Inside Partnership
Trust, opportunism and cooperation in the European automobile industry

Erhard Friedberg & Jean-Philippe Neuville


In itself, interfirm cooperation and governance in the industrial sector is not a new phenomenon. As already classic studies on districts, quasi-integration and cooperation (Houssiaux 1957, Phillips 1960, Macauley 1963, Blois 1972, Richardson 1972, Becattini 1978) suggest, it is in fact a traditional, independent and stable form of coordination which can be seen as a permanent alternative to other forms, like market or hierarchy. The reason why it has attracted increased attention in a rapidly growing literature is therefore to be searched for elsewhere. First, in its quantitative and qualitative development (Contractor and Lorange 1988), and second, in its growing visibility which is linked to its deliberate use by management as a strategic and formalized device to structure, i. e. steer, relationships with suppliers, competitors and clients.

"Industrial partnership" is an example of these efforts to develop a new and formalized governance form for subcontracting. Based on the Japanese industrial model (Aoki 1988, Helper 1993, Sako 1992, Baudry 1995), it aims to go beyond the traditional "make" or "buy" alternative which firms face when developing a new product, in order to develop a lasting cooperative relationship of "making with" some specific selected subcontractors which become "partners" for the contracting firm.

As a new and lasting form of interfirm cooperation and because of its distinctive features which we will go into in more detail shortly, "industrial partnership", like any other form of cooperative action, is of course vulnerable to opportunistic behavior by any one of the "partners". It is therefore not amazing that the main focus of the growing literature on "industrial partnership" has been on the means used to cope with this risk.

Institutions for creating and guaranteeing information about potential partners, trust understood as a mechanism enabling one of the partners to subjectively reduce the risk of opportunistic behaviors by the other, contract and their incentive-structure and long term commitment seen to produce long-term benefits for everyone involved in the relation have been used as four functional equivalents for explaining the emergence of interfirm-cooperation through the reduction and control, if not the disappearance, of the risk of opportunism. The first does so by producing
reliable quality labels, the second by involving social mechanisms which are based on moral resources (norms, interpersonal relations and commitments, identity, experience), the third by providing instruments for coordination which rely on positive and negative monetary incentives (Tirole 1989), and the fourth by sharing a rational calculation in advance.

These explanations of interfirm cooperation, which are of course complementary, carry considerable new insights for our understanding of the structure of economic action. In particular, they have helped overcome overly cynical and utilitarian models whose focalisation on short-sighted opportunistic behavior made them not only blind for the phenomenon, but also unable to explain it. However, they also have their shortcomings.

The most important of these seems to us to lie in their purely synchronic perspective, which seems to overestimate the capacity of contractual arrangements and of the procedures which monitor their implementation, to block and control, if not completely eliminate opportunism. Industrial partnership is seen to found what Sabel has called a "constitutional order" where the problem has in fact disappeared because partners have agreed to monitor one another's behavior and to follow certain procedures for the re-evaluation of the situation in the light of the results of this monitoring. With a few notable exceptions (in particular, Nooteboom 1996), these analyses tell us little indeed about the process of cooperation, about what is going on inside industrial partnership, or how and to what extent opportunism is really checked on a day to day basis. They seem to consider that once the decision to cooperate has been taken and the institutional framework set up, problems will disappear.

Such a strictly game-theoretical conception of cooperation, which in fact reduces cooperation to a once and for all decision to prefer collective benefits to individual profits, seems to us to be too reductionist to come to grips with the behavioral and process dimensions which are inherent in all relations, be they conflictual or cooperative, may they link individual or collective actors. This is why we have tried to open up the black-box of interfirm cooperation in our research by putting greater emphasis on a process-perspective, where interfirm cooperation is defined as a **common coordinated action which brings into contact and interaction employees of two organizations linked by a long-term contract**. (Smith Ring and Van de Ven 1994, Nooteboom 1996, Neuville 1997a) and where therefore the interaction-processes by which «industrial partnership" is actually implemented, are the basic focus of analysis.

Such a perspective yields a more complex, diverse and surprising picture, where trust and opportunism do not exclude each other but co-exist, where in other words cooperation can and should be analyzed as a mix of bounded trust and bounded opportunism, where trust and time not only reduce opportunism, but can be understood also as incentives for (bounded) opportunism, and where, last but not least, the actual functioning of that mix not only directly conditions the evolution of interfirm cooperation but
also introduces strong biases into the procedures designed to monitor the "partners".

**Industrial partnership as an “agency relation”: the critical nature of qualitative uncertainty**

In the car industry, “partnership” is a pattern of interfirm cooperation based on one main exchange: economic resources (market/order shares) on the part of the buyers against something like a polymorphic product and/or service (design, development, production and delivery of components and/or units) on the part of the suppliers. As a specific form of interfirm-cooperation, it has four main characteristics.

First, interfirm relations and contractual commitments are located within a long-term contractual framework for cooperation. This situation differs from market with spot transactions (subcontracting) as well as from organization with hierarchic integration (Weberian bureaucracy). In industrial partnership, car-manufacturers are committed to cooperate with their chosen suppliers during several years; however, the possibility to break the contractual link remains. Such a pattern of organized action, which mixes the stability of hierarchy with the threat of a potential return to the market, theoretically allows both of them to benefit from an inter-organizational learning process (Aoki 1988, Asanuma 1989), without suffering from bureaucratic dysfunction (Merton 1952, Gouldner 1954, Crozier 1964) and from free-riding (Olson 1965).

