the ex ante

---

<sup>23</sup> The industries were telephone equipment, clothing, computer hardware, and environmental support systems. (Larson 1992, 80)

protection against ex post opportunism, not whether business men do or do not actually reach their decisions by calculating the transaction costs of alternative governance structures. Testing of TCE has made considerable progress since 1975. Thus, Shelanski and Klein (1995) survey and assess some one hundred references on empirical research supporting TCE published prior to 1993.<sup>24</sup> Williamson (1984, 85) rightly asks: “What are the deeper insights [of sociologists’ arguments]? What are the added implications? Are the effects in question really beyond the reach of economizing reasoning?”

Somewhat peculiar is that sociologists work off Williamson’s early markets and hierarchies hypothesis when there have been significant developments in TCE in the twenty or more years thereafter, some of which are responsive to the criticisms in question.<sup>25</sup>

What seems to remain a problem for sociologists, including economic sociologists, is the rational choice tendency of TCE. Sociologists criticize that economists attribute human interaction to *individual* rationality and are abstracting away from fundamental aspects of *social relationships* that characterize economic as well as other actions. (Granovetter 2001 as opposed to Williamson 1996, Ch. 10) Social phenomena like fairness, trust or power are reduced by economists to individual rational actions while they are, in fact, well beyond what individuals’ incentives can explain. Or, as Swedberg in a personal reaction to this paper remarks: “Quite a bit in business may be due to sociality, friendship and the like, which can be expressed in terms of [transaction] costs - but which the participants would not do so themselves.” Economists’ reply is that an “as if assumption”

---

<sup>24</sup> See also the collection of by now classical applications and testings of TCE in Williamson and Masten (1995).

<sup>25</sup> See, e.g., Williamson (1996) as quoted in this contribution.

suffices as long as the concept yields sufficiently accurate predictions<sup>26</sup> and, further, that economists view costs, including transaction costs, to be opportunity costs containing quite a pinch of subjective evaluation.<sup>27</sup>

One reply to the criticism of Williamson's abstraction from the embeddedness of individuals in network relationships is to try to blend the two views.

## 5. Blending TCE and Social Network Theory

The network concept: Social networks consist of actors, attributes of actors and relations between pairs of actors (Wasserman and Faust 1994). Individual attributes include individual preferences, the type of choice behavior, the control of resources. The relations (or links) between pairs of actors may be understood as transactions (interactions), they are directed or controlled by an institution (J. Knight 1993, 2) or governance structure (Williamson 1985) – a set of explicit (formal) or implicit (informal) rules or norms, which structures social relations in a particular way. “Transactions” are to be understood *sensu largo*, not only as exchanges of material resources or information between actors but as any kind of social action “that establishes a linkage between a pair of actors.” (Wasserman and Faust 1994, 18) They include such “non-economic” relations or links as associations or affiliations between actors; movements between places; physical connections (a road, a telephone line); legal relationships (the formal debtor/creditor relation); biological relationships (kinship, descent); mental relationships (common views, beliefs, convictions, “culture”), and so on. Typical “economic” links between actors are relationships over time such as standing contracts, streams of transactions in

---

<sup>26</sup> See above Friedman (1953, 15) and his remarks on the lengthy discussion on the shortcomings of marginal analysis in the *American Economic Review* 1946 –48.

<sup>27</sup> Cf., e.g., Alchian 1977, 301.

markets, formal or informal authority relationships within a firm.

Network relations raise issues foreign to pure dyadic relations, such as the “centrality” or “prestige” of actors, their “social position”, their “social role.” (Wasserman and Faust 1994) In social networks actors compete for their social position. Thus, competition may be interpreted as competing for social positioning, as in Burt (1992).<sup>28</sup> Positioning of sellers or buyers in a network of market relationships is a matter of strategic significance. A new actor entering an already existing network, e.g., an existing market or firm, faces the challenge of positioning himself among the already existing actors and to build links with them, which may be tight or loose, “depending on the quantity (number) or quality (intensity), and type (closeness to the core activity of the parties involved) of interaction between members.” (Thorelli 1986, 38). “Social structure” is characterized by the strength of the links between actors. Embeddedness as described by Granovetter (1985) or Uzzi (1996) is a form of social network relationships.

