Networks in Cultural, Economic and Evolutionary Perspective

Barbara Krug
### BIBLIOGRAPHIC DATA AND CLASSIFICATIONS

**Abstract**

Depending on the kind of literature, networks in general, and Chinese networks in particular seem to be different phenomena, or are explained by different factors leaving the interested public puzzled. Whether Chinese networks resemble Clans, Clubs, or Mafia-kind of organizations is as much disputed as the effects of networking on the economy. While some argue that networks contribute to overall factor productivity in a situation in which neither the old planning system nor the nascent markets function, others insist on their counterproductive potential for the transformation of the Chinese economy. A third group dismisses networks as a transitory phenomena that will disappear with ongoing market reforms, in particular the wider use of the price mechanism for allocating resources and co-ordinating economic activities. The following attempts to shed some light into the confusing argumentation by grouping the different approaches according to what is explained and the explaining items. The paper will systematically compare theories that are usually classified as taking a cultural, economic, and evolutionary perspective and which can be found in China-specific or social science literature. All these approaches claim to provide explanations for (Chinese) networks. Yet they differ with respect to the phenomena that they want to explain, namely networks and/or the explanatory factors they regard as crucial. Thus, for example cultural and economic, better: Transaction cost economics (TCE) approaches focus on networks as a given organizational form, while evolutionary economics or the capability approach in management science include a further dimension, namely time, subsequently regarding network as an activity that might lead to different network forms. The approaches differ also widely according to the factors singled out or isolated – or isolated -which are claimed to be the crucial items in any explanation for networks. As will be shown the two competing models in which networks are either based on co-ethnic groups or on expected functional value are not necessarily mutually exclusive.

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| Free keywords | Cross cultural studies; Chinese business behavior; networks, social capital |
Networks in cultural, economic, and evolutionary perspective

Barbara Krug
Rotterdam School of Management
Erasmus University
Rotterdam, The Netherlands

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Depending on the kind of literature networks in general, and Chinese networks in particular seem to be different phenomena, or are explained by different factors leaving the interested public puzzled. Whether Chinese networks resemble Clans, Clubs, or Mafia-kind of organizations is as much disputed as the effects of networking on the economy. While some argue that networks contribute to overall factor productivity in a situation in which neither the old planning system nor the nascent markets function (Krug/Polos 2003, Qian), others insist (Cheung, Shleifer) on their counterproductive potential for the transformation of the Chinese economy. A third group dismisses networks as a transitory phenomena that will disappear with ongoing market reforms, in particular the wider use of the price mechanism for allocating resources and co-ordinating economic activities. The following attempts to shed some light into the confusing argumentation by grouping the different approaches according to what is explained (the explananda) and the explaining items (the explanantia). The theories introduced are usually classified as taking a cultural, economic, and evolutionary perspective and can be found in China-specific or social science literature. They all claim to provide explanations for (Chinese) networks. Yet they differ with respect to the phenomena that they want to explain, namely networks and/or the explanatory factors they regard as crucial. Thus, for example cultural and economic, better: Transaction cost economics (TCE) approaches focus on networks as a given organizational form, while evolutionary economics or the capability approach in management science (Teece) include a further dimension, namely time, and attempt to explain the process of network development.

The approaches differ also widely according to the factors singled out – or isolated - which are claimed to be the crucial items in any explanation for networks. To better see the contested aspects in these three perspectives, the following distinction is useful. First, the question needs to be raised whether the variables quoted in each approach are sufficient for explaining, or whether further variables need to be included for getting a satisfying explanation. In this case the explanatory power of the original set of variables is not questioned. One example would be the claim that familial ties, i.e. the Chinese family or family-based villages, can explain the emergence and functioning of networks. Related literature would not doubt the importance of the family, or extended family for
the formation of networks, yet would point out that the family is only one factor, and that in order to get a complete picture, other social groups such as classmates, comrades, i.e. members of the CCP need to be included.

Second, the question arises whether the isolated factors are necessary for explaining networks. In this case the explanatory power of the variables is questioned. As will be seen presently, the Williamson-type of TCE which explains networks by the attempt of rational economic actors to economise on TC, disputes that sociodemographic factors such as the family, the village, or school are of any value when it comes to explaining networks.