The second distinctive feature of industrial partnership is the nature of the “product”: the principal's economic decision concerns a complex, expensive and potential process. Complex because a car-manufacturer buys not only a set of specific skills covering a broad range of activities from design to mass-production and delivery of a component, but also a process, i.e. the way these skills are organized. Expensive in as much as it involves the creation of specific assets over a longer period of time. Potential because at the time the buyer signs the contract, the product has yet to be produced: like the market for rubber (Siamwalla 1978, Popkin 1981) or for used cars (Akerlof 1970), asymmetric information between partners creates a situation in which the quality of “product” cannot be determined at the time of sale but months later. These are the reasons why the investment decision depends on the perceived quality of the firms instead of the product. In other words, and on a more general level, industrial partnership switches exchange from markets of products to markets of organizations (Favereau 1989): not products compete, but organizations and their reputations.

Third, the just-in-time co-production system increases interfirm interdependence. All the basic principles of the Japanese production model (Monden 1983, Ohno 1988) tend to make the production system more complex and vulnerable to failure or partial disturbances. On the one hand,
we have a wide range of different components (economy of variety) and a fractionating of delivery-lots which goes hand in hand with the growing sophistication of logistics and delivery-systems. On the other hand, inventories have been reduced to the strict minimum and therefore cannot be called upon to compensate for temporary shortages: in such a system, any failure by the supplier, or any disturbance in the delivery-system has dramatic repercussions on the car-manufacturer who very quickly will have to stop production.

Fourth, because of their long-term commitments towards their suppliers, car-producers have an interest in accepting considerable investments in training, in financial support and in technological as well as organizational development in order to increase the performance of the cooperation. These investments in turn produce specific outputs such as intra- and inter-organizational learning (Aoki 1988, Asanuma 1989) or collective know-how and skills for cooperation. In short, it generates what can be called a relational rent and, linked to it, a common interest in the relationship. As a consequence, breaking the cooperation becomes particularly expensive. This explains why partnership is a contractual relation where under normal conditions “voice” will prevail over “exit” (Hirschman 1970, Helper 1993), or, in other words, where partners prefer informal negotiations to legal conflicts. Although the discontinuation of a “partnership” is never completely excluded, supplier firms do benefit from a larger room for manoeuvre than would be the case in a traditional subcontracting relationship: the cost of the decision to change partners is too high to be taken lightly by the car-manufacturer.

All this, of course, should not have us forget that behind the common interest which is produced by, and at the same cements, interfirm cooperation, individual divergent interests do persist. Despite words like “partnership”, “partners” and “cooperation”, and within the limits they impose, each actor has own individual interests to pursue: car-manufacturers seek to get the lowest possible prices for supplier-services, while suppliers of course seek to increase earnings through either higher prices or bigger orders.

Putting all this together, one can easily see that for the car-manufacturer, partnership as a special kind of interfirm purchasing agreement is a risky cooperation form which resembles very much an intra-firm labor contract: on the basis of contractual commitments (purchasing agreement = labor-contract), a car-manufacturer establishes a binding relationship with a set of specific skills (supplier=worker), and pays for it with a share in the overall purchase (market shares = salary) according to the quality of the supplier’s performance (i.e., the respect of the terms of the contract = minimal work requirements). Like any such pattern of cooperation, partnership therefore fits perfectly the principal-agent model (Pratt and Zeckhauser 1985). On the one hand, we face a status asymmetry between the two “partners”: one chooses (the principal - car manufacturer) whereas the other is chosen (the supplier - agent). On the other hand, the principal (like the employer) faces a double qualitative uncertainty relating to the
potential (adverse selection) and effective (moral hazard) quality of the supplier. Indeed, all of the characteristics of “partnership” in the car industry emphasize the extreme imbalance between the two “partners” as well as express and illustrate the critical nature of this qualitative uncertainty. No wonder, then that car-manufacturers have gone out of their way in developing rational tools in view of reducing it.

**Controlling quality through contract and evaluation**

A first reduction of that uncertainty is of course the contract between the partners. But signing a contract implies having selected partners, i.e. having faced and tried to control the risk of adverse selection. And having to sign an irreducibly incomplete contract means facing and having to control the risk of moral hazard on the part of the selected suppliers. Contracts, therefore, are only a small part of the solution. They have to be complemented by the assessment of suppliers, both before and after the signing of the contract.