By blending TCE and social network theory we continue to assume, as in TCE, boundedly rational behavior of actors. This view is comparable with Granovetter’s concept of embeddedness, in spite of Uzzi (1996) who argues

“ ... that embeddedness shifts actors’ motivations away from narrow pursuit of immediate economic gains toward the enrichment of relationships through trust and reciprocity.” (Uzzi 1996, 677).

“Trust” is here apparently understood as a basic motive of economic action besides self-interest (see above n. 6). But Uzzi’s statement would also be compatible with long term individual utility maximization as assumed to underlie any long term bilateral business

---

<sup>28</sup> Burt criticizes Williamson (1975) but disregards Williamson’s fundamental transformation concept (238 ff.).

relationship or “relational contract,” the third organizational mode besides “market” and “hierarchie” in Williamson (1985). It is difficult to escape the all-embracing concept of individual utility.

Network asset specificity: “Asset specificity<sup>29</sup> is one reason why firms are dependent on external resources and devote important resources to investments in [inter firm] relationships.” (Johannson and Mattson 1987, 45) The same can be said for customer relationships between firms and households; in fact, it is true for any social relationship. Thus, Williamson’s *fundamental transformation*, resulting from transaction-specific investments, can be also applied to social networks. Actors have to pay an “entry fee” for becoming members of an existing network or have to invest in the establishment of a new one. Afterwards they are locked into a complex, multilateral relationship. The strength of their “locks” is expressed by the size of switching costs<sup>30</sup>. The lock-up can invite opportunistic behavior among actors. Court ordering is limited or impossible for reasons of transaction costs and has to be supplemented with or replaced by self-enforcement or private ordering. The governance structure of network relationships matters. As in Williamson’s dyadic relations, hierarchy is a possible governance structure also of networks, but works also without integration into a single firm (without “unified governance”). Hamilton and Feenstra report on network hierarchies, like vertically controlled business groups or horizontally controlled stock markets (Hamilton and Feenstra 1995, 643 ff.), Greif (1993) describes the social control of the network of the 11th century Maghribi traders. Third party control (“trilateral governance”) is another governance structure of networks, introduced by Williamson himself with his argument

---

<sup>29</sup> Williamson (1985, 128).

<sup>30</sup> Shapiro and Varian (1999, 11 f.).

in favor of public regulation in case of a single supplier of a network product like water, gas, telephone, cable television (Williamson 1976). It is justified as a method to limit ex-post opportunism of the monopolist supplier.<sup>31</sup> Third party control characterizes also the network of the law merchants at the medieval Champaign fairs (Milgrom, North and Weingast 1990) or of New York's diamond dealers (Bernstein 1992). Positioning of actors in a network is a specific network safeguard against ex post opportunism. Thus, a buyer may establish a second source of supply to which he can easily switch, called "partial switching." (Shapiro and Varian 1999, 140).

Discussion: TCE and social network analysis can be meaningfully combined even if one assumes, as Uzzi (1996) seems to do, a different (or more general?) basic motivation of individual actors.<sup>32</sup> In any case, trust and reciprocity are also justifiable in the more narrow sense of individual rational action. In this respect, the concept of Williamson's fundamental transformation would also be applicable to network relationships. Of course, the governance structures of networks would have to be extended by network characteristics. Trust plays a more important role in networks than in dyadic relations, also egoism remains the basic motive of traders, because breach of promise is now punishable by third parties. Of interest in networks is also an actor's strategic positioning and the techniques of collective action such as coalition formation. "Voice" turns out to be an important organizational tool in addition to "exit".<sup>33</sup> Cooperation between actors may be supported by the most prestigious (or powerful) actor of the social network in form of hegemonic cooperation, e.g., of sovereign states. (Keohane 1984, 46) The

---

<sup>31</sup> Williamson (1976) illustrates his point by the experiences from the Oakland CATV franchise 1969-70.

<sup>32</sup> As alluded to by Schmoller (1900) or North (1990), see above n. 6. Interesting in this context is Frey's (1997, 5ff.) concept of the *homo oeconomicus matures*, being controlled by extrinsic *and* intrinsic motivations.