The different dimensions of the debate can be sketched as follows

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<th>Tab. 1 Criticism in the academic discourse on networks</th>
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Source: Maeki 2003
A negative response to all 4 questions (1) – (4) prompts a theoretical change. A “no” to (1) and (2) asks for including some factors that had been excluded (or were not seen) previously. A “no” to (3) and (4) asks for replacement of the isolated factors. The different answers to these four questions constitute the crucial element in the academic debate on networks in China. As will be seen in what follows, the management studies literature, China Studies, and evolutionary economics see question (1) and (2) as the prominent ones. The suggestion is therefore to de-isolate the originally chosen factor by supplementing them with other factors. The Williamson-type TCE, and partly Granovetter’s Embeddedness approach on the other hand will demand a radical move and total replacement of the explanatory variables.

**The Cultural Perspective**

The cultural perspective is usually linked to Cultural studies, Cross-cultural studies or to literature in China Studies. The following will however also include that part of the literature in management studies which claims that networks in China reflect cultural preferences. While in most of the management literature the content of cultural preferences remains rather vague, precluding the identifying those factors which will determine networks, Hofstede’s (1991) analysis is based on empirical research and deserves attention, none the least as he is the most quoted author in this field. In his analysis networks emerge as a result of behavioural codes which are based on norms and rules, in particular co-called “Confucianist” values (Hofstede 1991, see also Redding 1990). Compliance rests on the individual often unscrutinised willingness to follow these rules and codes. The approaches have isolated the following dimensions, i.e. variables, that shape individual behaviour, more precisely business behaviour, in China:
(1) The dimension of collectivism. This refers to fact that Chinese identify with small groups for which they feel affinity, or: familial ties, rather than identifying with individual choice and individual achievement.

(2) The dimension of long-term orientation. This refers to the fact that the Chinese society, or any small group therein, encourages and rewards future-oriented behaviour in planning, investment and delaying gratification.

(3) The dimensions of performance-orientation. This refers to the fact that Chinese culture encourages and rewards groups or group members for performance and excellence.

(4) The dimension of power distance. This is referring to the fact, that Chinese acknowledge inequality in status and power to the effect that they prefer individuals rather than institutions to co-ordinate and supervise action.

(5) The dimension of reciprocity. While reciprocity in the Western literature refers to exchange, i.e. a favour given for a return in the foreseeable future, reciprocity in this case determines both the start of personal relations, and the co-ordination mechanism employed within groups. Gift-giving at the beginning indicates that the boundaries between two people have broken down, familial ties (family-like) ties are established so that rule compliance becomes a matter of identification and moral obligation (Jacobs, Belschak and Krug 2003, Hwang 1987, Yang 1994, 2002).

In short, the collectivist nature of the Chinese prompts them to establish groups, i.e. networks, which are not expected to render quick monetary or non-monetary returns while individual achievement will be measured in terms of contributing to the status, size, and performance of the whole group.\(^3\)

The problem with this approach is that it cannot explain the emergence of networks without falling back on another set of factors, namely social groups which by their nature can command loyalty. The family figures prominently in one stream of the China-specific management literature and China Studies while other groups, such as groups of people having been to school together, or having served together in the army, are assumed to
function as “As-if” families\textsuperscript{4}. What these approaches have in common is the assumption of “natural group formation” in Chinese culture. Empirical studies in Hong Kong, Taiwan, but also among Overseas Chinese seem to support the assumption when they show that, indeed, the family and the three cultural dimensions explain the emergence of firms and networks\textsuperscript{5} (Biggert and Hamilton 1988, Trevor Lacy 1996). This result is not surprising if one knows that the analysis relied on data sets from these countries. In other words, the selection of what is to be explained predetermines the selection of factors that are assumed to be crucial for the explanation.

The cultural perspective faces the criticism of offering an insufficient set of variables only. This on conceptual and empirical grounds.

1. If networks were based on certain features that delineate a social group, then networks size and member composition would be fixed. The group constitutes the pool of potential business partners. In the language of the modern management literature: the underlying social group would impose an effective resource constraint on networking (Tsang 1998; Pistrui et al. 2001; Luo and Chen 1996). What we observe, however, is that networks grow out of their original group and change membership characteristics.

2. If networks were based on “natural” groups and behavioural codes demanding identification with and loyalty to the networks, then entry to and exit from networks would not be a matter of individual choice (Guthrie 1988). The changes in size, membership characteristics, or network characteristics do not support this assumption. For example, our interviews in Zhejiang showed that entrepreneurs and managers could be simultaneously member of different networks without being exposed to different claims to their loyalty (Krug/Hendrischke 2002b INSEAD). In clear contrast to Western style business clubs, let alone a Caste-system as in India, exit costs are low in China. On the other hand entry-costs are high when entry is depending on the introduction by a middleman. If there would be an automatism by which a member of a social group becomes a member of a network then entry costs would be nil, while exit costs would be considerable.