The function of the *ex ante* evaluation is to control the risk of adverse selection of suppliers by trying to assess their respective quality-potential, i.e. their capability of keeping up with their contractual commitments. This evaluation relies first of all on a set of exogenous institutional information bearing on the trustworthiness of the potential suppliers: quality-insurance, quality-awards, certification, ISO 9000, standards, labels and total quality management are generally considered to be institutional trust-signals which reduce qualitative uncertainty and have been introduced and analyzed as such in the literature (Zucker 1986, Eymard-Duvernay 1989, Baudry 1994, Benezech 1996). Being able to provide these trust-signals, however is a necessary, but not a sufficient condition for a supplier to be selected. All car-manufacturers will add to them direct assessments made by their own Purchasing Departments, through what could generically be called “qualification procedures”. These procedures always amount to sending a body of auditors to inspect the prospective suppliers' production sites in order to try and assess their structural capacity (industrial process, logistics, personnel training, financial health, quality of the management, R & D potential, ...) to satisfy the car-manufacturer's qualitative and quantitative demands.

The *ex post*- evaluation is meant to control the risk of moral hazard on the part of the selected suppliers. It bears on the effective quality of the components delivered, i.e. the suppliers' conformity with contractual commitments. This evaluation is actually and to some extent exclusively in the hands of the car-manufacturers' assembly-line operators and managers who are the direct customers of the components delivered by the suppliers. It is essentially based on a set of procedures for declaring the respective supplier's quantitative and qualitative failures and defects to the Purchasing Department.
Both *ex ante* and *ex post* evaluations thus produce a great number of reports and indicators which the Purchasing Departments centralize and manage, and on which its members, the individual buyers, will base their decisions as to which supplier will get what share of the overall order. In other words still, the car-manufacturer’s purchasing strategy thus essentially depends on the way the necessary information and indicators are being generated, processed and passed on by those in contact with suppliers, i.e. the car-manufacturer’s auditors and the assembly-line operators and managers.

**Industrial partnership in action**

Understanding the actual working of “partnerships” within the car-industry therefore calls for close scrutiny and analysis of the empirical interaction-processes through which operational actors within the car-manufacturers and their respective counterparts within the different supplier-firms actually manage the co-development and co-production of a car and implement the various procedures designed for the qualitative and quantitative evaluation of suppliers’ performance. It is this analysis which we shall turn to now\(^1\).

**Ex ante evaluation of the supplier’s capability**

When a new vehicle is to be developed, the Purchasing Department uses its qualification procedures in order to select its "partners". Before signing any new contract, the prospective partners’ (suppliers’) production-sites and technical services are being inspected in order to evaluate their quality-potential.

The auditors in charge of this mission easily and willingly admit the difficulty of the task, for several reasons. First they recognize that they do not have the skills and competencies to seriously evaluate the prospective supplier’s technology: as a rule, the rate of technological innovation in the different sub-sectors is too high. Second, they feel vulnerable to what they call the “mask syndrome”. When an auditor visits a supplier, the latter has always been forewarned and can therefore show a process which differs from the one which is normally implemented.

Off hand, one would be tempted to argue that both problems could be easily handled. In order to fill some of the information gap, for instance, auditors’ technical competencies would only have to be increased through training. However, there was no attempt to do so within the two car-makers we studied: indeed, we found only one auditor who as a personal initiative had taken it upon himself to increase and keep up his technical skills\(^2\)

---

1 The following developments are based on a comparative empirical investigation in the course of which we interviewed, between 1993 and 1994, 230 managers and employees of 2 big European car-manufacturers and 25 supplier firms. Moreover, we inside partnership - erhard friedberg & jean-philippe neuville publié in : grandori a. (éd.). *The Game of Network*. london, routledge, 1999.
Likewise, one could easily imagine for the auditor a way out of the risk to be abused by show-cases some suppliers could be tempted to put up in order to convey a favourable impression, or at least a way to control that issue. He or she could for instance visit a supplier by surprise in order to observe the gap between the way the process has been officially evaluated and the way it is actually run when looked at unexpectedly. Although rules do not forbid this kind of behaviour, none of the auditors we met did actually use such a possibility. According to them, an unannounced control would not only have been unfair. It would also have been counter-productive. They argued that, indeed, such controls would institute an atmosphere of tension and confrontation which would in fact prevent them from obtaining what they wanted from suppliers, i.e. a minimum of transparency about the way they actually managed their production process. In other words still, they were afraid that in the case of a show-down, the suppliers had the stronger hand.

The actual solution which the auditors developed empirically was much simpler, but apparently very effective. It consisted in constructing a cooperative relationship with one or two key-actors within the suppliers' Quality and/or Design and Production Engineering Departments. In order to construct such a relationship, however, they had to have something useful to exchange. And indeed they had, namely strategic information on two issues which were of interest to the supplier: on the one hand, knowledge about the suppliers' competitors (for e.g. product, process, organization, and so on); on the other hand, information about the car-manufacturer's purchasing policy and future cars. That was to some extent the price they had to pay in order to obtain in exchange an increase in the suppliers' transparency concerning their process and organization.

Thanks to this relation, the auditors were able to re-equilibrate somewhat their bargaining position in face of the prospective suppliers, who now had an interest in limiting their potentially opportunistic use of the information asymmetry. Lest they loose the auditors' trust and cooperation, they could not take too much advantage of their good faith.

If the auditors did not succeed in constructing such a relationship, then the suppliers' evaluation was a less positive one. If they succeeded, however, the objectives of their audits would implicitly have been modified. The auditors' mission would no more be the control of the conformity of the

---

2 The solution he used was to entertain informal relations with machine-makers and raw-material companies of the suppliers he was in charge of.