<sup>33</sup> Using the terminology of Hirschman (1969).

foundation of international regimes like the United Nations, the European Economic Union etc. facilitate such hegemonic cooperation. The same concept could be applied to the social network of a nation state or of a firm. An instrument against ex post opportunistic behavior of the network's hegemon is the use of voice. The government of a democratic state or the management of a modern corporation is subject to the credible threat of the "termination of relations" by their principals - their voters or shareholders.

Specific investments in networks are a form of network capital. Its consideration is particularly important when dealing with economic transformation or development issues. The point is stressed by Stark (1996, 995) who argues that transformation of postsocialist economies should consist in "rebuilding organizations and institutions not *on the ruins* but *with the ruins* of communism ...". An extreme counter example provides the German reunification of October 3, 1990. It was probably the most rapid formal transformation from socialism to capitalism in the world. East Germany took on, virtually overnight, the West German currency, the West German constitution, its legislation, administrative rules, economic order, social policy etc. Public administrations, courts, universities were turned upside down and newly staffed, to a large degree with West German experts. This complete disregard of path dependency of organizational change turned out to be an enormous handicap for the East German social and economic reconstruction. It would have been better (and probably less expensive) to consider the restrictions of path dependency. Still, as we know, path dependency may be also in the way of efficiency. Another handicap for a quick *wirtschaftswunder* style transformation of the East German economy might be made clear by the cultural view of organizations mentioned by Hamilton and Biggart (1988/1992, 182). The melancholic memory of the

“good old days” in the communist German Democratic Republic – “GDR nostalgia” – is a not to be ignored mentality of today's East Germans. As Berger and Luckman (1966, 54) rightly point out:

“Institutions ... imply historicity and control. Reciprocal typifications of actions are built up in the course of a shared history. They cannot be created instantaneously. Institutions always have a history of which they are the products.”

## 6. Concluding Thoughts

No question, NES and NIE have a common object: social action. Both deal with social structures or organizations (“institutions”). Where most of them still differ are their models of man: various motives of human actions (including rational choice) on the one side, individual rationality (pure or bounded) on the other. Network imagery might bring TCE, and NIE in general, further towards NES. Because of the now widely accepted influence of transaction costs even the strictest neoclassical economist should accept today the idea of a market as a network of people, knowing each other personally, as something “good” and not necessarily “bad” (encouraging collusion instead of competition). The basic difference in the models of man of NES and NIE might shrink further, or even fully disappear, with future advancements in the biology of human social behavior (Robson 2001).<sup>34</sup> For the time being, why not use different paradigms? The days are gone, when economists worked towards an elegant *General Theory* – as, e.g., general equilibrium theory or the neoclassical synthesis of Keynesian macroeconomics.

---

<sup>34</sup> In fact, economists are taking on further sociological issues like power (Rajan and Zingales 1998), fairness (Fehr, Klein and Schmidt 2001) social networks (Kranton and Minehart 2000), altruism (Bergstrom 1995) or status (Postlewaite 1998). There is also an increasing literature on preferences that adapt to experience (cf. Robson 2001, 17 ff.).

Macroeconomics, and increasingly also microeconomics, became a rag rug of different concepts explaining different phenomena. NIE with its many branches is a model for this development. In the course of time NES and NIE may merge into some “NSE” (New Socio-Economics). Presently, the two approaches, with their different models of man, may be used as special magnifying glasses for the analysis of different sets of problems. Plurality of methods has its explanatory merits. What seems indispensable, though, is to enrich economic institutional analysis with sociological or historical insights like the role of path dependency, of power (including the threat or use of force), of culture or fairness . The consequences of the elementary mistakes made by economists by advising politicians on development and transformation policy issues should make us think.