It
is worth noticing that the low exit costs is one of the features that distinguishes Chinese networks from a Mafia-organisation where exit often enough has to be seen literally (Gambetta 1993, Shleifer 1993).

3. The three Hofstede Dimensions are latent behavioural codes, that need to be activated if they determine action. What we observe however, is that that the Chinese do not behave according to these codes all the time and in all situations. The mobilisation of the codes seems to be rather context-depending. This asks for a supplementary theory that can single out structural elements, incentives or governance structures that mobilise such a rule-complying behaviour. What is also needed is to search for the alternatives that make Chinese acting the way they do. The context-dependency of norm-compliance is on one side on the general research agenda of social psychologists (McClelland 1985), while our research looks into the empirical side, however trying to make use of insights from the social psychology as will be summarised in the last section.

These three points emphasize the fact that the family or familial ties despite being crucial factors for explaining networks are not the only ones. Even within the literature that takes cultural perspective, new factors enter the model. These modified models give a contrasting view of networks in so far as networks are now seen as the outcome of individual and collective choice. The difference can be briefly summarised as follows:
Table 2: Comparison of the two *guanxi* models

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<th>Model of extended family ties</th>
<th>Model of particular instrumental ties</th>
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<td>Relational orientation</td>
<td>Sentimental ties</td>
<td>Instrumental ties</td>
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<tr>
<td>Relational base</td>
<td>Pseudo-family</td>
<td>Any group but mostly one of people sharing a “past”.</td>
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<td>Source of guanxi capital</td>
<td>Closeness and sentiments</td>
<td>Mutual trust and loyalty</td>
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<tr>
<td>Social mechanism</td>
<td>Fulfilling moral and obligations</td>
<td>Adhering to reciprocity norms</td>
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Source: Jacobs, Belschak, Krug 2003

In the familial-ties model networks are the result of group formation according to cultural characteristics. The claimed identity between a family and a firm explains the traditional Chinese family business, can however not contribute to explaining networks that function as business communities, if not Marshall’s industrial districts. For explaining these forms the model of particular instrumental ties shows better results as none the least the empirical studies of Overseas Chinese firms have shown (Lever-Tracy 1996). It is worth mentioning that our research revealed that in the last five years the family business became marginalized form, dominating retail, small scale production of goods with low technology content and hampered by a severe resource constraint with respect to capital, managerial competence and internal labour pool (Hendrischke 2002.). The interviews
also showed that Chinese entrepreneurs make use of both “models”, i.e. network forms according to the economic problem at hand (Jacobs, Krug, Belschak 2003).

**The Transaction Cost perspective**

The description starts with the Williamson model. The criticism and suggested modification will be summarized afterwards.

The TCE claims that the attributes of economic transactions determine the governance structure of collective actors such as firms or networks, or, as a matter of fact, any organisation. Organisation can be distinguished by different private property rights allocation and different governance structures; they emerge as the result of the different attributes of transactions and the need to economize transaction costs (TC). To quote Williamson:

“The underlying viewpoint that informs the comparative study of issues of economic organization is this: Transaction costs are economized by assigning transactions (which differ in their attributes) to governance structures (the adaptive capacities and associated costs of which differ) in a discriminating way”. (1985, 18)

While the cultural perspective often uses a typology of social groups that constitute familial ties, Williamson also introduces a typology which in his case describes different governance structures, such as hierarchy, market, public regulation, public bureaus, and hybrids. In his analysis networks would function as a hybrid between market and hierarchy (Williamson 1998).

While in the neoclassical world where TC are zero, resources are allocated by the price mechanism in (functioning) markets, in the Williamson world, where TC are positive, resource allocation depends on the private property rights structure and the prevailing
governance structure. The governance structure in turn reflects the need of economic agents to cope with bounded rationality and restrict opportunistic behaviour of individual agents. The last point is frequently misunderstood. Opportunism in the Williamson world refers to strategic behaviour by which economic agents secure their self-interest and shows the form of information distortion or “self-disbelieved” promises (Williamson 1975, 26, 255).

Aside from these behavioural assumptions, the following features of transaction determine which governance structure is chosen: asset-specificity, uncertainty, and frequency of contacts. All in all, which governance structure is chosen depends on the difference in adaptability and differences in TC-structure. By adaptive capability it is meant how quickly resources and assets can be moved to another employment, while the associated costs refer to the necessary adjustment of asset transfer and operating costs (Williamson 1985, 18).