3 The reasoning behind this argument is quite paradoxical: something which logically should allow the auditor to reduce moral hazard is presented as though it actually increased this same moral hazard.
suppliers' process and organization to whatever was the level specified for qualification. Much rather, it would be the assessment of (1) the suppliers' capacity to reach that specified level by the time the car for which the supplier was being selected would reach the phase of mass-production, and of (2) the risk generated by residual failures on the part of the prospective supplier.

**Ex post evaluation of suppliers' qualitative performance**

During the phase of mass production of a car, whether that production started 1 or 5 years earlier, we have observed two overall results that we can generalize to all the assembly lines (Neuville 1997a): (i) the quality of the suppliers' parts or components still was variable (despite *ex ante* evaluation, ISO standards and qualification procedures, there remained considerable uncertainty about quality) and (ii) assembly line operators as well as managers only very exceptionally accepted to stop the production (the rhetoric of total quality management notwithstanding, quantity still was the superordinate goal on the production sites).

When there is an *ex ante* evaluation, the quality of parts delivered by the suppliers is no more controlled by a specific Department: parts are directly delivered to the assembly lines. Thus, the final assembly lines do not only have to put together all the parts of a car; they also have to check the parts before. Every time they find a defect, the rules say that they have to rework it at the cost of the supplier. If this cannot be done, then they have to put it aside. At the same time, the assembly lines have to declare all the defects in order to inform the Purchasing Department on the various suppliers' qualitative performance. This is the formal story. Our observations, however, showed it to be quite different, with the Purchasing Departments being all but systematically informed about suppliers' quantitative and/or qualitative failures. Let us again sum up our findings.

If the defect concerned only one isolated part, the assembly line repaired it as well as possible and did not declare anything. If repairing the part was impossible, the defective part would be put aside and assembly line managers would try and negotiate a way for charging the supplier, without informing the Purchasing Department.

If 2 or 3 parts came up with the same defect once in a while, assembly line would still rework the parts without informing anyone. But the responsible supplier would be called in and be clearly told by the assembly-line managers that although they should be informing the Purchasing Department about all this, they were willing to keep things on their level if they could be sure that quality would be held steady from now on. As to the incriminated supplier, he or she would try and explain the reasons of this incident as well as assess the risk of it occurring in the future, and would promise to control 100% of the production before delivering it.
If the defectives components turned up 2 or 3 times by delivery-lot, this meant trouble. Even then, however, assembly-line managers would not systematically declare the incidents to the Purchasing Department. They would threaten the supplier that unless he or she would send someone for in site-inspection and, if necessary, for reworking the defective parts on the line, they would declare the defects and/or would have to stop the line. Suppliers would generally agree to do so, because this solution had at least two possible benefits for them. On the one hand, their presence would avoid defect-declaration to the Purchasing Department. On the other hand, it would allow them to secretly inspect the way their parts were actually handled and assembled on the line and to find out whether the incriminated defect could not be due to the non-respect of operating procedures by assembly-line operators, in which case they would be able to transfer the responsibility of the defect onto the car manufacturer.

If a defect occurred even more regularly in each delivery-lot, then this would be interpreted by the assembly-line management as the sign of a real dysfunction in the supplier's process. When such an ultimate situation was reached, assembly-line-managers would, as a last resort, declare the incident to the Purchasing Department, and would have to stop production, if they ran out of parts because of the frequency of the defects. The supplier who was unable to get his process back under control before such an emergency, would be held responsible for his or her failure and would be fully and officially sanctioned.

**Ex post evaluation of suppliers' quantitative performance**

The second post-contractual evaluation concerns the suppliers' quantitative and logistic performance, i. e. the way they respected or not their just-in-time delivery commitments.

Because of tight flow process and inventories reduction, the logistics technicians on the car-manufacturer's production sites are also under pressure. They have to see to it that they do not lack components in order not to stop production, while simultaneously keeping inventories of parts inside the factory as low as possible. This contradiction in objectives is all the more difficult for them to manage as due to both exogenous and endogenous disturbances, there is always a gap between actual consumption of parts and pre-established production programs.

The logistics technicians can only get some hold on that dilemma if they are able to establish a cooperative relationship based on mutually beneficial exchange with the supplier or more specifically with their counterparts (the suppliers' logistics technicians). Such a relationship will provide them with the necessary flexibility, the flexibility however, that comes neither from physical flows nor from procedures.

What are the elements of the situation? In order to avoid to run out of parts and to be responsible for a production stop, the car-maker's logistics
technicians must anticipate all the various disturbances which might alter
the even flow of parts, such as a component’s over-consumption
(endogenous trouble) or a supplier’s delivery delay (exogenous trouble).
The suppliers’ logistics technicians, on the other hand, have an interest of
hiding actual delays, with the hope that their failure to deliver exactly on
time will go unnoticed and will therefore not deteriorate their ratings on the
evaluation of their logistics performance. While the car-manufacturers'
logistics technician needs transparency and just-in-time information, the
supplier has an interest in opacity. And the car-manufacturers' technicians
are clearly in trouble, as they cannot force their counterparts within the
suppliers to inform them in due time.