## Literature

- Abolafia, M. (1984), "Structured Anarchy: Formal Organization in the Commodities Futures Market," in: Adler, P.A. und P. Adler (1984a), 129 – 150.
- Adler, P.A. und P. Adler (1984b), "Toward a Sociology of Financial Markets", in: Adler, P.A. und P. Adler (1984a)
- Adler, P.A. und P. Adler (eds.) (1984a), *The Social Dynamics of Financial Markets*", Greenwich, CN: Jai-Press.
- Alchian, A. A. (1950), "Uncertainty, Evolution, and Economic Theory," *Journal of Political Economy*, 58, 211 – 221; reprinted in Alchian (1977), 15 – 35.
- Alchian, A. A. (1977), *Economic Forces at Work*, Indianapolis: Liberty Press.
- Alchian, A. A. (1987), "Concluding Remarks," *Journal of Institutional and Theoretical Economics*, 143, 232 – 234.
- Arthur W. B. (1989), "Competing Technologies, Increasing Returns, and Lock-In by Historical Events," *Economic Journal*, 99, 116 – 131.
- Axelrod, R. (1984), *The Evolution of Cooperation*, New York: Basic Books.
- Barber, B. (1977), "Absolutization of the Market: Some Notes on How we Got From There to Here", in: G. Dworkin et al. (eds.), *Markets and Morals*, Wiley, 15 - 31.
- Baron J., N. and Hannan, M. T. (1994), "The Impact of Economics on Contemporary Sociology," *Journal of Economic Literature*, 32, 1111 – 1146.
- Berger, P.L. and Luckman, Th. (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, New York: Anchor Books.
- Bergstrom, T. (1995), "On the Evolution of Altruistic Rules for Siblings", *American Economic Review*, 85, 58 – 81.
- Bernstein, L. (1992), "Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry," *Journal of Legal Studies*, 21, 115-157.
- Bradach, J. L. and R. G. Eccles (1989), "Price, Authority, and Trust: From Ideal Type to Plural Forms", *Annual Review of Sociology*, 15, 97 - 118.
- Brinton, N.C. und V. Nee (1998), *The New Institutionalism in Sociology*, New York: Russell Sage Foundation.
- Burt, R. S. (1982) *Toward a Structural Theory of Action. Network Models of Social Structure, Perception, and Action*, New York, Academic Press.
- Coase, R.H. (1937), "The Nature of the Firm," *Economica*, 4, 386-405.
- Coase, R.H. (1960), "The Problem of Social Cost," *Journal of Law and Economics*, 3, 1-44.
- Cournot, A. (1838), *Recherches sur les Principes Mathématiques de l Théorie des Richesses*, Paris: Rivière.

- David, P.A. (1986), "Understanding the Economics of QUERTY: The Necessity of History," in: W.N. Parker (ed.), *Economic History and the Modern Economist*, New York, N.Y., 30 – 49.
- Demsetz, H. (1968), "The Cost of Transacting," *Quarterly Journal of Economics*, 82, 33-53.
- DiMaggio, P. (1990), "Cultural Aspects of Economic Organization and Behavior," in: R. Friedland and A.F. Robertson (eds.) *Beyond the Market Place: Rethinking Economy and Society*, New York, N.Y.: Aldine.
- Eccles, Robert G. (1981), "The Quasi Firm in the Construction Industry", *Journal of Economic Behavior and Organization*, 2, 335 – 357
- Eccles, R. (1985), *The Transfer Pricing Problem: A Theory for Practice*, Lexington, MA: Lexington Books.
- Fehr, E., Klein, A., and Schmidt, K. M. (2001), „Fairness, Incentives and Contractual Incompleteness,“ manuscript, Universities of Munich and Zurich.
- Fligstein, N. (1985), „The Spread of the Multidivisional Form Among Large Firms, 1919 – 1979“, *American Sociological Review*, 50, 377 – 391.
- Fligstein, N. (1990), *The Transformation of Corporate Control*, Cambridge, MA: Harvard University Press
- Freeland, R. F. (1996a), "The Myth of the M-Form? Governance, Consent, and Organizational Change," *American Journal of Sociology*, 102, 481 – 526.
- Freeland, R. F. (1996b), "Theoretical Logic and Predictive Specificity: Reply to Shanley," *American Journal of Sociology*, 102, 537 – 542.
- Frey, B. (1997), *Markt und Motivation. Wie ökonomische Anreize die (Arbeits-) Moral verdrängen*, München: Vahlen.
- Friedman, M. (1953), "The Methodology of Positive Economics," in: M. Friedman (1953), *Essays in Positive Economics*, Chicago: University of Chicago Press, 3 – 43.
- Furubotn, E. G. and Richter, R. (1997), *Institutions and Economic Theory. The Contribution of the New Institutional Economics*, Ann Arbor, MI: University of Michigan Press.
- Grabher, G. (1993), "Rediscovering the Social in the Economics of Interfirm Relations", in: G. Grabher (ed.), *The Embedded Firm. On the Socioeconomics of Industrial Networks*, London: Routledge
- Granovetter, M. (1985), "Economic Action and Social Structure: The Problem of Embeddedness", *American Journal of Sociology*, 91, 481 – 510.
- Granovetter, M. (1992), "Economic Action and Social Structure: The Problem of Embeddedness" reprinted from AJS 1985 in Granovetter, M. and Swedberg, R. (1992), 53 – 81.
- Granovetter, M. and Swedberg, R. (eds.) (1992), *The Sociology of Economic Life*, Boulder et a.: Westview Press.