The problem with the Williamson approach is that the alternative governance structures are given. To proclaim that there are hybrids, such as networks, that lie somewhere in between market co-ordination and hierarchy, leave the phenomenon that one wants to explain vague. In order to check whether the factors identified by Williamson are sufficient (or necessary) for explaining networks, one needs to be more specific what networks are and how they function. This challenge was taken up in the management science literature, in sociology, social psychology and New Institutional Economics. Their critique will be summarised presently.

First however a short description how TCE would explain networks in China (Krug 2002; Krugand Mehta 2003, Qian 2001). It is worth repeating that TCE offers an ex post analysis that might claim that networks in China were chosen and became a major economic actor because they allow (Krug and Polos 2003)

(1) individual actors pooling resources, such as capital, not (yet) transferable assets, individual competence and by doing so enlarge the resource base for (new) firms;
(2) allocating resources quickly, thus more flexibly responding to changes in demand, supply, relative prices or new business opportunities when compared to the hierarchical structure on the socialist planning system;

(3) allocating resource at lower costs when compared to the “nascent” market environment they find themselves in, in particular as with the ill-functioning capital market a market for allocating risk is still missing.

(4) establishing partnership, generating routines, and business practices, such as contracting, by defining defaults, monitoring individual behaviour and sanctioning misdemeanour.

In TCE economic partners are indifferent to the nature of potential business partners while meticulously scrutinising business opportunities, contract compliance, and opportunity costs. This is in sharp contrast to the cultural perspective where the potential business partner is carefully checked before s/he becomes a member of a network while the nature of business deals is less scrutinised. TCE goes far beyond the criticism of the cultural perspective heard so far. Socio-demographic factors, such as social groups or behavioural codes are regarded as not being necessary for explaining networks. In other words, the explanation of networks should be left to economist and some sociologists. The criticism falls into the category (3) and (4) in Table 1. Authors having subscribed to the cultural perspective, but also Granovetter (1985), stress the missing variables in the Williamson concept which can explain neither the emergence of networks nor the systematic features in membership composition.

The Williamson concept unleashed new research agendas in the fields of organisation theory, New Institutional Economics, strategic management, sociology and social psychology, which in turn point to the insufficiencies of TCE.

*Enlarging the set of explanatory variables: The critique on TCE*

Although TCE admits that transaction cost considerations are not the only factors for explaining the organisational choice, other factors such as the “quest for monopoly gains
and the imperatives of technology” are assumed to have an impact on “market shares and the absolute size of specific technological units…” (Williamson 1981, p. 1537) only. The criticism here is that his definition of the phenomena to be explained precludes a broader frame of analysis. It is not hard to see, that in the case of networks which according to TCE are mainly TC-saving devices, the quest for monopoly gains or technical constraints were also dismissed.

And yet, as most research not only on China, but also on other transition economies, in particular Russian, have shown, networks are established in order to secure (local) monopolies. Our fieldwork for example shows that the attempt to control local monopolies is crucial for the evolving private property rights structure, when in order to secure a monopoly an alliance between private interests, i.e. investors and managers, and public bureaus is needed (Krug and Hendrischke 2002a; for Russia see Shleifer 1993).

The major criticism on TCE however centres on the justified claim, that TCE lacks a “…theorizing of the causal mechanism in support for its functional argument” (Dow 1987, pp. 27-33). The claim that certain governance structures prevail due to the TC-advantage they offer, can neither explain the emergence of other or new organisational forms, such as for example the Chinese networks, nor changes in organisational form undertaken by the economic actors themselves. In short, the criticism asks for the supplementation of other factors as explanatory variables, and, as will be seen presently, for a broader definition of what is to be explained.

In the case that interests here, namely networks, the following aspects deserve attention.

1. **The Omission of technology**
   To dismiss technology as a major explanatory factor for the chosen organisational form was at the core of a major debate that started in the 80s already between TCE, traditional organisation theory (Chandler), evolutionary economics (North 1984, 1994; Jones 1982, 1983) and Williamson (1983a, 1983b). As empirical studies based on findings of organisation theory, but also the theory on outsourcing, mergers and
acquisition proved, vertical integration reflects technical interdependencies and their changes rather than TC-consideration (Englander 1988). Our interviews for example also show that despite the reluctance of networks to embark on long commitments such as vertical integration implies, they do invest (in mainly upstream firms) on technological grounds. The justification offered that TCEs takes the technical level as given, means to make use of the only too familiar ceteris paribus condition and limits the explanatory power of the theoretical set up as it precludes to analyse changes in organisational forms, or in our case, network development (for another view see Podolny, J.M., Stuart T.E. and Hannan MT. 1996).