They are therefore the driving force behind the search for some sort of a
deal which would make it worthwhile for their counterparts to inform them
and cooperate with them. And we observed that they were able to strike a
bargain around an exchange of some tolerance on their part against some
more transparency on the part of their counterparts within the suppliers.
Here are two examples of this kind of exchange.

First, the suppliers’ technicians would forewarn their counterpart on the
production-site that the delivery of the part would be one hour late, thus
giving them time to organize and face up to the situation. In exchange, this
non-respect of contractual commitments would not be declared to the
Purchasing Department. Second, when the car manufacturers' logistics
technicians needed supplementary parts because of over-consumption or an
inventory-error, the suppliers would deliver them without arguing that it
was not written on the official order. In exchange they would be informed
ahead of time about planned production in- or decreases, enabling them to
adjust in time their resources and production-flow.

Thus, the defective suppliers who had been able to offer some transparency
to their logistics-counterpart on the production sites did not have to fear
that their failures, at least as long as they did not cause a production-stop,
would be declared to the Purchasing Department. The car-manufacturer's
logistics technicians, on the other hand, succeeded in quietly managing their
inventories and in minimizing their risk of leaving the assembly line without
the necessary parts and of being held responsible for a production stop.

From economic contract to local orders

The preceding examples are not the result of theoretical considerations. They
are based on the empirical observations and findings collected in intensive
qualitative field-studies in the factories and purchasing-
departments of two major European car-manufacturers and with a great
number of their suppliers. They point to major and in our eyes decisive
discrepancies between the theory of the new philosophy and management
of sub-contracting summed up in “industrial partnership” and the practice of
actors in the field.
When looked at from some distance, the patterns of behavior and interaction which can be observed seem to have one common denominator, i.e. "restraint". The actors involved in the day-to-day management of partnership both within the car-manufacturers and the supplier firms seem unwilling to use whatever means for coercion or negative sanction the formal organization of the “partnership” might provide them with. On the part of the suppliers, one can observe restraint in actually profiting fully from the information asymmetries which are inherent in the relation with the car-manufacturer: they do show their process and they do forewarn their clients when something is wrong or when unexpected and unforeseen delays occur. And the same can be said of the representatives of the car-manufacturer: the auditor conspicuously refrains from unannounced inspection-tours, and the assembly-line managers indeed go out of their ways in order not to have to declare the actual inadequacies of suppliers to the Purchasing Department or stopping production, both of which would have devastating effects on the respective suppliers' performance records within the Purchasing Department and on subsequent orders from the car-manufacturer.

All our observations definitely point in the same direction: to the existence of a basic complicity and solidarity transforming into allies what on the formal level would look like opposing parties. Instead of fighting each other in order to maximize whatever short term profits they expect from the relation, they cooperate within the framework of mutually destructive, "last-resort" sanctions which may frequently be invoked as threats but which are rarely put into effect.

In order to last, however, such a cooperative relationship needs a common stake, and, more important still, something to exchange. The common stake is avoiding the equally disruptive effects of non-cooperation for both sides: lost orders, decreased market-share and deteriorating reputation for the supplier, difficult and potentially unreliable ex ante evaluations and production losses on the side for the car-manufacturer.

The commodity which is exchanged is of course different in ex ante and ex post evaluations. In the relations involved in ex ante evaluations, the transaction is based mostly on the exchange of mutually interesting information: the auditor will provide information on future cars as well as on competitors, and in exchange will get a better and more realistic picture of the suppliers' real capability and thus will gain a better position for a realistic evaluation. In the ex post evaluation situation, whether it concerns the qualitative and quantitative performance of suppliers, the good to be

---

4 This would be the case for instance with the assembly-line managers' prerogative to stop the assembly line if incoming components are not of the required quality: this possibility is often introduced in the discussion with the suppliers' representatives and thus used as a threat, but hardly ever is it really put into practice. This possibility is a sort of atomic bomb which defines a common interest in avoiding what both consider as a mutually destructive and therefore undesirable outcome.

5 Although some tolerance on the part of auditors will always be involved also.
exchanged is mostly the car-manufacturers' tolerance for suppliers' inadequacies against more transparency and supplementary service (help) on the part of the latter.

In fact, the interactions involved here can be conceptualized as a quasi-market for "non-quality", i.e., performance by the supplier which does not live up to contractual commitments. There is a supply: the supplier who tries and have production sites of the car-manufacturer tolerate inadequate performance (non-conformity to contractual quality requirements concerning the design of parts and/or delivery conditions). There is a demand: assembly-line and production site operators and managers who are willing to accept (indeed have no choice but to accept) such inadequate performance if they want to avoid having to stop production and thus to incur production losses. And there is a price, namely the conditions under which the latter are willing to accept such inadequate performance, i.e. the supplementary, non-contractual service which suppliers will have to deliver in order to "get away" with it.

To give just a few examples, such service may range from minor changes in the design of parts which are non-contractual, but which will help assembly-line operators in their task, to giving a hand to assembly-line operators in checking a set of components to select the "good" ones, to accepting to take back parts which were true to design but have been deteriorated by inadequate use on the assembly-line or even to providing some "extra parts" to substitute for those which had been deteriorated by assembly-line operators and which are now lacking in the inventories.