- Granovetter, M. (2001), "A Theoretical Agenda for Economic Sociology", in M. F. Guillen, R. Collins, P. England, and M. Meyer (eds.), *Economic Sociology at the Millennium*, New York, N.Y.:
- Greif, A. (1993), "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalitions," *American Economic Review*, 83, 525 – 548
- Hamilton, D.G. und N. W. Biggart (1988), "Market, Culture, and Authority: A Comparative Analysis of Management and Organization in the Far East", *American Journal of Sociology*, 94, Sup., 53 – 94.
- Hamilton, G. G. und N. W. Biggart (1992), "Market, Culture, and Authority: A Comparative Analysis of Management and Organization in the Far East", reprint of Hamilton and Biggart (1988) in: Granovetter und Swedberg (1992), 181 – 221.
- Hamilton, G. G. and Feenstra, R.C. (1995), "Varieties of Hierarchies and Markets: an Introduction," *Industrial and Corporate Change*, 4, 51 – 91.
- Hirschman, A.O. (1969), *Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations, and States*, Cambridge, Mass.: Harvard University Press.
- Johannson, J. and Mattson, L.-G. (1987), "Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach," *Studies of Management and Organization*, 17, 34 – 48.
- Keohane, R.O. (1984), *After Hegemony. Cooperation and Discord in the World Political Economy*, Princeton: Princeton University Press.
- Knight, J. (1993), *Institutions and Social Conflict*, Cambridge: Cambridge University Press.
- Kranton, R.E. and Minehart, D.F. (2000), "A Theory of Buyer-Seller Networks", manuscript, University of Maryland, College Park, MD and Boston University, Boston, MA.
- Larson, A. (1992), "Network Dyads in Entrepreneurial Settings: A Study of the Governance of Exchange Relationships", *Administrative Science Quarterly*, 37, 76 – 103
- Larson, A. and Starr, J. (1992), "A Network Model of Organization Formation," *Entrepreneurship Theory and Practice*, 17 (quoted from Larson 1992).
- Lewis, D. (1969), *Convention. A Philosophical Study*, Cambridge, Mass.: Harvard University Press.
- Liebowity, St. J. and St. Margolis (1990), "The Fable of the Keys," *Journal of Law and Economics*, 33, 1 – 26.
- Menger, C. (1883/1963), *Problems of Economics and Sociology*, translated by F.J. Nock from the German edition of 1883, ed. by L. Schneider, Urbana, Illinois: University of Illinois Press.
- Milgrom, P., North, D. C. and Weingast, B. (1990), "The Role of Institutions in the Revival of Trade: The Medieval Law Merchants, Private Judges, and the Champagne Fairs," *Economic and Politics*, 2, 1 – 23.