2. The Omission of power and authority

In this case the critique, most explicitly by Dow 1987, concentrates on two aspects, namely the implicit assumption that specific organisations are neutral with respect to the interest of their economic actors, and second that a hierarchical structure, i.e. authority, economizes TC by restraining opportunism of subordinate units or employees. To start with the former. As the management science and economic literature on trust on trust, alliance but also on business communities has shown (Nooteboom 1996, 1997) the interests of all actors do matter, as does the strategic behaviour of individual members in the production coalition, might this production coalition be a firm, a public bureau or a network. TCE focuses on total TC-advantages while the sharing rules, how the gains from establishing TC-saving governance structures are distributed within a network are assumed to play no role.

The development of networks in China point to another picture. It is at this point where insights from the cultural perspective re-enter the research agenda. As was shown elsewhere (Krug and Mehta 2003, Goodman2003, Duckett 2003) networks that are based on an alliance between private investors, or managers on the one side, and local government or state bureaus on the other side, take another organisational form that networks that link private interests only.
That the analysis of hierarchical relations focuses only on the consequences for the opportunism of employees or subordinate units is certainly a major deficit of the model. As the literature in New Institutional Economics, political science and sociology have shown, hierarchy generates a structural condition under which opportunism of employers or any head of an organisation is actually encouraged. Hierarchy allows those in power using internal information for their benefit, imposing self-serving incentive scheme and using fiat to settle disputes to their own advantage (Krug and Hendrischke 2002a).

It is worth mentioning that it is this kind of opportunism, namely opportunism at the top that links the analysis of networks to the analysis of corruption (for Russia see Shleifer 1993). The contribution of approaches with a cultural perspective can contribute by describing the different forms corruption can take, for example when it is pointed out that in Imperial China “squeeze” operated “through forms of politeness rather than secrecy”. (Fairbank/Goldman 1998, p. 182) however without an analysis of the set up of economic and political institutions, these description must fail to give conclusive explanations.

The debate in economics whether networks contribute to Chinese economic development and economic transformation by offering less costly alternatives for allocating resources and co-ordinating activities, or whether networks hamper economic development when they hinder a quick expansion of markets (use of the price mechanism) is essentially also a debate around “Opportunism at the top”, as market – restricting legislation and state interference are negotiated in the political arena (Krug and Hendrischke 2002a). The TCE cannot contribute to this debate, while once more insights form a cultural perspective re-enter the research agenda.

(3) The Omission of social relations
TCE is a striking example for what Granovetter calls the *undersocialized* concept of human action. The TCE-world neglects identity and past relations (Granovetter 1985, p. 491). The debate it too well known to be repeated here. What matters in the context of Chinese networks is the claim of the “Embeddedness approach” that personal relations and relations between and within firms constitute the primary explanatory items when organisational forms are chosen. It is also stated that the level of opportunism in and around firms or networks is less the outcome of the governance structure than the outcome of personal relations and networks of relations in and around organisations.

In other words, in the embeddedness approach networks do not appear as one amongst other organisational forms or governance structures. Instead networks are seen as prime movers when it comes to explain other organisational forms, and organisational activities. Thus, for example, the analysis argues that stable networks may mediate complex transaction, permitting a governance structure of loosely connected subordinate units or autonomous firms, co-ordinated by lean management, while lack of personal relations or networks that cannot effective control opportunism will force the organisation to establish a hierarchical governance structure.

In short the embeddedness approach joins the cultural approaches by emphasizing the role of network in the development of a business system while in contrast to these approaches transaction cost advantages are not dismissed.

(4) *The omission of competence and capabilities.*

A firm following the neoclassical paradigm where allocative efficiency depends on full employment of all resources would hardly survive in the long run. Productive slack is needed for innovation, knowledge creation, experimentation, in short: for the building up of learning capabilities. The so-called Competence approach (Teece and Pisano 1994, see also Hodgson 1998 and Langlois 1992; Langlois and Foss 1999) therefore criticises TCE for its failure to contribute to a dynamic view by leaving out factors such as
organizational learning and the acquisition of capabilities. A concept of dynamic governance costs needs to be developed that attempts to include the costs for generating competence as well as transferring capabilities to others if by doing so individual performance can be increased (Winter 1991). As is further argued a great part of the generation of capabilities depends on the ability to co-operate, share knowledge, and creative routines available to all business partners at low costs. In other words, networks are a systematic response to the need to maintain competence and capabilities. In the long run, the costs for transferring capabilities by networking will be more decisive for the level of integrated or loosely connected firms than simple asset-specificity (Langlois 1992, 124).