Indeed, it could include anything that will help their counterparts in the production sites of the car-manufacturers in doing what they are paid to do: assemble a fixed number of cars which satisfy ever-rising quality requirements despite all the unplanned qualitative and quantitative disturbances which are all the more threatening to an even production flow as today reserves and slack have been eaten up by lean-management techniques. One could almost say that within limits of course, lesser quality in the productive and logistic performance of any supplier can be made up by his or her reactivity and efficiency in bringing solutions to problems arising in the work-flow of the car-manufacturers' production-sites.

Our journey inside partnership thus brings to light the existence of tight-knit, boundary-spanning arrays of social exchange relations at all the interfaces between car-manufacturers and their suppliers. Based on cooperative arrangements, complicity and trust, these relations are the basic tools and mediators for the implementation of the contractual framework of partnership, the mediators through which the economic exchange of contract is translated into a series of "rules of the game" able to found "local orders" (Friedberg 1993) stabilizing and regulating the actual behaviour of operational actors while enabling them to manage the day to day contingencies of their job.
The significance of these local orders should not be analyzed in purely negative terms as mere impediments to the improvement of actual quality or to the attainment of official goals. Quite to the contrary: indeed, all the recent amelioration of the quality of the cars produced has been managed through precisely such arrays of social exchange and the informal processes of negotiation and transaction they are based on. The significance of our observations is therefore to be seen elsewhere: it lies in the gap that they show to exist between the theory and practice of the new (Japanese) style for the management of subcontracting. Quality may have been improved, but this has been obtained in ways quite different from those that the new management philosophy would have us believe or would prescribe. And these ways have important theoretical as well as practical implications some of which we should like to briefly sketch out below.

Some implications for theory

At least four themes with direct implications for the theory of inter-firm cooperation and more generally of the structuring of fields of collective action can be drawn from our observations based on a process-view of partnership.

The first has to do with the intricate link between formal and informal characteristics of these local orders which make it impossible to oppose these two levels of action or to attribute actual performance to either of them (Friedberg 1993, 1996). Formal and informal dimensions of cooperation in these local orders not only cannot be separated, but have to be seen as interdependent and equally important components which rely on and produce each other. One is not more rational or more efficient as the other, one is the condition for the efficiency and performance of the other.

Without the legal-contractual framework and the possibilities of sanction as well as negotiation that it offers to operational actors, the transactions at the operational level would simply not be possible. If, to take just one example, assembly-line managers did not have the possibility to hide suppliers’ inadequacies or on the contrary to declare them or even to simply make them visible for all through production stops, and if suppliers did not have the possibility to invoke formal prescriptions (the design and contractual quality requirements) by threatening to respect them again, they would not be able to start any negotiation. But at the same time, the

---

6 A supplier threatening to again deliver parts true to design is of course paradoxical since this is what he is supposed to do in the first place. However, it happens all the time, as the suppliers, as a service for his or her partners on the assembly-line, often have accepted to slightly modify contractual design in order to make a part easier to assemble. They have done so, however, without any formal change in the contractual dispositions and/or the design, and these changes are therefore revocable, if necessary and can become a commodity to be exchanged against some tolerance and comprehension on the part of the assembly-line managers for the (temporary) difficulties of their suppliers.


13
same legal framework without the liberties that operational actors take with it, would only paralyze action as it would be unable to actually guarantee an even production flow of reasonably “good” cars, i.e. cars satisfying ever increasing quality requirements.

The reason is simple: no ex ante qualification, however sophisticated and well instrumented, can prevent uneven quality and unforeseen disturbances during the mass-production phase. The apparent paradox around ISO quality standards or other certification or qualification procedures is a case in point. Certification and qualification, as a trust-signal, is supposed to inform the buyer about the quality and capability of the seller’s organization and production process and therefore theoretically becomes an indicator of the seller’s reliability to develop, produce and deliver components as promised and codified in contract. However, we were not able to observe any significant difference in the actual performance of the supplier-firms. Whether certified or not, all of them were victims of failures and thus unreliable to a certain extent. Thus, ISO and similar procedures for the qualification of potential suppliers, have more to do with providing legitimate decision criteria for buyers than insurance against seller’s failures. Such insurance is beyond reach.

And such inevitable variation in the quality of supplies has to be managed on a day to day basis without interrupting production. In order to do so, operational actors will actually use their role in the implementation of this framework in such a way as to transform its legal and contractual dispositions into instruments for creating the conditions of negotiations which, when durably successful, may easily produce a very solid cooperative relationship based on interpersonal trust. In turn, such a relationship will reintroduce flexibility into an otherwise very cumbersome and top-heavy structure.

More generally, we could say that economic inter-firm contract, incomplete by nature like any formal device in organizational life, with time becomes institutionalized, i.e. loaded with social interpersonal contracts that “complete” the terms of the economic contract and make possible its implementation. In other words, local commitments based on mutually beneficial exchange, reciprocity and trust are made possible by global information-based commitments, and, by progressively becoming autonomous from the latter and taking on a life of their own, will increasingly mediate, i.e. modify its impact. The question then becomes: which one is the relevant contract for understanding the actual functioning and dynamics of inter-firm cooperation, the economic or the social one? In the light of our findings, the answer can only be both, an answer which in turn clearly underscores that contract and decision-making around make or buy decisions alone are an unsatisfactory entry into the study of inter-firm-cooperation.