- Mintz, B. and Schwartz, M. (1985), *The Power Structure of American Business*, Chicago: The University of Chicago Press.
- Moe, T.M. (1984), "The New Economics of Organization", *American Journal of Political Science*, 28, 739–777.
- Nee, V. (1998), „Sources of New Institutionalism,“ in: M.C. Brinton and V.Nee (eds.), *The New Institutionalism in Sociology*, New York: Russell Sage
- Nohria, N. (1992), “Is a Network Perspective a Useful Way of Studying Organizations?”, in: N. Nohria und R.G. Eccles (eds.), *Networks and Organizations. Structure, Form, and Actions*, Boston, MA: Harvard Business School Press, 1 – 22
- North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- Parsons, T. (1937), *The Structure of Social Action: A Study in Social Theory with Special Reference to a Group of Recent European Writers*, 2 Vols., New York, N.Y.: The Free Press.
- Perrow, Ch. (1970), “Departmental Power and Perspectives in Industrial Firms,” in: Mayer Zald (ed.), *Power in Organizations*, Nashville, TN: Vanderbilt University Press, 59 – 89.
- Perrow, Ch. (1981), “Markets, Hierarchies, and Hegemony,” in: A.H. van De Ven and W. J. Joyce (eds.), *Perspectives on Organization Design and Behavior*, New York: Wiley, 371 – 386.
- Perrow, Ch. (1986), *Complex Organizations. A Critical Essay*, 3<sup>rd</sup> ed., New York: McGraw-Hill.
- Pfeffer, J. (1981), *Power in Organizations*, Marshfield, MA: Pitman.
- Polanyi, K. (1944) *The Great Transformation. The Political and Economic Origins of Our Time*, Boston, MA: Reinhart & Company.
- Postlewaite, A. P (1998), “The Social Basis of Interdependent Preferences”, *European Economic Review*, 42, 779 – 800.
- Powell, W.W. (1990), “Neither Market nor Hierarchy: Network Forms of Organization,” in: B.M. Staw and L.L. Cummings (eds.) *Research in Organizational Behavior*, 12, 295 – 336, Greenwich, CT: JAI Press.
- Powell, B.W. und P.J. DiMaggio (eds.) (1991), *The New Institutionalism, in: Organizational Analysis*, Chicago: University of Chicago Press
- Rajan, R. G. and Zingales, L. (1998), “Power in a Theory of the Firm,” *Quarterly Journal of Economics*, 113, 387 – 432.
- Ress, G. (1994), "Ex Ante Safeguards Against Ex Post Opportunism and International Treaties: The Boundary Question," *Journal of Institutional and Theoretical Economics*, 150, 239-264.
- Richter, R. (1996), “Bridging Old and New Institutional Economics: Gustav Schmoller, the Leader of the Younger German Historical School, Seen With

- Neoinstitutionalists' Eyes," *Journal of Institutional and Theoretical Economics*, 152, 567 – 592.
- Robson, A.J. (2001), "The Biological Basis of Economic Behavior", *Journal of Economic Literature*, 39, 11 - 33.
- Saxenian, A. (1994), *Regional Advantage. Culture and Competition in Silicon Valley*, Cambridge, MA: Harvard University Press.
- Schmoller, G. (1900), *Grundriss der Allgemeinen Volkswirtschaftslehre. Erster Teil*, Leipzig: Duncker&Humblot.
- Schotter, A. (1981), *The Economic Theory of Social Institutions*, Cambridge: Cambridge University Press.
- Schumpeter, J.A. (1926), "Gustav v.Schmoller und die Probleme von heute", *Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft*, 50, 337-388
- Scott, E.R. (1994), "Institutions and Organizations. Toward a Theoretical Synthesis", in: E.R. Scott, J.W. Meyer and Associates (eds.) *Institutional Environments and Organizations. Structural Complexity and Individualism*, Thousand Oaks: SAGE Publications, 55-80.
- Shanley, M. (1996), "Straw Men and M-Form Myths: Comment on Freeland", *American Journal of Sociology*, 102, 527 – 536.
- Shapiro, S. (1984), *Wayward Capitalists: Targets of the Securities and the Exchange Commission*, New Haven: Yale University Press.
- Shapiro, C. and Varian, H.R. (1999) *Information Rules. A Strategic Guide to the Network Economy*, Boston, MA: Harvard Business School Press.
- Simon, H.A. (1957), *Models of Man*, New York: John Wiley & Sons.
- Smelser, N.J. and R. Swedberg (1994b), "The Sociological Perspective on the Economy", in: Smelser und Swedberg (1994a), 3 – 26.
- Smelser und Swedberg (eds.) (1994a), *The Handbook of Economic Sociology*, Princeton, N.J.: Princeton University Press,
- Stark, D. (1996), "Recombinant Property in East European Capitalism," *American Journal of Sociology*, 101, 993 – 1027.
- Stinchcombe, A.L. (1975), "Contracts as Hierarchical Documents," in: A.L. Stinchcombe and C.A. Heimer, *Organization Theory and Project Management*, Norwegian University Press, Chap. 2, 121 – 171.
- Swedberg, R. (1990), "The New 'Battle of Methods' " *Challenge*, 33, No.1, 33 – 38.
- Swedberg, R. (1994), "Markets as Social Structures" in: Smelser und Swedberg (1994a), 255 – 282.
- Swedberg, R. (1998), *Max Weber and the Idea of Economic Sociology*, Princeton, N.J.: Princeton University Press.
- Thorelli, H.B. (1986), "Networks: Between Markets and Hierarchies, *Strategic Management Journal*, 7, 37 – 51