In short, the costs for generating, storing, retrieving, and transferring capabilities determine when compared to market exchange determine the emergence and size of networks, which then ultimately shape the business sector. Once more the criticism centres on the insufficiency of variables included in all other models. Some of the considerations of the competence approach were used in the model that forms the base of the empirical research in China.

**The evolutionary perspective**

At first sight, evolutionary economics of the Nelson (1995, 1996) or North (1984, 1994) version with its focus on selection and changes in relative prices does not seem to be able to contribute to the debate on networks. These approaches would claim that the selection process driven by (market) competition ultimately determines whether networks will survive as a major economic agent in the future Chinese economic system. Such a suggestion is open to the functionalist fallacy. When it is claimed that networks must offer functional value, otherwise they will disappear, then survivability becomes a proxy for functional value. Both features cannot be measured independently.

*Organisational ecology* (Carroll and Hannan 2000, Hannan and Freeman. 1989) starts from another evolutionary perspective when it asks which organisations, such as firms,
trade unions, or networks, will survive in the long run. There are two prevailing lines of reasoning. Neo-classical economics, at least implicitly, assume that old, large firms due to their resource advantage, experience, and their ability to define standards and thereby limit entry, keep young firms at the periphery of the market centre to the effect that a firm’s mortality rates drops with increasing age. “The older you are the older you become”. Transferring this result to the organisational form that comes closest to firms, namely networks, the reasoning would suggest that with increasing age networks will occupy the market and political centre, limit entry to newcomers which are kept at the periphery (as for example Olson has shown…). Undoubtedly CCP-membership offered a safe platform for networking when as it was the case during the Cultural Revolution they emerged as a device to secure survival in an environment of social collapse (Yang 1989).

Unsurprisingly one line of argument claims that to the extent that the CCP can co-opt new entrepreneurs or entrepreneurial networks, the old organisational form of the Party will survive, while new business networks will be kept at the periphery. This after all is also the present official Party line. The contesting view is the Schumpeterian “creative destruction” (schoepferische Zerstoerung). According to this view old, and large organisations due to ossification loose their ability to flexibly respond to changes in the environment. Therefore, over the years they get outperformed by new and young organisations which eventually will control the market centre and an increasing share of resources.

By replacing networks for firms, the China specific interpretation reads as follows. The Party is to ossified to respond to changes in the political and economic environment. Networks which emerged in big numbers after the reforms started, rapidly moved into the market centre and starting in the early nineties when shareholding companies encouraged public/private partnerships into the (local) political centre. By negotiating transfer of assets from the state to the private sector these networks increased their resource base considerably, while driving state sector and party controlled economic activities toward the periphery. In this case, the “withering away” of the Party-State is the result if
different forms of networks with different incentives and capabilities for innovation, experimentation, and flexibility.

The next step in taking an evolutionary perspective for modelling networks is then to look for features and regularities that are sufficient for predicting change and survivability. The literature centres around four assumptions (Stuart, Hoang, and Hybels 1999; Stinchcombe 1965; Aldrich 1979; Barron, West, and Hannan 1994): liability of newness, liability of smallness, liability of intense competition in the market centre, and liability of legitimation. These four assumptions were acknowledged in the design for the fieldwork in the last five years. Based on the small data set, a preliminary interpretation would look as follows.

At first sight, it looks as if big, state firms in China will dominate the economic sector irrespective of ownership due to their broader resource base, and the fact that a broad range of input is still state controlled, while the new private firms will be kept at the periphery irrespective of economic legislation. And indeed, the confiscation risk, the liability of success, and non-tradability of input generates a size distribution similar to the one found in Western capitalist economies: the proliferation of numerous small and few large (surviving, state owned) organizations with middle scale firms squeezed out, or in the Chinese case not emerging. The question, is however whether the large state firms will occupy the market centre in the future as in the West.

Our model points to another scenario if ownership and uncertainty is taken into account. Uncertainty, often enough accompanied by markets where due to excess demand, almost everything sells, makes it empirically hard to define what a market centre is. Even without sophisticated tools that help to isolate and define a market centre, firms in China are aware the “market moves”. Thus, for example, consumers demand higher quality of products, or demand products so far not available in the domestic market, while on the other hand, fashion is allowed to play a role. Unlike new private firms, which know that their survival depends on producing good for which there is positive demand, state firms
facing no competition, have neither the management tools nor the incentive to adjust to such an environmental drift\textsuperscript{7}.