A second theme worthwhile to be stressed is the co-existence in these local orders of both trust and opportunism. On the one hand, our results corroborate the hypothesis that durable cooperative arrangements generate
and are based on trust. (Axelrod 1984) as well as other empirical results especially in Swedish studies: (Ford, Hakansson and Johanson 1986, Johanson and Mattsson 1987, Hallén, Johanson and Seyed-Mohamed 1991) have demonstrated that repeated exchanges lead to mutual adaptation and interpersonal bonding, which enable inter-firm cooperation to digest most of the turbulence. This systemic flexibility based on specific interpersonal relations goes beyond any formal agreement that is to say without any legal assurance for both parties, as it is based on something like a “moral contract”. From this point of view, trust is really a moral resource (Hirschman 1984), socially constructed by a cross-learning process.

On the other hand, however, our results also go to show that this does not exclude opportunistic behaviour. For example, when assembly line managers and operators tolerate suppliers' failures because they trust the promises their counterparts in these firms have made, the latter can and do take advantage of the situation: they can and actually do reintroduce defective products selectively into the delivery lots, with the hope that this will not be detected by the assembly line, they can and actually do transfer some quality control operations and some reworking of defective components onto the assembly line.

What this co-existence of trust and opportunism indicates is that opportunism should not be studied as a decision problem, but as a relational problem, like trust and power in social exchange theories. This is to say, that the presence or absence of opportunism and trust in a relation is not a matter of decision at one moment, but rather one of process where (1) trust and opportunism flow easily one into the other and where (2) opportunism is not so much a question of one of the partners choosing to betray, but a question of the other detecting unexpected behaviour and interpreting it as betrayal (Sabel 1993). Opportunism matters if we consider subjective perceptions of actors instead of objective descriptions of an external observer. In this perspective, one of the partners can betray with a chance that the other doesn’t perceive anything that is to say without any damage for his trust capital. And the more cooperation is based on trust (less control and more autonomy), the more each of the partners can take the risk of bounded opportunism.

In a way, this indicates that we have to go beyond the either/or conception which one frequently encounters in regard to trust. Whether it is based on a norm of reciprocity (Dore 1987, Berger and al. 1993), on interpersonal relations (Granovetter 1985, Karpik 1989), on membership in a community (Ben-Porath 1980) or on the experience of past cooperation (Ford and al. 1986, Johanson and Mattsson 1987, Hallén and al. 1991), trust in the last run will be analyzed as something which exists or not in a given relation or in a given context. Reality seems to be much more complex. Empirical exchange relations are not either based on power, bargaining and opportunism or on trust: they include all of these dimensions. And if in numerous works (Lorenz 1988, Aoki 1989, Bradach et Eccles 1989, Grabher 1993, Baudry 1994), introduction of time in inter-firm relation is seen to allow cooperation because it reduces information asymmetry, builds up
trust and interpersonal bonding and therefore drastically reduces or even excludes the risk of opportunist, deeper analysis of the empirical exchange relations opens up the possibility of a causality going the other way: trust reduces control and thus becomes vulnerable to bounded opportunism. Much more, it cannot be excluded that trust is built in a strategic way: i.e. in order to be opportunist, a given supplier firm has to appear trustworthy and therefore has a stake in investing time and resources into building up trust. (Neuville 1997b, 1998).

The third theoretical theme that can be drawn from our findings on the process of inter-firm cooperation has to do with the socially constructed nature of “quality”. Looked at from the operational level, quality is not just something “objective” in the sense that it could be defined in purely technical terms and that its attainment could be ascertained unequivocally. It is also socially constructed as it depends in part on the outcomes of the various negotiations and transactions without which it would not exist. Indeed, the emergence and satisfactory functioning of these boundary-spanning local orders are unthinkable without the basic indeterminacy of what the “quality” of a vehicle or a part (component) really is. This basic indeterminacy entails the fact that quality requirements cannot be unequivocally codified in contractual terms. The contractual framework of the industrial partnership is thus basically incomplete: it leaves blanks to be filled through action, it leaves ambiguities which operational actors can put to use as resources in bargaining and exchange processes. And it provides assembly line management with one basic weapon: they are the ones who in the last resort will be defining the quality, i.e. the acceptability of a part.

The final quality of a car is thus the product of the rules of the game which have prevailed in the bargaining and exchange processes between partly internal, partly external actors and which have led to the acceptance or the refusal as well as to the (official or unofficial) modification of this or that part or component. These ongoing bargaining-processes on what definition of quality will prevail at any time are not unlimited, but subject to certain modes of regulation which will prevent them to get out of hands. The technical instrumentation of quality is a first constraint which limits the leeway of operational actors in their day-to-day dealings. But the short-term regulation of these processes is elsewhere: it is located in the final evaluation of the quality of a vehicle which is situated at the end of the assembly line and which marks a sort of internal demarcation line between manufacturing and sales. The local department of quality control which is in charge of this final evaluation is not completely external to these processes, as it may - and frequently does - participate in the bargaining. But it is sufficiently distanced from it to be able to act as a sort of justice of peace whose decisions call actors back to order. It does so by arbitrarily varying the quality requirements which it enforces, thus indirectly steering the level

---

7 But one should not forget that this instrumentation can also be used in the negotiations going on between the involved actors, and that they can and will be transformed by this use.

of attention, vigilance and mutual tolerance of the members of the quality-producing networks.