- Useem, M. (1996), *Investor Capitalism: How Money Managers are Changing the Face of Corporate America*, Basic Books.
- Uzzi, B. (1996), "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect." *American Sociological Review*, 61, 674 – 698.
- Wasserman, S. and Faust, K. (1994), *Social Network Analysis. Methods and Applications*, Cambridge: Cambridge University Press.
- Weber, M. (1922), *Wirtschaft und Gesellschaft. Grundriss der verstehenden Soziologie*, Tübingen: J.C.B. Mohr (Paul Siebeck) (5th Edition 1980).
- Weber, M. (1968), *Economy and Society. An Outline of Interpretative Sociology*, ed. by Roth, G. and Wittich, C., Berkeley: University of California Press.
- Williamson, O.E. (1967), "Hierarchical Control and Optimum Firm Size", *Journal of Political Economy*, 75, 123 – 138.
- Williamson, O.E. (1970), *Corporate Control and Business Behavior*, Englewood Cliffs, NJ: Prentice-Hall.
- Williamson, O.E. (1975), *Markets and Hierarchies. Analysis and Antitrust Implications*, New York et al.: Free Press.
- Williamson, O. E. (1976), "Franchise Bidding for Natural Monopolies – in General and With Respect to CATV," *Bell Journal; of Economics*, 7 (Spring), 73 – 104.
- Williamson, O.E. (1979), "Transaction-Cost Economics: The Governance of Contractual Relations," *Journal of Law and Economics*, 22, 233-261.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, New York et al.: Free Press.
- Williamson, O.E. (1993), "The Evolving Science of Organization," *Journal of Institutional and Theoretical Economics*, 149, 36 – 63
- Williamson, O. E. (1995), "Hierarchies, Markets and Power in the Economy: An Economic Perspective," *Industrial and Corporate Change*, 4, 21 – 49.
- Williamson, O. E. (1996), *The Mechanisms of Governance*, New York, Oxford: Oxford University Press.
- Williamson, O. E. (2000), "The New Institutional Economics: Taking Stock, Looking Ahead," *Journal of Economic Literature*, 38, 595 – 613.
- Williamson, O. E. and Bhargava, N. (1972), "Assessing and Classifying the Internal Structure and Control Apparatus of the Modern Corporation," in: K. Cowling (ed.), *Market Structure and Corporate Behavior Theory and Empirical Analysis of the Firm*, London: Gray-Mills, 125 – 148.
- Williamson, O.E. and Ouchi, W.G. (1981), "The Markets and Hierarchies and Visible Hand Perspectives," in: A.H. van De Ven and W. J. Joyce (eds.), *Perspectives on Organization Design and Behavior*, New York: Wiley, 347 – 370.
- Williamson, O. E. and Masten, S. E. (eds.) (1995), *Transaction Cost Economics*, Vol. II,

Aldershot: Edward Elgar.

Zelizer, V. A. (1983), *Morals and Markets: The Development of Life Insurance in the United States*, New Brunswick: Transaction Press.