On the other hand, private firms have an incentive to remain small as the following considerations show. As long as diversification and investment in other sectors or regions (by establishing independent new and small companies) is one way to escape over-taxation or indirect confiscation of profits and cash flow even successful firms have an incentive to remain small forgoing scale and scope economies around a core business. To invest in other lines of production or other jurisdictions is to be seen as a response that actually exploits the institutional weakness, one that attempts to spread resources across different unrelated businesses so that each remains smaller than the threshold at which political action can be expected. This tactic explains the rapid growth of relatively small companies in the Chinese private business sector. It is worth emphasizing that this feature distinguishes Chinese entrepreneurship from European transition economies where large foreign or domestic firms set the pace. The large number of (relatively) small companies seems to reflect the necessity to safeguard profit and capital accumulation of existing firms and preceding entrepreneurship rather than a greater pool of potential entrepreneurs as often is argued in cultural explanations.

In other words in contrast to the findings for market economies and what is predicted or feared by other approaches we predict the following: Due to uncertainty and (state) ownership large firms will be driven to the still (resource rich) periphery while the market centre will be occupied by numerous small firm which co-ordinate their action, generate capabilities, and establish business practices via networks.

Based on these findings, our empirical research suggest the following support for the different approaches:

With respect of what is to be explained: networks can be both substitutes for firms or other organisations or a specific organisational form the pre-dates firms and acts as collective entrepreneur before firms get started. The kind of collective entrepreneurship
that we found in the life history of firms clearly points to personal relations and group formation outside the range of (economic) reasoning. This does not mean that these groups are not expected to “perform”, it rather stands for the common sense notion that economic agents start doing business with people whom they know. And it stands for a willingness to co-operate and look for partners. In other words traditional social groups offer a kind of scaffolding for the start-up of partnerships and networks. As our empirical research indicates, these partnerships become crucial economic agents when membership is no longer restricted to individuals but includes firms. What makes the networks behind firms so powerful is their function as platform for organisational learning, their control over productive slack, their willingness to invest in experiments in production and organisational forms, and their ability to define new standards for “doing business”. A dynamic analysis would certainly contribute to our understanding of networks, although the TCE remains a powerful tool in the short run. Finally, an probably most surprising, the Embeddedness Argument by Granovetter, or the Cultural Persistence-hypothesis by di Maggio and Powell (DiMaggio and Powell 1983, Powell 1991)) get support by the approaches of evolutionary ecology and our field study. One function of networks is to render legitimation to new firms and/or new sectors, and new business practices. As long as networks concentrate around a geographical base rather than a professional core, we would then expect different standards for business relations to emerge, as well as (other things equal) investment in different sectors reflecting different “cultural preferences”. Once more culture offers the starting point, if culturally chosen institutions or sectors should not offer sufficient returns, then they will be given up. In short, as comparative business system and New Institutional Economics literature have shown, networks “represent enactments of socially acceptable, institutionalised forms of economic behavior – they are manifestations of a normative structure that underlies economic activity and provides market order” (Orru, Biggart Hamilton 1991, 387).
Conclusion

As described previously the debate on networks can be organised by the following claims, that

1. Factors isolated in one approach are unnecessary or fruitless for explaining networks;
2. Factors isolated in one approach though valid, are insufficient for explaining networks;
3. The chosen form of networks is too narrowly defined a subset of the phenomenon that needs to be explained.

The claim that one approach uses unnecessary factors is limited to the early TCE, which would discard cultural factors in the explanation of networks. Organisational ecology, but also Teece, on the other hand insist that networks will change over time so that the relevant subset should includes today’s networks and networks at a future date. Subsequently, processes and the dynamic of change need to be included in the analysis. Evolutionary economics argues that cultural approaches insisting on long term stability of values and institutions such as guanxi networks must run into conceptual and empirical problems. If as it is the case networks change over time then any attempt to explain short-term changes with long term stable factors is futile.

Both approaches, organisational ecology and Teece, criticise the TCE’s comparative static analysis in which changes in the environment leads to changes in the governance structures as pre-defined in the Williamson typology. Thus, for example, networks might give way to a more conventional M-shaped type of firm, or a holding company. For this reason networks in TCE remain unexplained. They are rather regarded, if not predicted, as transitory phenomena or hybrids only\textsuperscript{8}.