One final theme flowing from our process-view on partnership should be mentioned, namely the convergence of our findings concerning two car-manufacturers in two European countries. This convergence is remarkable, even troubling as one could and would have expected national or "cultural" variation (Dore 1987, d'Iribarne 1989, Fukuyama 1995). Without sustaining technological determinism as a satisfactory explanation, we must stress the extreme resemblance between our two car-manufacturers as far as their production and coordination systems are concerned: both are inspired by the Japanese model of industrial partnership and both have drawn the same prescriptive conclusions from this model. It may well be that this mimetic process which is being funneled by the spread of ISO procedures and certifications leads to very similar technological and organizational problems and to a convergence in the actual functioning of European car-manufacturers, but more and deeper research should be done on that question.

However, there is another "cultural" issue which could be raised in relation to our findings. The "local orders" we observed come close to what has been seen as characteristic of social exchange in industrial districts (inter-individual trust based on reciprocity). But this is obtained without all the other ingredients that are usually mentioned to explain "industrial districts": partnership links national and international firms, and variables as identity, proximity, community or local norms seem to be "catalyst" or "booster" more than structural mechanism. Maybe time more than space, is the key variable to understand the process of inter-firm cooperation.

Some implications for practice

Last, but not least, we should like to draw attention to the practical implications which the structure and functioning of these local orders entails for the management of this new philosophy of subcontracting called "industrial partnership". Two levels of analysis have to be distinguished here.

First of all, the way these social networks are structured and function, directly influences supplier evaluation by the Purchasing Department and thus its purchasing strategies and decisions. The ex ante and ex post

---

8 It has been noticed, and we have observed, that the level of quality in any factory will go up mechanically when there is a control of every car, and will go down again when the control is made on statistical grounds (one car out of n cars is subject to control). This is of course just another element which goes to show how "arbitrary" and variable the prevailing level of acceptability and "quality" is.

9 It may be said, however, that proximity still may have its importance. It is not the common belonging to a community, but the interpersonal knowledge and direct interaction between assembly-line managers and operators and the various suppliers' representatives which do seem to make a difference.
evaluation procedures which are at the basis of its purchasing decisions are definitely biased. They do not provide a faithful picture of the gap between the suppliers’ contractual commitments and their effective performance. They reflect instead the auditors' and/or assembly-line managers' and operators' estimation of the suppliers' capacity to manage and keep under control the inevitable gaps between their contractual commitments and their real performance, an estimation which is considerably influenced, as we have seen, by the level of trust and cooperation which in the field characterizes their day-to-day relationship to this or that supplier.

In other words, and to put it more bluntly, the evaluation-procedure only indirectly sanctions the suppliers' industrial process. As a consequence, the car-manufacturers do not necessarily contract with the best possible suppliers (in an absolute sense, whatever that would be), but with those whose representatives have been able to establish a relationship of trust and cooperation with their own technicians and operational managers. What the evaluation procedures really measure, then, is the suppliers' capacity to cooperate and to find solutions for the day-to-day disturbances which threaten the even flow of production of good cars. And that means that the ex post evaluation finally is more important than the ex ante evaluations. One can even ask the question: what is the use of the ex ante evaluation, if finally the only thing that really counts is the suppliers' aptitude to manage his failures?

From there flows another practical implication for the governance of the supply-relationship: the structure and functioning of these boundary-spanning local orders can and must be interpreted as enabling suppliers to re-equilibrate the balance of power in their relations with the car-manufacturers. Indeed, on the operational level, it seems to us that the balance of power definitely tilts in favour of the suppliers. Of course, operational managers always have the resource to threaten with a stop of the assembly line and a declaration of suppliers' failures. However, this is a self-defeating weapon, which punishes production just as much as it does suppliers. It is therefore only used as last resort, even if it remains a threat frequently used to obtain cooperative behaviour on the part of the suppliers.

Suppliers offer the one thing that is unreplaceable: reactivity and flexibility in an otherwise more and more tightly coupled production-process which however continues to be threatened by a great number of potential qualitative and quantitative disturbances. They have the short-term solutions which helps production sites to respect production programs, to find better and more comfortable ways of assembling, to overcome a temporary shortage of this or that component. And in exchange, they are able to externalize some of their non-quality and some of their production costs onto the car-manufacturers.

One could say that the suppliers slowly win back what they had to concede during the initial negotiation of the deal with the Purchasing Department. By progressively emptying the contractual commitments of their content, they
partially or completely win back during mass-production what they had to offer in order to get the deal. Short term earnings by the car-manufacturer in his contractual arrangements may well be eroded by medium and long term losses due to the governance and/or implementation costs of the partnership relations.

References