The most dominant form of criticism however is the claim that other approaches need to be de-isolated and supplemented with other factors. The social sciences and modern
economics (experimental economics and modern HRM) would join cultural studies and criticise TVE or traditional economics for not including social preferences.

**Tab. 3 Areas of dispute in the academic discourse on networks**

<table>
<thead>
<tr>
<th></th>
<th>N0: Network (t=0)</th>
<th>N1: Network (t+1)</th>
<th>New variables and approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficiency of variables</td>
<td>Cultural factors</td>
<td>Adaptation vs.</td>
<td>Social preferences,</td>
</tr>
<tr>
<td></td>
<td>plus economic</td>
<td>selection,</td>
<td>dynamic analysis</td>
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<tr>
<td></td>
<td>rationale</td>
<td>Capabilities</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Necessity of variables for</td>
<td>Causal link needs</td>
<td>Process rather</td>
<td>Social psychology,</td>
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<tr>
<td>explaining N</td>
<td>to be established</td>
<td>than choice and</td>
<td>Experimental economics</td>
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<td></td>
<td></td>
<td>response to given</td>
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<td></td>
<td></td>
<td>relative prices</td>
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</tr>
</tbody>
</table>

It is not hard to see that the notion of social preferences links the literature on guanxi or networks to the literature on social capital, cultural capital, trust, norms, or organisational forms. For this reason it is worthwhile to finish the paper with a short summary how to bridge the dichotomy between cultural explanations and functional explanations.

Social preferences stand for the fact that agents do not only care for the material resources allocated to the but also for the material resources allocated to others. While economics in the past assumed income (utility-) maximisation as sole motivation, social preferences add three other motivations that shape behaviour: reciprocity, social approval, and the intrinsic motivation to fulfil a specific task well. Both, reciprocity and
social approval are directly linked to network organisations and offer analytical insights that cultural studies could exploit for a wider ranging analysis.

For example, the difference between reciprocity, guanxi or moral obligation was already described above (Tab. 2). The difference between reciprocity and co-operation as used in economics is the following. Economics assumes that actors form networks when and if they expect a co-operation rent high enough to cover the costs for co-operating. In other words, co-operation depends on expected outcome. In the reciprocity world, on the other hand, intention matters. Agents co-operate, better reciprocate when and if a “principal”, such as a network displays so-called kind intent. Whether a network is perceived as being of kind or hostile intent depends on consequences and the fairness of intent, the latter of which referring to the distribution of pay-offs. Experiments have shown that between 40 and 60 per cent of economic agents consistently respond positively to reciprocity, the rest is either behaving selfish or opportunistically. What is not yet done is a systematic analysis whether cultural differences in the solid stock of individuals willing to reciprocate can be found. Thus, for example, Chinese might use different benchmarks when they judge a network as being of “kind intent”, or whether, indeed, the Chinese example supports the 40—60 per cent found in other studies.

The link between social approval and cultural studies is the Chinese notion of face while the link to economics is the public goods problem. Social approval in this analysis does not prompt altruism, but rather conditional co-operation. In the case of networks, individual agents will contribute to the network effort provided all others do the same. In what is called management of belief networks need to convince their members of their effectivity and of their kind intent. This is so, as individual agents will react in a hostile way, if they perceive hostile intention of networks. In this setting, identity is crucial for employing social approval as motivator. Experiments have shown that the willingness to contribute to a joint effort increases significantly when members know each other “by face”. Networks offer an organisational form for meeting but no necessarily personally, and can therefore provide more public goods, or face less opportunistic behaviour in the production of public goods. Once more, systematic empirical research is needed to see
whether there are cultural differences between China and other countries, or within
China.

All in all the comparison of cultural studies, TCE and organisational ecology shows that
modern economics has moved into the direction of cultural studies acknowledging
cultural factors as fruitful explanatory variable. This is a move, which also reflects new
theories in sociology, social psychology, and organisation theory. The old (Weberian?)
paradigm that assumes cultural and economic analysis to be mutually exclusive seems to
have lost its persuasive power.

With respect to cultural studies and cross-cultural studies see Hofstede (1980, 1991, 1993); Javidan and House (2001); House et al. (1999) which developed the Hofstede instrumentarium further.


This process is well covered in numerours field studies. See for Example Zhang 2001, the different contribution in the book, edited by Oi and Walder,.....


A similar line of argument is followed by Boisot and Child where the governance structure is shifting from "Fief" to "Clan" (Boisot and Chuild 1996).

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